CGI

Change History

date	Modifications
20160317	Add EncoderType URL when getting HTTP tunnel video
20160317	Added description of encoderType constant in stream configuration

20160322	Add the legitimacy description of username and password
20160615	Update the description of the arrowID URL in the OSDCanvas function
20161201	HTTP method to request video with AudioFlag flag
20161216	Update PTZ modules supported by Fisheye devices
20170221	1. Updated the alarm status value description in Table 3.7.1 (3). 2.2.6.4.1.3 Modify the Example URL. 3.2.5.8.1 Remove the speed URL.
20170309	Added 2.4.3.2 alarm output manual control function
20170519	Added 2.10 to get real-time audio
20170711	1、 Add OSDBlinkFlag and OSDBlinkInterval URL in OSDCanvas of 2.6.2.9.1; 2、 Change the setOSDCanvas method in 2.6.2.9.3. It originally only supports setting one canvas at a time. Now it is changed to setting multiple canvases in a loop. In each canvas, multiple OSDInfo are set in a loop.
20170718	Corrected 2.5 PTZ function Example URL
20170818	Modify the alarm status URL and description in 2.4.3.1 manual alarm (manualAlarm)
20171016	Add LPR configuration and retrieval
20171107	Added Fisheye correction parameters and installation mode settings
20180621	CGI thermal imaging function
20180627	3D positioning function
20180918	Update OSDCanvas function description, improve 3D positioning function description, and add disk status
20181215	Add and modify user functions and add user functions
20181228	Added zoom focus function
20191020	Add AI thermal imaging related functions, Refer to 2.6.13 Added infrared light 2.8.9, white light 2.8.10, wiper 2.5.12, lens flushing

	2.5.13 control functions
20200518	Added people counting related functions, Refer to 2.6.9.13.1
20210730	Added the ability to set and get multi-target parameters
20230626	New interfaces: Audio output, system, pseudo color settings, FFC control, smoking detection, fire spot detection, fireworks detection, entering area, leaving area, network alarm, message push, maskinging area, 802.1X, port mapping, FTP, IP filtering, SNMP, QOS, platform access, CMS configuration, multicast parameters, scheduled restart. New URL: Device information: ubootVersion, kerneVersion, networkCardNum ; AI Multi-target: FilterStaticEnable; Device port: sslPort; Recording strategy: PreRecordTime; Motion detection alarm: motionDetectStreamEnable; Protocol information: rtspRule, rtspExample , onvifUuid; Alarm email: anonymousSendEnable; Reset: keepIpAddresses .
20230 801	New interfaces: Some advanced intelligent analysis capabilities, intelligent analysis capabilities Revise: Improve some advanced intelligent analysis and intelligent analysis interfaces, and Return URL based on capabilities
20230825	Add and modify interfaces: Capture, solution, mode, day and night, time zone capability, camera, OSD capability, audio capability, Voice denoise, PTZ capability, motion detection capability, Audio alarm output, infrared thermal imaging capability, ambient temperature, temperature measurement area, alarm output, deployment linkage, manual recording, privacy masking capability, go to privacy masking, DDNS, SMTP test, FTP test, alarm service center test, SNMP security level capability, delete user, get all users, get all groups, get specified user permissions, get specified group permissions, BonjourService, P2P, QRCode,

	LED light control parameters
20231009	Added: Image, import and export configuration
20231110	Added: ROI capability, ROI, white balance, exposure, AI multi-target capability, SVCStream capability, SVCStream , advanced capability, advanced Revise: Image enhancement, intelligent analysis supports preset mode, human body temperature measurement parameters, image calibration, intelligent tracking, day and night
20240328	Added: Merge The lite series documents and NVR documents; support three devices for setting instructions;
20240430	Added: Remove plaintext checksum;
20240606	Updated catalogue and title levels and updated lite series names
20240709	Added: Day night switch alarm; IPC Flashlight alarm; Play audio alarm
20240801	Added: PTZ setHome, restoreHome; Heating command; NVR event log and Smart motion detection

Table of contents

设置了格式： 默认段落字体，字体：（中文）宋体，检查拼写和语法

设置了格式： 默认段落字体，字体：（中文）宋体，检查拼写和语法

设置了格式： 默认段落字体，字体：（中文）宋体，，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，字体：（中文）宋体，检查拼写和语法

设置了格式： 默认段落字体，字体：（中文）宋体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，字体：（中文）宋体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式： 默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，字体：(中文) 宋体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法
设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，字体：（中文）宋体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

设置了格式：默认段落字体，检查拼写和语法

1. Introduction to CGI

CGI (Common Gateway Interface) is a suit of interfaces based on HTTP which used between IP Camera and NVR. Client program can operate devices via CGI command.

1.1. Description of the main CGI modules

Table 1-1

Module Name	Description
video.cgi	Live Video
record.cgi	Video
image.cgi	Snapshot
alarm.cgi	Call the police
ptz.cgi	PTZ Operation
param.cgi	Get and configure device parameters
operate.cgi	Device operations, such as restart, reset, etc.
sensor.cgi	Front-end configuration
audio.cgi	Real-time audio

1.2. User Authentication

Any visit to CGI needs to be Authenticated by username and password for security. Device gives visitor corresponding permission by authorizing username and password.

There are two authentication mechanisms: Basic Authentication in HTTP, attach username and password to parameter of CGI program.

1.3. Access to CGI

CGI programs support URL access and form access. Different URLs accessed by users correspond to different CGI programs. When users use CGI programs through forms, they should ensure that the URL used to access the CGI program is consistent with the corresponding parameters of the CGI program to be accessed. The encoding format of the URL is UTF8 and

must comply with the RFC_3986 standard. Other encoding formats may cause exceptions.

Note: In the following two Examples of accessing CGI programs, the test machine IP used is: 192.168.1.121

The account and password to access the machine are admin and admin respectively

1.3.1. Sample of Form Access to CGI

Example code:

```
<form action="http://<servername>/cgi-bin/param.cgi">
<input name=”userName”>
<input name=”password”>
<input name=”operate”>
<input name=”type”>
<input type=submit value=”ok”>
</form>
```

1.3.2. Sample of URL Access to CGI

```
http://<servername>/cgi-bin/param.cgi?action=get&type=deviceInfo
```

1.4. Return of CGI

Depending on the operation type, CGI Return types are divided into the following categories: general response, plain document, text string, image data body and URL string, MJPEG stream data, and alarm data.

1.4.1. General Response

Successful:

```
HTTP Code: 200 OK
Content-Type: text/plain
OK
```

failed：

HTTP Code: 200 OK Content-Type: text/plain *<error message>*

<error message>The error message usually was Returned by format "error, Return=%d", the %d in the string is the error code. The meaning of the error code can refer to 3.3 Error Constant

1.4.2. Plain Text

Usually the device status or parameters are Returned by format plain text, the specific format of this text includes HTTP Code, Content-Type of text, Content-Length and body.

Example :

HTTP Code: 200 OK Content-Type: text/plain Content-Length: <body size> <body> <parameter>=<value> <parameter>=<value> ...

Note:

1. If operation fails, the body is the Returned error code, the details can refer to 3.3 Error Constant.

2. If operation successful, the loop part is composed of '**Begin---next_URL---End**', **Begin** indicates the start of first segment in list; **next_URL** indicates the end of last segment and the beginning of the next segment; **End** indicates the end of all the segments. The details can refer to **3.1 Context Format Rule**

1.4.3. String Text

Usually the results of the operation are Returned by format String text, the specific format of this text includes HTTP Code, Content-Type of image, Content-Length and body.

HTTP Code: 200 OK

```
Content-Type: text/plain
Content-Length: < body size>
< message >
```

1.4.4. image data body

The captured image data will be Returned in image format. The specific format of the data body is HTTP protocol version , Returned image data type, image data body length and data body.

Example :

```
HTTP Code: 200 OK
Content-Type: image/jpeg
Content-Length: <image size>
<image data>
```

1.4.5. URL text string

The URL string format generally Returns the RTSP access address in the format of protocol type, IP port, and related code

Example :

rtsp://192.168.250.27:554/snl/live/1/1

1.4.6. H264 stream data

The H264 stream data is Returned when request H.264 stream, the specific format of this data includes HTTP Code, Connections, Content-Type of image, and Content-Length, stream data

Example :

```
HTTP Code: 200 OK
Date: <Date>
Pragma: no-cache
Cache-Control: no-cache
Content-Type: multipart/x-mixed-replace; boundary=myboundary

--myboundary
HTTP Code: 200 OK
```

Content-Type: video/h264

Content-Length: <data len>

< data len>

…

--myboundary

HTTP Code: 200 OK

Content-Type: image/jpeg

Content-Length: <data len>

< data len>

1.4.7. MJPEG stream data

MJPEG encoding is used to pull streams, the data is Returned in this format. The specific format of the data body is the HTTP protocol version , connection mode, Returned image data type, image data body length, and data body.

Example :

HTTP Code: 200 OK

Date: <Date>

Pragma: no-cache

Cache-Control: no-cache

Content-Type: multipart/x-mixed-replace; boundary=myboundary

--myboundary

HTTP Code: 200 OK

Content-Type: image/jpeg

Content-Length: <image size>

<image data>

…

--myboundary

HTTP Code: 200 OK

Content-Type: image/jpeg

```
Content-Length: <image size>
<image data>
```

1.4.8. Alarm data

The alarm information is Returned by this format. the specific format of this data includes HTTP Code, Connections, Content-Type of plain, and Content-Length, alarm data

Example :

```
HTTP Code: 200 OK
Date: <Date>
Pragma: no-cache
Cache-Control: no-cache
Content-Type: multipart/x-mixed-replace; boundary=myboundary

--myboundary
HTTP Code: 200 OK
Content-Type: text/plain
Content-Length: <body size>
<body data>
…
--myboundary
HTTP Code: 200 OK
Content-Type: text/plain
Content-Length: <body size>
<body data>
```

1.4.9. Description of application of the product series

This document supports the following products:

IPC, NVR, IPC (Excluding the lite series), IPC (The lite series)

IPC: indicates our IPC products

NVR: indicates our company's NVR products

IPC (The lite series): specifically refers to The lite series series IPC products.

IPC (Excluding the lite series): specifically refers to Excluding the lite series series IPC products

Thermal: specifically refers to products with functions related to thermal temperature measurement;

LPR: specifically refers to products that include LPR-related functions;

If there is no special description, it proves that this instruction normally supports three devices; if the above markings are carried, they are only applicable to specific series of products.

2. CGI Commands

2.1. Live Video (video.cgi)

Real-time video supports the RTSP protocol [RFC 2326] and HTTP protocol; the RTSP method Returns the RTSP URL, and the HTTP method Returns the video data.

2.1.1. H.264, H.265, MJPEG real-time video

2.1.1.1. Get RTSP URL (RTSP method)

RTSP mode: If the device firmware supports RTSP, obtain the RTSP URL through CGI, and then use this URL to pull the RTSP real-time video;

URL	http://<servername>/cgi-bin/video.cgi?type=RTSP&cameraID=<cameraID>&streamID=<streamID>
Description	Refer to Live Video Input Common Parameters
Example	http://192.168.1.121/cgi-bin/video.cgi?type=RTSP&cameraID=1&streamID=1
Return	rtsp://192.168.1.121:554/snl/live/1/1 (For other responses, Refer to General Response)

2.1.1.2. Get Live Video Stream via HTTP (HTTP) (IPC)

URL	http://<servername>/cgi-bin/video.cgi?type=HTTP&cameraID=<cameraID>&streamID=<streamID>&AudioFlag =< AudioFlag >
Description	Refer to the general parameters of real-time video input (IPC (The lite series) and NVR do not support playback for the time being)
Example	http://192.168.1.121/cgi-bin/video.cgi?type=HTTP&cameraID=1&streamID=1
Return	--myboundary Content-Type: video/h264 Content-Length: 139936 …. --myboundary Content-Type: video/h264 Content-Length: 25789 …. (For other responses, Refer to General Response)

2.1.2. General Parameters for Live Video Streaming

At least 4 parameters needed when using video.cgi, that is **userName(user name of user), password(password of user), type(protocol type to be used)**, **cameraID(index of channel), streamed(index of stream).** UserName and password must be the first and the second URL**.**

The corresponding information of each string of general parameters in video.cgi refer to below:

video.cgi Parameters Table:

Table 2-1-2

parameter	data	Description
userName	<string>	username
password	<string>	password

type	<string>{RTSP,HTTP}	RTSP: RTSP video stream HTTP: HTTP video streaming not case sensitive.
cameraID	<int>[0,n]	The supported channel ID of the device, related to ability of the device, by default is 1
streamID	<int>[0,n]	The supported stream ID of the device, related to stream ability of the device
mjpegplay	<int>[0,1]	0: Normal steam 1: MJPEG stream (currently only supports MJPEG stream access)
AudioFlag	<int>0,1	When request video: 0: Without audio; 1: With audio; Note: Only used via HTTP, default as 1 when omitted.

2.2. Recording (record.cgi)

2.2.1. Recording Query

URL	http://<servername>/cgi-bin/record.cgi?action=query&cameraID=<cameraID>&startTime=<startTime>&endTime=<endTime>
Description	Refer to Recording Parameters~~Recording Parameters~~
Example	http://192.168.1.121/cgi-bin/record.cgi?action=query&cameraID=1&startTime=20180912170410&endTime=20180912170450
Return	resultCount=2 resultBegin=1 startTime=20180912170410 endTime=20180912170420

	dataLength=2554168 resultNext = 2 startTime=20180912170430 endTime=20180912170440 dataLenth=2553268 resultEnd=1 (Others refer to the 错误!未找到引用源。~~General Response~~)

2.2.2. Recording Playback

URL	http://<servername>/cgi-bin/record.cgi?action=playBack&startTime=<startTime>&endTime=<endTime>
Description	Refer to Recording Parameters~~Recording Parameters~~
Example	http://192.168.1.121/cgi-bin/record.cgi?action=playBack&cameraID=1 &streamID=1 &startTime=20170215163000&endTime= 20170215163500
Return	--myboundary Content-Type: video/h264 Content-Length: 139936 …. --myboundary Content-Type: video/h264 Content-Length: 25789 …. (Others refer to the 错误!未找到引用源。~~General Response~~)

2.2.3. Recording Parameters

Explanation of parameters refer to Recording Parameters~~Recording Parameters~~

Recording Parameters

Table 2-2-4

Parameter	Data	Description
userName	<string>	username
password	<string>	password
action	<string>	query: video query playBack: video playback download: video download
cameraID	<int>[1,n]	Device channel ID
startTime	<string>	Start time of record Format(YYYYMMDDHHMMSS)Note:minimum value≥1971010101000000
endTime	<string>	End time of record Format(YYYYMMDDHHMMSS)Note:minimum value≥1971010101000000
dataLength	<unsigned long>[0,n]	Video data length
resultCount	<int>[1,n]	Query the total number of record time periods within the time (if no record exists, Return resultCount=0)
resultBegin	<unsigned long>{1}	Mark the start of the record period
resultNext	<int>[2,n]	The next record period is marked
resultEnd	<unsigned long>[1,n]	Mark the end of the record period

2.3. Snapshot (image.cgi)

2.3.1. Get snapshot image

URL	http://<servername>/cgi-bin/image.cgi?cameraID=<cameraID>&quality=<quality>
Description	Refer to Snapshot Parameters~~Snapshot Parameters~~

Example	http://192.168.1.121/cgi-bin/image.cgi?cameraID=1&quality=5 NVR/the lite series http://192.168.0.123/cgi-bin/image.cgi?type=snap&cameraID=1&streamID=1&quality=5
Return	HTTP/1.1 200 OK Date: Fri, 31 Dec 1999 18:45:11 GMT Cache-Control: no-cache Contact: no-cache Connection: close Server: test Content-Type: image/jpeg Content-Length: 16063 … (For other responses, Refer to General Response)

2.3.2. Snapshot Parameters

Snapshot parameter table:

Table 2-3-2

parameter	data	Description
cameraID	<int>[1,n]	Device channel ID
quality	<int>[1,9]	Image quality: (1 is the worst, 9 is the best) Required parameter
StreamID	<int>[1,n]	Stream ID supported by the device, optional parameter

2.4. Alarm information (alarm.cgi)

2.4.1. Alarm Status (alarmStatus)

2.4.1.1. Get current alarm status (getCurrentAlarmStatus)

URL	http ://<servername>/cgi-bin/alarm.cgi?action=get&type=currentAlarmStatus
Description	Refer to 错误!未找到引用源。~~Alarm Information parameters~~
Example	http://192.168.1.121/cgi-bin/alarm.cgi?action=get&type=currentAlarmStatus
Return	alarmInfoBegin=1 alarmMajorType=1 alarmMinorType=2 sourceID=1 alarmFlag=0 alarmTime=2018-9-21 15:26:50 … next_alarmInfoURL =4 alarmMajorType=1 alarmMinorType=2 sourceID=1 alarmFlag=1 alarmTime=2018-9-21 15:26:56 alarmInfoEnd=4 (For other responses, Refer to General Response)

2.4.1.2. Get alarm status in attach mode (attach) (IPC)

URL	http://<servername>/cgi-bin/alarm.cgi?action=attach
Description	Refer to 错误!未找到引用源。~~Alarm Information parameters~~. When an alarm message is received, plain text will be Returned. Otherwise, it will always display "Connecting, waiting for alarm message".
Example	http://192.168.1.121/cgi-bin/alarm.cgi?action=attach
Return	--myboundary Content-Type: text/plain Content-Length: 238

	alarmInfoBegin=1 alarmMajorType=1 alarmMinorType=2 sourceID=1 alarmFlag=1 alarmTime=2018-9-21 15:34:22 next_alarmInfoURL =2 alarmMajorType=1 alarmMinorType=2 sourceID=1 alarmFlag=1 alarmTime=2018-9-21 15:34:22 alarmInfoEnd=2 (Others refer to the 错误!未找到引用源。~~General Response~~)

2.4.2. Alarm Action (IPC excluding the lite series/NVR)

2.4.2.1. Manual Alarm

URL	http://<servername>/cgi-bin/alarm.cgi?action=manual&alarmInID=<alarmInID>&alarmFlag=1&AlarmSourceType=1
Description	Refer to 错误!未找到引用源。~~Alarm Information parameters~~ and **Manual Alarm in Parameters**~~Manual Alarm in Parameters~~
Example	http://192.168.1.121/cgi-bin/alarm.cgi?action=manual&alarmInID=1&alarmFlag=1&AlarmSourceType=1
Return	OK (Others refer to the 错误!未找到引用源。~~General Response~~)

Manual Alarm in Parameters

parameter	type of data	Remark
alarmInID	<int>[1,n]	Alarm input channel ID
AlarmSourceType	<int>[1,6]	Alarm input source type: 1:IO alarm 2:motion alarm 3:disk alarm

		4:record alarm 5:network alarm 6:video loss alarm
alarmFlag	<int>{1,2}	Alarm status: 1:alarm start(note:record and disk alarm only alarm trigger, no end state) 2:alarm stop

2.4.2.2. Manual alarm output control (manualAlarmOutControl)

URL	http://<servername>/cgi-bin/alarm.cgi?action=manualControl&alarmOutID=1&controlFlag=1
Description	Refer to 错误!未找到引用源。~~Alarm Information parameters~~ and **The Manual Alarm Out Control Parameters**~~The Manual Alarm Out Control Parameters~~
Example	http://192.168.1.121/cgi-bin/alarm.cgi?action=manualControl&alarmOutID=1&controlFlag=1
Return	OK(Others refer to the 错误!未找到引用源。~~General Response~~)

The Manual Alarm Out Control Parameters:

parameter	data	Description
alarmOutID	<int>[1,n]	Alarm output channel id
controlFlag	<int>{0,1}	Control output status: 1:start 0:stop

2.4.3. Alarm information general parameters

In the alarm .cgi program, enter at least three parameters, namely user name **userName,** password **password, and** operation type **action** . **(userName and password must be in the first and second positions of the parameter)**

The corresponding information of each string of general parameters in alarm.cgi refer to Table **2-4-3-1**

Table 2-4-3-1

Parameter	Data type	Note
userName	<string>	Account of login device
password	<string>	Password of login device
action	<string>	Get:get attach:connect manual:manual manualControl:manual control
type	<string>	When Action is attach, manual,it can be no Type. Type, Refer to specific meanings table 2-4-3-2

Table 2-4-3-2 shows the information corresponding to the get behavior subtype string in the alarm.cgi program

Table 2-4-3-2

Parameter	Description
currentAlarmStatus	Current alarm status

The corresponding information of each string of common parameters in alarm.cgi refer to Table 2-4-3-3

Table 2-4-3-3

Parameter	Data Type	Description
sourceID	<int>[1,n]	When the alarm is IO, it indicates the alarm input ID, and the rest indicates the camera ID
alarmInfoCount	<int>[1,n]	Total number of alarm messages
alarmInfoBegin	<int>1	Alarm message start flag
next_alarmInfo	<int>[1,n]	The sign indicating the end of the previous alarm

URL		message and the beginning of the next alarm message
alarmFlag	<int>{0,1}	Alarm mark, 0: Stop alarm 1: Alarm is being issued
alarmTime	<string>	Alarm time
alarmInfoEnd	<int>[1,n]	Alarm message end mark

Table 2-4-3-4

parameter	data	Description
alarmMajorType	<int>{1,4,5,6}	Alarm main type, refer to main type :
alarmMinorType	<int>[1,n]	Alarm subtype, determined by the main type, refer to the subtype:

2.5. PTZ (ptz.cgi) (Supports PTZ devices)

2.5.1. PTZ Input General Parameters

In the ptz.cgi program, enter at least 4 parameters, namely **userName, password, cameraID and action . (userName and password must be in the first and second positions of the parameter)**

The following table shows the information corresponding to each string in the general parameters of the ptz.cgi program:

ptz.cgi program general parameter table

Table 2-5-1-1

parameter	data	Description
username	<string>	Login Username
password	<string>	login password
cameraID	<int>	Channel number, default is 1
action	<string>	PTZ Action

		For specific meanings, Refer to Table 2-5-1-2
PTZID	<int>[1,n]	PTZID is an optional parameter. It is effective in single-channel mode of Fisheye device. Otherwise, PTZID parameter is invalid.

Action type meaning table

Table 2-5-1-2

action	**Description**
stop	stop
rotate	position operation
zoom	Zoom in, zoom out
focusFar	Far Focus
focusNear	near Focus
runAutoFocus	Auto Focus
irisIncrease	Larger aperture
irisDecrease	Smaller aperture
runAutoIris	Automatic aperture (IPC)
presetAdd	Preset point addition
presetInvoke	Preset point call
presetDelete	Preset point deletion
listPrest	Get preset points
trackAddBegin	Track Add Start
trackAddEnd	End of track addition
trackInvoke	Track call
trackDelete	Track Deletion
listTrack	Get track

scanAddBegin	Scan Add Start
scanAddEnd	Scan Add End
scanInvoke	Scan call
scanDelete	Scan to delete
listScan	Get Scan
tourAdd	Parade Added
tourAddBegin	Parade Add Start
tourAddPreset	Add preset points during tour
tourAddEnd	End of tour addition
tourRun	Tour call
tourStop	Parade Stop
tourDelete	Parade Delete
listTour	Get a Tour
keeperSet	Guard position setting
keeperRun	Guard bit call
getPosition	Get directions
setPosition	Set direction
setNorthPosition	Set the current position to true north
3DPosition	3D Positioning

Among them, stop, zoom, FocusFar, FocusNear, irisIncrease, irisDecrease, and setNorthPosition commands do not carry parameters.

2.5.2. PTZ Capability (ptzCap)

URL	http://<servername>/cgi-bin/ptz.cgi?action=get&type=ptzCap&cameraID=<cameraID>

Description	Refer to PTZ input general parameters
Example	http://192.168.1.88:80/cgi-bin/ptz.cgi?action=get&type=ptzCap&cameraID=1
Return	presetMaxNum=16 tourMaxNum=4 tourPresetMaxNum=12 scanMaxNum=12

2.5.2.1 Meaning of PTZ capability parameters

PTZ capability command parameter meaning table:

Table 2-5-2-1

parameter	data	Description
p tz Support	<int>	Support pzt
presetMaxNum	<int>	Maximum number of preset points
tourMaxNum	<int>	Maximum number of tour points
tourPresetMaxNum	<int>	Maximum number of patrol scanning points
scanMaxNum	<int>	Maximum number of scanning points

2.5.3. PTZ operation commands

2.5.3.1. Pan/tilt zoom operation command (zoom) (IPC)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=zoom&pan=<pan>&[PTZID=<PTZID>]
Description	Refer to the PTZ input general parameters and the meaning of the PTZ zoom in and zoom out parameters table.
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action=zoom&cameraID=1&pan=1

Return	OK (Others Refer to General Response)

Meaning table of PTZ zoom in and zoom out parameters :

Table 2-5-2-1

Argument	**data**	**Description**
pan	<int>{-1,1}	-1: indicates zooming out 1: Indicates zooming in

2.5.3.2. PTZ Commands (IPC/NVR/the lite series)

stop, focusFar, focusNear, irisIncrease, irisDecrease, setNorthPosition , runAutoFocus, runAutoIris, setHome, restoreHome

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=<action>&[PTZID=<PTZID>]
Description	Refer to PTZ input general parameters
Example	http://192.168.1.121/cgi-bin/ptz.cgi?userName=admin&password=admin&cameraID=1&action=stop
Return	OK(Others Refer to General Response)

2.5.3.3. PTZ position command rotate (IPC/NVR/the lite series)

2.5.3.3.1. PTZ left command (rotate)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=rotate&pan=-60&tilt=0&[PTZID=<PTZID>]
Descriptio	Refer to the table of PTZ input common parameters and position command

n	parameter meanings.
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID =1&action=rotate&pan=60&tilt=0
Return	OK(Others Refer to General Response)

2.5.3.3.2. Meaning of PTZ command parameters

Position command parameter meaning table :

Table 2-5-4-2-1

parameter	data	Description
pan	<int>[-63,63]	Horizontal speed: The positive and negative signs indicate the direction of rotation, with positive on the right and negative on the left; The value represents the rotation speed, where 0 means no rotation in this direction;
tilt	<int>[-63,63]	Vertical Speed: The positive and negative signs indicate the direction of rotation, with positive at the top and negative at the bottom; The value represents the rotation speed, where 0 means no rotation in this direction;
Speed (NVR)	<int>[0,9]	Speed, 4.* New

The positive and negative signs indicate the direction of rotation, right is positive, left is negative, top is positive, bottom is negative; for Example, (-30,25) rotates at the speed of the upper left.

2.5.4. PTZ preset points (Preset)

2.5.4.1. Add PTZ preset point (presetAdd)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=presetAdd&presetID=<presetID>&presetName=<presetName>&[PTZID=<PTZID>]
Description	Refer to PTZ input general parameters and PTZ preset point parameters
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action=presetAdd&cameraID=1&presetID=1&presetName=001
Return	OK(Others Refer to General Response)

2.5.4.2. Calling PTZ preset points (presetInvoke)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=presetInvoke&presetID=<presetID>&[PTZID=<PTZID>]
Description	Refer to PTZ input general parameters and PTZ preset point parameters
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=presetInvoke&presetID=1
Return	OK (Others Refer to General Response)

2.5.3.1 Delete PTZ preset point (presetDelete)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=presetDelete&presetID=<presetID>&[PTZID=<PTZID>]
Description	Refer to PTZ input general parameters and PTZ preset point parameters
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=presetDelete&presetID=1

Return	***OK***(Others Refer to General Response)

2.5.3.2 **Get PTZ preset points (listPreset)**

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=listPreset&[PTZID=<PTZID>]
Description	Refer to PTZ input general parameters and PTZ preset point parameters
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=listPreset
Return	presetBegin=1 presetID=1 presetName=A next_presetURL=2 presetID=2 presetName=sd next_presetURL=3 presetID=3 presetName=fd presetEnd=3 (Others Refer to General Response)

2.5.3.3 **Meaning of PTZ preset point parameters**

PTZ preset point parameter meaning table :

Table 2-5-5-5-1

parameter	data	Description

presetID	< int >[1,400]	Preset point number. Range: 1-400
PTZID	<int>[1,n]	PTZ ID: Fisheye single channel mode, there are multiple PTZ IDs (1-n), such as 1 Fisheye + 7 PTZ mode, there are 7 PTZIDs (1-7)
presetCount	< int >	Number of PTZ preset points
presetName	<string>	Preset point name
presetBegin	<int>{1}	Preset point loop body start mark
next_presetURL	<int>[2,n]	Next preset URL
presetEnd	<int>[1,n]	Preset point loop body end mark

2.5.5. PTZ Track

2.5.5.1. Add PTZ track (trackAdd)

URL	Add a track start point: http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=trackAddBegin&trackID=<trackID> Add a track end point: http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=trackAddEnd&trackID=<trackID>&trackName=<trackName>
Description	Refer to PTZ input general parameters and PTZ trajectory parameters table
Example (adding a starting point)	http://192.168.1.121/cgi-bin/ptz.cgi?action=trackAddBegin&cameraID=1&trackID=1

Return	OK(Others Refer to General Response)
Example (adding an end point)	http://192.168.1.121/cgi-bin/ptz.cgi?action=trackAddEnd&cameraID=1&trackID=1&trackName=test1
Return	OK(Others Refer to General Response)

2.5.5.2. Calling the PTZ track (trackInvoke)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=trackInvoke&trackID=<trackID>
Description	Refer to PTZ input general parameters and PTZ trajectory parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=trackInvoke&trackID=1
Return	OK(Others Refer to General Response)

2.5.5.3. Delete the PTZ track (trackDelete)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=trackDelete&trackID=<trackID >
Description	Refer to PTZ input general parameters and PTZ trajectory parameters table NVR carries & camera ID
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=trackDelete&trackID=1 &cameraID=1
Return	OK(Others Refer to General Response)

2.5.5.4. Get PTZ tracks (listTrack) (IPC)

URL	http://<servername>/cgi-bin/ptz.cgi?userName=admin&password=<password>&cameraID=<cameraID>&action= listTrack
Description	Refer to PTZ input general parameters and PTZ trajectory parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=listTrack
Return	trackBegin=1 trackID=0 trackName=sd next_trackURL=2 trackID=1 trackName=cd trackEnd=2 (For other responses, Refer to General Response)

2.5.5.5. Meaning of PTZ trajectory parameters

Meaning table of PTZ trajectory parameters:

Table 2-5-6-5-1

parameter	data	Description
trackCount	< int >[1,n]	Number of PTZ tracks
trackID	< int >[1,n]	Track number
trackName	<string>	Track Name
trackBegin	< int >1	Track loop body start mark

next_trackURL	< int >[2,n]	Next track start sign
trackEnd	< int >[1,n]	Track loop end mark

2.5.6. PTZ Scan

2.5.6.1. Add PTZ scan (scanAdd)

URL	Add a scan start point: http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=scanAddBegin&scanID=<scanID> Add a scan end point: http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=scanAddEnd&scanID=<scanID>&sanName =<scanName>
Description	Refer to PTZ input general parameters and PTZ scanning parameters table
Example (adding a starting point)	http://192.168.1.121/cgi-bin/ptz.cgi?action=scanAddBegin &cameraID=1& scanID=1
Return	OK(Others Refer to General Response)
Example (adding an end point)	http://192.168.1.121/cgi-bin/ptz.cgi?action=scanAddEnd&cameraID=1& scanID =1& scanName =test1
Return	OK(Others Refer to General Response)

2.5.6.2. Call PTZ scan (scanInvoke)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=scanInvoke&scanID=<scanID>

Description	Refer to PTZ input general parameters and PTZ scanning parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=scanInvoke&scanID=1
Return	OK(Others Refer to General Response)

2.5.6.3. Delete PTZ scan (scanDelete)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=scanDelete&scanID=<scanID>
Description	Refer to PTZ input general parameters and PTZ scanning parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=scanDelete&scanID=1
Return	OK(Others Refer to General Response)

2.5.6.4. Get PTZ scan (listScan)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=listScan
Description	Refer to PTZ input general parameters and PTZ scanning parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=listScan
Return	scanBegin=1 scanID=0 scanName=dsf next_scanURL=2

	scanID=1 scanName=bgm scanEnd=2 OK(Others Refer to General Response)

2.5.6.5. Meaning of PTZ scanning parameters

PTZ scanning parameter meaning table:

Table 2-5-7-5-1

parameter	data	Description
scanCount	< int >[1,n]	PTZ scanning number
scanID	< int >[1,n]	Scan ID
scanName	<string>	Scan Name
scanaBegin	< int >{1}	Scan loop body start mark
next_scanURL	< int >[2,n]	Next scan start mark
scanEnd	< int >[1,n]	Scan loop body end mark

2.5.7. PTZ Tour

2.5.7.1. Add PTZ tour (tourAdd)

URL	Add a tour start point: http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=tourAddBegin&tourID=<tourID> Add a tour preset point: http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=tourAddPreset&presetID=<presetID >&time=<time> **[&speed=<speed>]**

	Add a tour end point: http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=tourAddEnd&tourID=<tourID> & tourName=<tourName>
Description	Refer to PTZ input general parameters and PTZ tour parameters table
Example (adding a starting point)	http://192.168.1.121/cgi-bin/ptz.cgi?action= tourAddBegin &cameraID=1& tourID =1
Return	OK(Others Refer to General Response)
Example (adding a tour preset point)	http://192.168.1.121/cgi-bin/ptz.cgi?action= tourAddPreset&cameraID=1&presetID =1&time=10&speed=1
Return	OK(Others Refer to General Response)
Example (adding an end point)	http://192.168.1.121/cgi-bin/ptz.cgi?action= tourAddEnd&cameraID=1& tourID =1& tourName =test1
Return	OK(Others Refer to General Response)

2.5.7.2. Calling PTZ Tour (tourRun)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=tourRun&tourID=<tourID>
Description	Refer to PTZ input general parameters and PTZ tour parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action= tourRun&cameraID=1& tourID =1
Return	OK(Others Refer to General Response)

2.5.7.3. Delete PTZ tour (tourDelete)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=tourDelete&tourID=<tourID>
Description	Refer to PTZ input general parameters and PTZ tour parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action= tourDelete &cameraID=1& tourID =1
Return	OK(Others Refer to General Response)

2.5.7.4. Get the PTZ tour (listTour)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=listTour
Description	Refer to PTZ input general parameters and PTZ tour parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action=listTour&cameraID=1
Return	tourBegin=1 tourID=0 tourName=sdf presetBegin=1 presetID=1 time=5 speed=1

	presetEnd=1 next_tourURL=2 tourID=1 tourName=bt presetBegin=1 presetID=1 time=5 presetEnd=1 tourEnd=2 (Others Refer to General Response)

2.5.7.5. Meaning of PTZ cruise parameters

Meaning table of PTZ cruise parameters:

Table 2-5-8-5-1

parameter	data	Description
tourCount	< int >[1,n]	Number of pan/tilt tours
tourID	< int >[1,n]	Parade Number
tourName	<string>	Parade Name
tourBegin	< int >{1}	Tour loop start sign
next_tourURL	< int >[2,n]	Next Cruise
tourEnd	< int >[1,n]	End of the tour loop
presetID	< int >[1,400]	Preset point number. When adding a tour, the corresponding preset point must exist

time	< int >[1,255]	time. Range: 1-255 seconds
speed	<int>[1,7]	speed: Range: 1-8
presetBegin	< int >[1,400]	Preset point loop body start mark
next_presetURL	< int >[2,n]	Next preset URL
presetEnd	< int >[1,n]	Preset point loop body end mark

2.5.8. PTZ keeper

2.5.8.1. Set the PTZ keeper position (keeperSet)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=keeperSet&keeperType=<keeperType>&keeperID=<keeperID>&time=<time>
Description	Refer to the PTZ input general parameters and PTZ guard position parameter table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action=keeperSet&cameraID=1&keeperType=1&keeperID=1&time=1
Return	OK Others Refer to General Response

2.5.8.2. Get the PTZ keeper position (getkeeper) (IPC)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=getKeeper
Description	Refer to the PTZ input general parameters and PTZ guard position parameter table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action=getKeeper&cameraID=1

Return	keeperType=2 keeperID=1 StatusId=2 time=12 (Others Refer to General Response)

2.5.8.3. Execute PTZ keeper (keeperRun) (IPC)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=keeperRun&StatusId=2
Description	Refer to the PTZ input general parameters and PTZ guard position parameter table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?userName=admin&password=admin&action=keeperRun&cameraID=1&StatusId=2
Return	OK (Others Refer to General Response)

2.5.8.4. Meaning of PTZ guard position parameters

PTZ guard position parameter meaning table:

Table 2-5-9-4-1

parameter	data	Description
keeperType	< int >{1,2,3,4}	Guard Type: 1: Preset position, 2: Scan, 3: Self-learning, 4: Parade
keeperID	< int >[1,n]	When action=keeperSet, this is the number corresponding to keeperType.

		When action=keeperRun, keeperID: 0 means stop, 2 means start keeper
time	< int >[1,240]	Execution guard time, range: 1-240 minutes
StatusId	< int >{1,2}	Status ID number, 0x00: Disable the watchdog bit 0x02: Enable the watchdog bit

2.5.9. PTZ position control (Position)

2.5.9.1. PTZ Position (IPC)

2.5.9.1.1. Get the PTZ position (getPosition)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=getPosition
Description	Refer to the PTZ input general parameters and PTZ position parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action=getPosition&cameraID=1
Return	pan=45.000000 tilt=30.000000 zoom=3.000000 (Others Refer to General Response)

2.5.9.1.2. Set the PTZ position (setPosition)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=setPosition&pan= <pan>&tilt=<tilt>&zoom=<zoom>

Description	Refer to the PTZ input general parameters and PTZ position parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action=setPosition& pan=45.5&tilt=30.1 &zoom=3&cameraID=1
Return	OK (Others Refer to General Response)

2.5.9.1.3. Set the north position of the PTZ (setNorthPosition)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=setNorthPosition
Description	Refer to the PTZ input general parameters and PTZ position parameters table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?action= setNorthPosition&cameraID=1
Return	OK (Others Refer to General Response)

2.5.9.1.4. Meaning of PTZ position parameters

Meaning table of PTZ position parameters:

Table 2-5-10-4-1

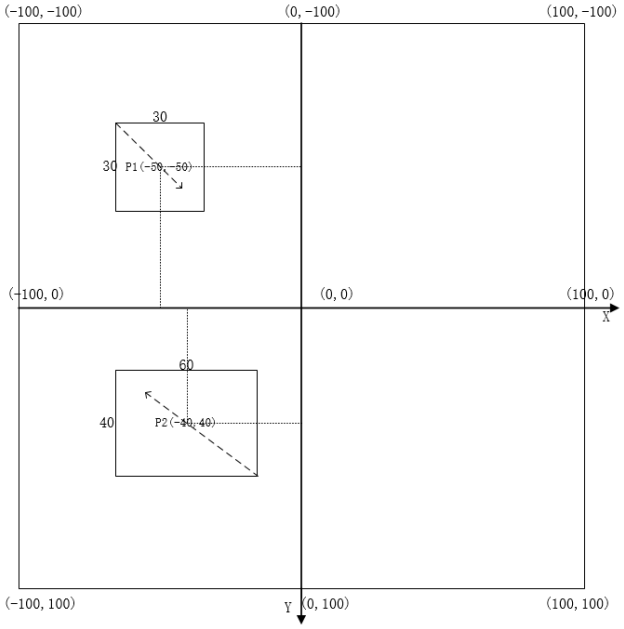
parameter	data	Description
pan	<float>[0.0,360.0]	Horizontal angle, Range: 0-360
tilt	<float>[0.0,90.0]	Vertical angle, Range: 0-90
zoom	<float>[0.0,n]	Zoom, determined by device capabilities
focus	<int>	Focal length, determined by device capabilities

2.5.9.2. 3D Positioning (3DPosition) (IPC)

3D positioning description:

3D positioning is to move the specified position to the center and then zoom in or out the image. The entire image can be marked with a Cartesian coordinate system, with the center of the image as the origin, the horizontal x-axis, negative on the left and positive on the right; the vertical y-axis, negative on the top and positive on the bottom; the range of x and y values is [-100, 100].

3D positioning diagram:



Example 1: 3D zoom. Take area P1 as an Example, drag the mouse from the upper left to the lower right, and set ZoomRate to a positive value. After the center point (-50, -50) of area P1 is moved to the center position, the image is enlarged.

PontX = -50

PontY = -50

ZoomRate = (200*200)/(30*30)

Example 2: 3D zoom out. Take area P2 as an Example, drag the mouse from the lower right to the upper left, and set ZoomRate to a negative value. After the center point (-40, 40) of area P2 is moved to the center position, the image is zoomed out.

PontX = -40

PontY = 40

ZoomRate = -(200*200)/(40*60)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=3DPosition&PontX=<PontX>&PontY=<PontY>&ZoomRate=<ZoomRate>
Description	Refer to the PTZ input general parameters and 3D positioning parameter meaning table
Example	http://192.168.1.121/cgi-bin/ptz.cgi?cameraID=1&action=3DPosition&PontX=20&PontY=30&ZoomRate=2
Return	OK (Others Refer to General Response)

3D positioning parameter meaning table :

Table 2-5-11-1

parameter	type of data	Remark
PontX	<int>[-100,100]	X coordinate of the center point of the positioning area
PontY	<int>[-100,100]	The Y coordinate of the center point of the positioning area
ZoomRate	<float>[1,n]	ZoomRate = the area of the entire screen / the area of the positioning area, which is determined by the device capabilities

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>&action=setRelativePosition...
Descriptio	Refer to relative motion parameters table

n	
Example	http://192.168.110.101/cgi-bin/ptz.cgi?action=setRelativePosition&pan=320&tilt=3&zoom=3&cameraID=1
Return	Ok (Others Refer to General Response)

2.5.9.3. PTZ relative motion (setRelativePosition) (IPC)

2.5.9.3.1. Relative motion setting (setRelativePosition)

2.5.9.3.2. Relative motion setting meaning

parameter	data	Description (movement relative to current position)
pan	<float>[0.0,360.0]	Horizontal angle, Range: 0-360
tilt	<float>[0.0,90.0]	Vertical angle, Range: 0-90
zoom	<float>[0.0,n]	Zoom, determined by device capabilities

2.5.9.4. PTZ position range (getPositionRange) (IPC)

2.5.9.4.1. Get Position Range (getPositionRange)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID> & getPositionRange&cameraID=1 ...
Description	Refer to relative motion parameters table

Example	http://192.168.110.101/cgi-bin/ptz.cgi?action=getPositionRange&cameraID=1
Return	**P anmax=360** **P anmin = 0** **T iltmax=100** **T iltmax=0** **Zoom =0** **Zoom =90** (Others Refer to General Response)

2.5.10. PTZ wiper control (Wiper)(NVR is not supported)

2.5.10.1.Open the wiper (openWiper)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>& type=Wiper&action=open
Description	Refer to wiper parameter table
Example	http://192.168.1.205/cgi-bin/ptz.cgi?type=Wiper&action=open
Return	OK (Others Refer to General Response)

2.5.10.2.Close Wiper

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>& type=Wiper&action= close
Description	Refer to wiper parameter table
Example	http://192.168.1.205/cgi-bin/ptz.cgi?type=Wiper&action= close
Return	OK (Others Refer to General Response)

2.5.10.3.Wiper parameter meaning

parameter	data	Description
Action	< string > [open, close]	open, enable the wiper function close, disable the wiper function

2.5.11. PTZ lens washing control (Wash)(NVR is not supported)

2.5.11.1.Open the wiper (openWash)

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>& type= W ash &action=open
Description	Refer to flushing parameters table
Example	http://192.168.1.205/cgi-bin/ptz.cgi?type=W ash &action= open
Return	OK (Others Refer to General Response)

2.5.11.2.Wiper parameter meaning

parameter	data	Description
Action	< string > [open]	open, turn on the flushing function Lens flushing, the operation lasts for 5 seconds and then stops

2.5.12. PTZ Heating

2.5.12.1.PTZ Heating command

URL	http://<servername>/cgi-bin/ptz.cgi?cameraID=<cameraID>& action=heating&HeatingSwitch=1
Description	Refer to flushing parameters table

带格式的：多级符号 + 级别：3 + 编号样式：1, 2, 3, … + 起始编号：1 + 对齐方式：左侧 + 对齐位置：0.74 厘米 + 缩进位置： 1.99 厘米

设置了格式：字体：Times New Roman

Example	http://192.168.1.205/cgi-bin/ptz.cgi?cameraID=1&action=heating&HeatingSwitch=1
Return	OK (Others Refer to General Response)

2.5.12.2.Parameter Meaning

Parameter	Data	Description
HeatingSwitch	< int> [0,1]	0 close 1 open

设置了格式：字体：Times New Roman

带格式的：正文，段落间距段前：0 磅， 无项目符号或编号

2.6 Device configuration (param.cgi)

In the param.cgi program, enter at least 4 parameters, namely user name, password, action, and program subtype. (user Name and password must be in the first and second positions of the parameter)

2.6.1. Device-related configuration

2.6.1.1. Device Information (deviceInfo)

2.6.1.1.1. Get device information (getDeviceInfo)

URL	http://<servername>/cgi-bin/param.cgi?&action=get&type= **deviceInfo**
Description	Refer to the device information parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=deviceInfo
Return	deviceID=159356 deviceName= deviceType=1 productModel=IPV57/41CLDR/Z/13 manufacturerID=003

	manufacturerName=IPCamera MACAddress=00:1C:27:15:93:56 hardwareVer=V060101_1 softwareVer=v3.5.0804.1003.3.0.27.4.0 channelNum=1 alarmInNum=1 alarmOutNum=1 RS485Num=0 ubootVersion=v1.0_20221109 kerneVersion=v1.0_20221122 networkCardNum=1 (Others refer to the 错误!未找到引用源。~~General Response~~)

2.6.1.1.2. Set the device name (setDeviceName)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **deviceName** [&deviceName=<deviceName>]
Description	Carrying the device name parameter indicates setting, and not carrying the parameter does not change the original device name; For parameters, Refer to the device information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=deviceName&deviceName=test
Return	OK (Others refer to the 错误!未找到引用源。~~General Response~~)

2.6.1.1.3. Device Information Parameters

Device information parameters table:

Table 2-6-1-1-3-1

Parameter	data	Description
deviceID	<string>	Device ID Unique device identifier

deviceName	<string>	Device Name Cannot contain the following English characters < > % & \ " / ,' ; = | +
deviceType	<int>{1,5}	Device type: IPCamera (default is 1) NVR (default is 5)
productModel	<string>	Manufacturer ID
manufacturerName	<string>	Trade Names
manufacturerID	<string>	Device Model The corresponding ID is 001
MACAddress	<string>	MAC Address
hardwareVer	<string>	hardware version
softwareVer	<string>	Software version
channelNum	<unsigned int>[0,n]	Number of cameras
alarmInNum	<unsigned int>[0,n]	Number of alarm inputs
alarmOutNum	<unsigned int>[0,n]	Number of alarm outputs
RS485Num	<unsigned int>[0,n]	RS485 serial port number
ubootVersion	<string>	uboot version
kerneVersion	<string>	Kernel version
networkCardNum	<string>	Number of network cards

2.6.1.2. local network

2.6.1.2.1. Get local network parameters (getNetwork)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **localNetwork** &IPProtoVer=<IPProtoVer>[&netCardId=<netCardId>]

Description	1. IPProtoVer is mandatory. When IPProtoVer is 1, get designated information of netcard if with netCardId, get information of all netcard if without it. When IPProtoVer is 2, netCardId is mandatory, otherwise will Return parameters error; 2. NVR only support get the IPV4 information of netcard now, IPV6 is not supported yet; still Returns IPV4 information of netcard when IPProtoVer = 2 (IPV6). Refer to network parameter information table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=localNetwork&IPProtoVer=1&netCardId=1
Return	localNetworkBegin=1 (IPC) IPProtoVer=1 netCardId=1 IPAddress=192.168.32.151 subNetmask=255.255.0.0 subGetway=192.168.1.1 preferredDNS= alternateDNS= autoGetIPFlag=1 localNetworkEnd=1(IPC) mtu=1500 (IPC) (Others Refer to General Response)

2.6.1.2.2. Set local network parameters (setNetwork)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **localNetwork** &netCardId=<netCardId>&IPProtoVer=<IPProtoVer>[&<argument>=<value>...]
Description	netCardId and IPProtoVer are required parameters, and the rest are optional parameters; For parameters, Refer to the network parameter information table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=localNetwork&netCardId=1&IPProtoVer=1&IPAddress=192.168.32.21&subNetmask=255.255.255.0&subGetway=192.168.3

	2.1&preferredDNS=128.0.0.1&alternateDNS=128.0.0.2&mtu=1500
Return	OK (Others Refer to General Response)

2.6.1.2.3. Local Network Parameters

Network parameter information table

Table 2-6-1-2-3-1

parameter	data	Description
IPProtoVer	<int>{1, 2}	IP Version 1: IP V4 2: IP V6 Mandatory
IPAddress	<string>	Device IP
subNetmask	<string>	Subnet Mask
subGetway	<string>	Device Gateway
preferredDNS	<string>	Primary DNS
alternateDNS	<string>	Alternative DNS
autoGetIPFlag	<int>{0,1}	Automatically obtain IP flag 0: Manual 1: Automatic
netCardId	<int>{1,2}	Network card number 1: Network card 1 2: Network card 2 It is an optional parameter when getting. Carrying this parameter means obtaining the specified network card information. Not carrying this parameter means obtaining all network card information. It is a required parameter when setting.
mtu	<int>	MTU

localNetworkBegin	<string>	Network information start mark (NVR/The lite series only supports one network card, so this parameter is not available for the time being)
localNetworkNextFlag	<string>	Next network card information mark Start from 2. If the value is 2, it means the following parameter is the second one.
localNetworkEnd	<string>	End of network information

2.6.1.3. ADSL Network (IPC excluding the lite series)

2.6.1.3.1. Get ADSL network parameters (getADSLNetwork)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **ADSLNetwork** &IPProtoVer=<IPProtoVer>
Description	For parameter description, Refer to ADSL network parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=ADSLNetwork&IPProtoVer=1
Return	IPProtoVer=1 IPAddress= (For other responses, Refer to General Response)

2.6.1.3.2. ADSL network parameters meaning

ADSL Network Parameters Table

Table 2-6-1-3-2-1

parameter	data	Description
IPAddress	<string>	IP address

IPProtoVer	<int>{1,2}	IP Version 1: IP V4 2: IP V6 Required parameter;

2.6.1.4. Device Port (devicePort)

2.6.1.4.1. Get device port parameters (getDevicePort)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **devicePort**
Description	Refer to the device port parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=devicePort
Return	controlPort=30001 httpPort=80 rtspPort=554 rtmpPort=8080 httpsPort=443 sslPort=20001(IPC) (For other responses, Refer to General Response)

2.6.1.4.2. Set device port parameters (setDevicePort)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **devicePort** [&<argument>=<value>]
Description	Carrying port parameters means setting, and not carrying them means no change; For parameters, Refer to the device port parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=devicePort&controlPort=30001&httpPort=80&rtspPort=554&rtmpPort=8080&httpsPort=443&sslPort=20001

Return	OK (For other responses, Refer to General Response)

2.6.1.4.3. Meaning of device port parameters

Device port parameter table

Table 2-6-1-4-3-1

parameter	data	Description
controlPort	<unsigned short>[0,n]	Control Port Signaling control, audio and video end, optional parameter when setting
httpPort	<unsigned short>[0,n]	HTTP Port As an optional parameter when setting
rtspPort	<unsigned short>[0,n]	RTSP connection port As an optional parameter when setting
rtmpPort	<unsigned short>[0,n]	RTMP connection port As an optional parameter when setting
sslPort	<unsigned short>[0,n]	SSL Port Control Port (IPC)
httpsPort	<unsigned short>[0,n]	HTTPS Port

2.6.1.5. Channel device information parameters (channelInfo) (NVR)

2.6.1.5.1. Get channel device information (get ChannelInfo)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type= channelInfo
Description	Refer to channel device information parameter table
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=get&type= channelInfo
Return	channelNum=16 channelBinded=2 channelBegin=1

	channelId=1 channelName=Device channelModel=SN-Q204M-B channelFirmware=t4.4.1207.1004.0.0.2.12.0 channelHardware=120704101 channelStatus=5 channelProtocol=2 channelType=1 streamNum=2 streamBegin=1 streamId=1 streamEncoder=1 streamWidth=2560 streamHeight=1440 next_streamURL=2 streamId=2 streamEncoder=1 streamWidth=704 streamHeight=576 streamEnd=2 next_channelURL=2 channelId=2 channelName=Channel01 channelModel=IPR57/20UKDN/Z/13 channelFirmware=v3.5.0804.1004.3.0.33.7.0 channelHardware=V060391_1 channelStatus=5 channelProtocol=2 channelType=1 streamNum=2 streamBegin=1 streamId=1 streamEncoder=1 streamWidth=1920 streamHeight=1080 next_streamURL=2 streamId=2 streamEncoder=1 streamWidth=704 streamHeight=576 streamEnd=2 channelEnd=2 (For other responses, Refer to General Response)

2.6.1.5.2. Channel device information parameters

Channel device information parameter table

Table 2-6-1-5-2-1

parameter	data	Description
channelNum	<int>[0, n]	Total number of channels
channelBinded	<int>[0, n]	The number of channel devices currently bound
channelId	<int>[0, n]	Channel ID
channelName	<string>	Channel device name
channelModel	<string>	Channel model
channelFirmware	<string>	Channel device firmware version
channelHardware	<string>	Channel device hardware version
channelStatus	<int>[1,4]	Channel device status: 0, device not bound 1. Network connection failed 2. Username or password is incorrect 3. Access Denied 4. process denied 5. The device is online normally 6. The maximum number of cameras connected has been reached 7. Encoding parameters are not supported
channelProtocol	<int>	Channel Device Protocol: 0, unknown

		1.onvif 2. Private~~Sunell~~ 3. lcoal~~ local~~ ~~4, Sunell SSL~~ 101, Custom Protocol
channelType	<int>	Channel device type: Channel device type: 1, Network camera 2, Digital video recorder 3, Digital video server 4, IP High speed PTZ 5, NVR 6, Onvif device 7, Encode device 8, LPR camera 9, Fisheye 10, Digital video recorder 11, Panorama camera 13, Thermal 14, Body temperature 15, face detection 16, LPR (domestic) 17, Dual light thermal 18, AI multi-object 100, HK DVR 101, AL DVR 102, DH DVR
streamNum	<int>[1,n]	Total number of channel device video streams
streamId	<int>[1,n]	Video stream ID

streamEncoder	<int>[1,2]	Encoding type: 1、 H264 2、 H265
streamWidth	<int>	Resolution width
streamHeight	<int>	Resolution height
streamBegin	<int>1	Stream begin flag
next_streamURL	<int>[0, n]	Next stream flag
streamEnd	<int>[2, n]	Stream end flag
cameraBegin	<int>1	Camera begin flag
cameraEnd	<int>[2, n]	Camera end flag
next_cameraURL	<int>[0, n]	Next device tag

2.6.1.6. Channel information parameters (cameraInfo)

2.6.1.6.1. Get the channel name (getCameraName)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=cameraInfo [&cameraID = **<cameraID>**]
Description	Refer to channel information parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=cameraInfo&cameraID=1

Return	cameraName=OEM (For other responses, Refer to General Response)

2.6.1.6.2. Set the channel name (setCameraName)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **cameraInfo** &cameraID=<cameraID>[&cameraName =<cameraName>]
Description	Carrying the channel name parameter indicates setting, and not carrying it indicates not making changes; For parameters, Refer to the channel information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=cameraInfo&cameraID=1&cameraName=asd
Return	OK (For other responses, Refer to General Response)

2.6.1.6.3. Channel Information Parameter Table

Table 2-6-1-5-3-1

parameter	data	Description
cameraID	<int>[0,n]	Channel Number The channel number is unique in the device. This parameter is optional. If you bring cameraID when getting, it means getting the channel name of a single channel. Without this parameter, it means getting the names of all channels. This parameter is required when setting.
cameraName	<string>	Channel Name Optional parameter. Without it, the existing name will not be changed.

2.6.1.7. Device time (dateTime)

2.6.1.7.1. Get device time parameters (getDateTime)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **dateTime**
Description	Refer to equipment time parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=dateTime
Return	year=2018 month=9 day=25 hour=14 minute=5 second=20 (For other responses, Refer to General Response)

2.6.1.7.2. Set device time parameters (setDateTime)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **dateTime** [&<argument>=<value>]
Descripti	For parameters, Refer to the equipment time parameter table.

on	
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=dateTime&year=2018&month=9&day=25&hour=14&minute=10&second=10
Return	OK (For other responses, Refer to General Response)

2.6.1.7.3. Meaning of device time parameters

Equipment time parameter table

parameter	data	Description
Datefmt (IPC The lite series, NVR)	I nt[0,5]	Date format: (optional parameter for Set) 0: YY/MM/DD hh:mm:ss 1: hh:mm:ss YY/MM/DD 2: MM/DD/YY hh:mm:ss 3: hh:mm:ss MM/DD/YY 4: DD/MM/YY hh:mm:ss 5: hh:mm:ss DD/MM/YY Note: IPC can be set in the OSD canvas
Timefmt (IPC The lite series, NVR)	I nt[0,1]	Time format: (optional parameter for Set) 0: 12H 1: 24H Note: IPC can be set in the OSD canvas
month	<unsigned short>[1,12]	moon Optional parameter for Set
day	<unsigned short>[1,31]	day Optional parameter for Set

hour	<unsigned short>[0,23]	hour Optional parameter for Set
minute	<unsigned short>[0,59]	point Optional parameter for Set
second	<unsigned short>[0,59]	Second Optional parameter for Set

Table 2-6-1-6-3-1

2.6.1.8. Time zone capabilities

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= timeZoneAbility &languageId=1
Description	Refer to the device time zone parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=timeZone &languageId=1
Return	timeZoneCount=76 timeZoneBegin=1 timeZoneName=(GMT-12:00) International Date Line West next_TimeZoneURL=2 timeZoneName=(GMT-11:00) Midway Island, Samoa next_TimeZoneURL=3 timeZoneName=(GMT-10:00) Hawaii next_TimeZoneURL=4 timeZoneName=(GMT-09:00) Alaska next_TimeZoneURL=5 timeZoneName=(GMT-08:00) Pacific Time (US Canada) next_TimeZoneURL=6 timeZoneName=(GMT-08:00) Tijuana, Baja California next_TimeZoneURL=7 timeZoneName=(GMT-07:00) Mountain Time (US Canada) next_TimeZoneURL=8 timeZoneName=(GMT-07:00) Chihuahua, La Paz, Mazatlan next_TimeZoneURL=9 timeZoneName=(GMT-07:00) Arizona next_TimeZoneURL=10 timeZoneName=(GMT-06:00) Central Time (US Canada)

	next_TimeZoneURL=11 timeZoneName=(GMT-06:00) Saskatchewan next_TimeZoneURL=12 timeZoneName=(GMT-06:00) Guadalajara, Mexico City, Monterrey next_TimeZoneURL=13 timeZoneName=(GMT-06:00) Central America next_TimeZoneURL=14 timeZoneName=(GMT-05:00) Eastern Time (US Canada) next_TimeZoneURL=15 timeZoneName=(GMT-05:00) Indiana (East) next_TimeZoneURL=16 timeZoneName=(GMT-05:00) Bogota, Lima, Quito next_TimeZoneURL=17 timeZoneName=(GMT-04:30) Caracas next_TimeZoneURL=18 timeZoneName=(GMT-04:00) Atlantic Time (Canada) next_TimeZoneURL=19 timeZoneName=(GMT-04:00) Santiago next_TimeZoneURL=20 timeZoneName=(GMT-03:30) Newfoundland next_TimeZoneURL=21 timeZoneName=(GMT-03:00) Brasilia next_TimeZoneURL=22 timeZoneName=(GMT-03:00) Buenos Aires next_TimeZoneURL=23 timeZoneName=(GMT-03:00) Greenland next_TimeZoneURL=24 timeZoneName=(GMT-02:00) Mid-Atlantic next_TimeZoneURL=25 timeZoneName=(GMT-01:00) Azores next_TimeZoneURL=26 timeZoneName=(GMT-01:00) Cape Verde Is. next_TimeZoneURL=27 timeZoneName=(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London next_TimeZoneURL=28 timeZoneName=(GMT) Casablanca, Monrovia next_TimeZoneURL=29 timeZoneName=(GMT+01:00) Belgrade, Bratislava, Budapest, Ljubljana, Prague next_TimeZoneURL=30 timeZoneName=(GMT+01:00) Sarajevo, Skopje, Warsaw, Zagreb next_TimeZoneURL=31 timeZoneName=(GMT+01:00) Brussels, Copenhagen, Madrid, Paris

	next_TimeZoneURL=32 timeZoneName=(GMT+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna next_TimeZoneURL=33 timeZoneName=(GMT+01:00) West Central Africa next_TimeZoneURL=34 timeZoneName=(GMT+02:00) Bucharest next_TimeZoneURL=35 timeZoneName=(GMT+02:00) Cairo next_TimeZoneURL=36 timeZoneName=(GMT+02:00) Helsinki, Kyiv, Riga, Sofia, Tallinn, Vilnius next_TimeZoneURL=37 timeZoneName=(GMT+02:00) Athens, Beirut, Istanbul, Minsk next_TimeZoneURL=38 timeZoneName=(GMT+02:00) Jerusalem next_TimeZoneURL=39 timeZoneName=(GMT+02:00) Harare, Pretoria next_TimeZoneURL=40 timeZoneName=(GMT+03:00) Moscow, St. Petersburg, Volgograd next_TimeZoneURL=41 timeZoneName=(GMT+03:00) Kuwait, Riyadh next_TimeZoneURL=42 timeZoneName=(GMT+03:00) Nairobi next_TimeZoneURL=43 timeZoneName=(GMT+03:00) Baghdad next_TimeZoneURL=44 timeZoneName=(GMT+03:30) Tehran next_TimeZoneURL=45 timeZoneName=(GMT+04:00) Abu Dhabi, Muscat next_TimeZoneURL=46 timeZoneName=(GMT+04:00) Baku, Tbilisi, Yerevan next_TimeZoneURL=47 timeZoneName=(GMT+04:30) Kabul next_TimeZoneURL=48 timeZoneName=(GMT+05:00) Ekaterinburg next_TimeZoneURL=49 timeZoneName=(GMT+05:00) Islamabad, Karachi, Tashkent next_TimeZoneURL=50 timeZoneName=(GMT+05:30) Chennai, Kolkata, Mumbai, New Delhi next_TimeZoneURL=51 timeZoneName=(GMT+05:30) Sri Jayawardenepura next_TimeZoneURL=52 timeZoneName=(GMT+05:45) Kathmandu next_TimeZoneURL=53

	timeZoneName=(GMT+06:00) Astana, Dhaka next_TimeZoneURL=54 timeZoneName=(GMT+06:30) Rangoon next_TimeZoneURL=55 timeZoneName=(GMT+07:00) Novosibirsk next_TimeZoneURL=56 timeZoneName=(GMT+07:00) Bangkok, Hanoi, Jakarta next_TimeZoneURL=57 timeZoneName=(GMT+07:00) Krasnoyarsk next_TimeZoneURL=58 timeZoneName=(GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi next_TimeZoneURL=59 timeZoneName=(GMT+08:00) Kuala Lumpur, Singapore next_TimeZoneURL=60 timeZoneName=(GMT+08:00) Taipei next_TimeZoneURL=61 timeZoneName=(GMT+08:00) Perth next_TimeZoneURL=62 timeZoneName=(GMT+08:00) Irkutsk next_TimeZoneURL=63 timeZoneName=(GMT+09:00) Seoul next_TimeZoneURL=64 timeZoneName=(GMT+09:00) Osaka, Sapporo, Tokyo next_TimeZoneURL=65 timeZoneName=(GMT+09:00) Yakutsk next_TimeZoneURL=66 timeZoneName=(GMT+09:30) Darwin next_TimeZoneURL=67 timeZoneName=(GMT+09:30) Adelaide next_TimeZoneURL=68 timeZoneName=(GMT+10:00) Canberra, Melbourne, Sydney next_TimeZoneURL=69 timeZoneName=(GMT+10:00) Brisbane next_TimeZoneURL=70 timeZoneName=(GMT+10:00) Hobart next_TimeZoneURL=71 timeZoneName=(GMT+10:00) Vladivostok next_TimeZoneURL=72 timeZoneName=(GMT+10:00) Guam, Port Moresby next_TimeZoneURL=73 timeZoneName=(GMT+11:00) Solomon Is., New Caledonia next_TimeZoneURL=74 timeZoneName=(GMT+12:00) Fiji, Kamchatka, Marshall Is. next_TimeZoneURL=75

	timeZoneName=(GMT+12:00) Auckland, Wellington next_TimeZoneURL=76 timeZoneName=(GMT+13:00) Nuku'alofa timeZoneEnd=1

2.6.1.8.1. Meaning of time zone capability parameters (IPC excluding the lite series)

URL	Parameter Description	scope	type of data
languageId	language 1: English 2: Simplified Chinese 3: Russian 4. French 7: Spanish 8: Portuguese 9: Polish 16: Czech 25 : Hungarian 26: Italian		int
timeZoneCount	Number of time zones		int
timeZoneBegin	Time zone start indicator		int
timeZoneName	Time zone name		int
next_TimeZoneURL	Next time zone start mark		int
timeZoneEnd	Time zone end marker		int

2.6.1.8.2. Get device time zone parameters (getTimeZone)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **timeZone**
Description	Refer to the device time zone parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=timeZone
Return	timeZone=85 DSTOpenFlag=0 beginMonth=3 beginWeekly=5 beginWeekDays=0 beginTime=60 endMonth=10 endWeekly=5 endWeekDays=0 endTime=120 (For other responses, Refer to General Response)

2.6.1.8.3. Set device time zone parameters (setTimeZone)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **timeZone** [&<argument>=<value>...]
Description	When DSTOpenFlag = 1 (open daylight saving time), the start time must be less than the end time DSTOpenFlag = 0 (close daylight saving time), no strict verification is performed on the time parameters. For parameters, Refer to the device time zone parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=timeZone&timeZone=85&DSTOpenFlag=1&beginMonth=3&beginWeekly=1&beginWeekDays=1&beginTime=600&endMonth=10&endWeekly=2&endWeekDays=0&endTime=1200
Return	OK

	(For other responses, Refer to General Response)

2.6.1.8.4. Meaning of device time zone parameters

Device time zone parameter table

Table 2-6-1-7-3-1

parameter	data	Description
timeZone	<int>[0, 300]	Time zone id 0-300 represents different time zones
DSTOpenFlag	<int>{0, 1}	Daylight saving time enable flag 0: Disable 1: Enable
beginMonth	<int>[1,12]	Daylight saving time starts in the month
beginWeekly	<int>[1,5]	Daylight Saving Time starts week Indicates the week number in January
beginWeekDays	<int>[0,6]	Daylight saving time starts 0 means Sunday
beginTime	<int>[0, 1440]	Daylight saving time starts The number of minutes from 00:00 to the current time Note: The time must be an integer multiple of 30
endMonth	<int>[1, 12]	Daylight saving time ends month
endWeekly	<int>[1, 5]	Daylight Saving Time Ends Week Indicates the week number in January
endWeekDays	<int>[0, 6]	Daylight saving time ends 0 means Sunday
endTime	<int>[0, 1440]	Daylight saving time ends The number of minutes from 00:00 to

		the current time Note: The time must be an integer multiple of 30
Offset (NVR)	<int>{30, 60}	Offset Note: Only 30 or 60

2.6.1.9. Camera (IPC excluding the lite series)

2.6.1.9.1. Get camera capabilities

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **videoSystemAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= videoSystemAbility
Description	Refer to URL Descriptions
Return	videoFormatCount=2 videoFormatBegin=1 videoFormat=1 frequencyCount=1 frequencyBegin=1 frequency=50 frequencyEnd=1 next_FormatURL=2 videoFormat=0 frequencyCount=1 frequencyBegin=1 frequency=60 frequencyEnd=1 videoFormatEnd=1

2.6.1.9.2. Camera capability parameters meaning

URL	Parameter Description	scope	type of data
videoFormatCount	Number of video formats		int
videoFormatBegin	Video format start mark		int

videoFormat	Video format 0: NTSC 1: PAL		int
frequencyCount	Video refresh rate		int
frequencyBegin	Video refresh rate start mark		int
frequency	Video refresh rate		int
next_FreqURL	Video refresh rate next mark		int
frequencyEnd	Video refresh rate end mark		int
next_FormatURL	Next format start mark		int
videoFormatEnd	Video format end mark		int

2.6.1.9.3. Get camera parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **videoSystem** &cameraID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=videoSystem &cameraID=1
Return	videoFormat=0 frequency=60 (IPC)

2.6.1.9.4. Set camera parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **videoSystem** &cameraID=1&videoFormat=0&frequency=60

Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type= videoSystem&cameraID=1&videoFormat=0&frequency=60
Return	OK (For other responses, Refer to General Response)

2.6.1.9.5. Camera parameter meaning

URL	Parameter Description	scope	type of data
videoFormat	Video format 0: NTSC 1: PAL	0-1	int
Frequency (IPC)	Video refresh rate		

2.6.1.10. Watermark (OSD) (IPC excluding the lite series)

2.6.1.10.1. Get OSD capabilities

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **OSDAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= OSDAbility
Description	Refer to URL Descriptions
Return	maxCanvasProperNum=8 maxOSDNum=1 osdTypeCount=5 osdTypeBegin=1 osdType=1 next_OSDTypeURL=2 osdType=2 next_OSDTypeURL=3

	osdType=3 next_OSDTypeURL=4 osdType=4 next_OSDTypeURL=5 osdType=5 osdTypeEnd=1 fontSizeCount=3 fontSizeBegin=1 fontSize=3 next_FontSizeURL=2 fontSize=2 next_FontSizeURL=3 fontSize=1 fontSizeEnd=1 timeFormatCount=6 timeFormatBegin=1 timeFormat=YYYY-MM-DDhh:mm:ssww next_TimeURL=2 timeFormat=hh:mm:ssYYYY-MM-DDww next_TimeURL=3 timeFormat=MM/DD/YYYYhh:mm:ssww next_TimeURL=4 timeFormat=hh:mm:ssMM/DD/YYYYww next_TimeURL=5 timeFormat=DD/MM/YYYYhh:mm:ssww next_TimeURL=6 timeFormat=hh:mm:ssDD/MM/YYYYww timeFormatEnd=1 fontAlphaCount=4 fontAlphaBegin=1 fontAlpha=1 next_AlphaURL=2 fontAlpha=2 next_AlphaURL=3 fontAlpha=3 next_AlphaURL=4 fontAlpha=4 fontAlphaEnd=1 supportFontColor=1 allFontColor=1 supportFontInverse=0

2.6.1.10.2. OSD capability parameter meaning

URL	Parameter Description	scope	type of data
maxCanvasProperNum	Maximum number of canvases		int
maxOSDNum	Maximum number of OSDs		int
osdTypeCount	Number of OSD types		int
osdTypeBegin	OSD type start mark		int
osdType	OSD Type 1: Device name 2: Camera number 3: Camera name 4: Time watermark 5: Text watermark 6: PTZ position operation watermark 7: PTZ behavior operation watermark 8: PTZ temperature		int
next_OSDTypeURL	Next OSD type start mark		int
osdTypeEnd	OSD type end marker		int
fontSizeCount	Font size number		int
fontSizeBegin	Font size start mark		int
fontSize	font size		int
next_FontSizeURL	Next font size start mark		int
fontSizeEnd	Font size end marker		int
timeFormatCount	Number of time formats		int
timeFormatBegin	Time format start mark		int

timeFormat	Time format		string
next_TimeURL	Next time format start mark		int
timeFormatEnd	Time format end mark		int
fontAlphaCount	Font transparency number		int
fontAlphaBegin	Font transparency start mark		int
fontAlpha	Font transparency		int
next_AlphaURL	Next Font transparency start mark		int
fontAlphaEnd	Font transparency end marker		int
supportFontColor	font color 0: Not supported 1: Support		int
allFontColor	All font colors 0: Not supported 1: Support		int
fontColorCount	Font Color Number		int
fontColorBegin	Font color start mark		int
fontColor	font color		int
next_FontColorURL	Next item font color start mark		int
fontColorEnd	Font color end mark		int
supportFontInverse	Invert font 0: Not supported 1: Support		int
allFontInverseColor	Invert all fonts		int

	0: Not supported 1: Support		
fontInverseColorCount	Number of inverted fonts		int
fontInverseColorBegin	Inverted font start mark		int
fontInverseColor	Invert font color		int
next_InverseURL	Next item font inverted color starts marking		int
fontInverseColorEnd	End mark with inverted font		int

2.6.1.10.3. Setting all parameters

2.6.1.10.3.1. Get OSD parameters (getOSD) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **OSD** &cameraID=<cameraID>	
Description	Refer to OSD Global Parameters Table	
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=OSD&cameraID=1	
Return	(IPC) fontColor=2 inverseFlag=1 alpha=4 TwelveHoursFlag=0 WeekFlag=0 (For other responses, Refer to General Response)	(NVR/the lite series) red=0 green=0 blue=0 alpha=0 inverseFlag=0 frontWidth=32 frontHeight=32

2.6.1.10.3.2. Set OSD parameters (setOSD) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **OSD** &cameraID=<cameraID>[&<argument>=<value>...]
Descripti	For parameters, Refer to OSD Global Parameters Table

on		
Example	(IPC excluding the lite series) http://192.168.32.151/cgi-bin/param.cgi?action=set&type=OSD&cameraID=1&fontColor=7&inverseFlag=1&alpha=2&TwelveHoursFlag=1&WeekFlag=0	(IPC The lite series) http://192.168.2.193/cgi-bin/sensor.cgi?action=set&type=OSD&cameraID=1&red = 2&green=3&blue=1 &inverseFlag= 1 &alpha= 3&frontWidth=28&frontHeigth=30
Return	OK (For other responses, Refer to General Response)	

2.6.1.10.3.3. OSD parameter meaning

OSD Parameters Table

Table 2-6-1-8-3-1

parameter	data	Description
IPC		
timeFormat	<int>	Time format
cameraID	<int>[0,n]	Camera ID
fontColor	<unsigned int>[0, 9]	font color 0: Other 1: White 2: Black 3: Red 4: Orange 5: Yellow 6: Green 7: Blue 8: Blue 9: Purple
inverseFlag	<unsigned char>{0, 1}	Invert Enable Flag

		0: Disable 1: Enable
inverseColor	<int>[0, 9]	font color 0: Other 1: White 2: Black 3: Red 4: Orange 5: Yellow 6: Green 7: Blue 8: Blue 9: Purple
alpha	<unsigned int>[0, 4]	transparency 0: Other 1: Transparent 2: Translucent 3: Semi-translucent 4: Opaque 0 indicates transparency other than transparent, translucent, sub-translucent, and opaque. It is valid when getting and an invalid parameter when setting.
TwelveHoursFlag	<unsigned char>{0, 1}	12 hour switch enable flag 0: Disable 1: Enable
WeekFlag	<unsigned char>{0, 1}	Week switch enable flag 0: Disable 1: Enable
NVR/the lite series		

cameraID	<int>[0,n]	Camera ID
red	<int>[0, 255]	Red (font color RGB)
green	< int >[0, 255]	Green (font color RGB)
blue	< int >[0, 255]	Blue (font color RGB)
frontWidth	<int>	Font width
frontHeigth	<int>	Font height
inverseFlag	<unsigned char>{0, 1}	Invert Enable Flag 0: Disable 1: Enable
alpha	<unsigned int>[0, 4]	transparency 0: Other 1: Transparent 2: Translucent 3: Semi-translucent 4: Opaque 0 indicates transparency other than transparent, translucent, sub-translucent, and opaque. It is valid when getting and an invalid parameter when setting.

2.6.1.10.4. Canvas (OSDCanvas) (IPC excluding the lite series)

2.6.1.10.4.1. Get OSDCanvas parameters (getOSDCanvas)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **OSDCanvas** &cameraID=<cameraID>&canvasID =<canvasID>
Description	canvasID is an optional parameter. Without it, it means to obtain all canvas information of the channel device. Refer to OSDCanvas parameter table
Example	http://192.168.32.151/cgi-

	bin/param.cgi?action=get&type=OSDCanvas&cameraID=1&canvasID=1
Return	topX=67 topY=19 fontSize=2 alignMode=0 OSDInfoCount=1 OSDInfoBegin=1 arrowID=0 OSDEnableFlag=1 OSDType=4 info=YYYY-MM-DDhh:mm:ssww OSDInfoEnd=1 (For other responses, Refer to General Response)

2.6.1.10.4.2. Set OSDCanvas parameters (setOSDCanvas)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **OSDCanvas** &cameraID=<cameraID>[&<argument>=<value>...]
Description	Each canvas can only set one OSDinfo The arrowID of each OSDinfo can only be set to 0 Time watermark can only be set on the first canvas OSDCanvasBegin and OSDCanvasEnd must be set, OSDInfoBegin and OSDInfoEnd must also be set For parameters, Refer to OSDCanvas parameter table
Example	http://192.168.32.245/cgi-bin/param.cgi?action=set&type=OSDCanvas&cameraID=1&OSDCanvasBegin=1&canvasID=2&topX=0&topY=50&fontSize=2&alignMode=1&OSDInfoAction=add&OSDInfoBegin=1&arrowID=0&OSDEnableFlag=1&OSDType=5&info=YYYY-MM-DD %20hh:mm:ss%20ww&OSDInfoEnd=1&next_OSDCanvasURL=2&canvasID=1&topX=0&topY=50&fontSize=2&alignMode=1&OSDInfoAction=add&OSDInfoBegin=1&arrowID=0&OSDEnableFlag=1&OSDType=4&info=YYYY-MM-DD%20hh:mm:ss%20ww&OSDInfoEnd=1&OSDCanvasEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.1.10.4.3. OSDCanvas parameter meaning

OSDCanvas Parameter Table

Table 2-6-1-8-4-1

parameter	data	Description
cameraID	<int>[0,n]	Camera ID
OSDCanvasCount	<unsigned int>[0,n]	Number of OSD canvases
OSDCanvasBegin	<unsigned int>1	OSDCanvas start sign Can only be 1
canvasID	<int>[1, 8]	Canvas Number When getting canvas information, you do not need to enter the canvas number, which means getting all canvas information of the specified channel.
topX	<int>[0, 100]	x-coordinate The x coordinate of the upper left corner of the area as a percentage of the total video area width
topY	<int>[0, 100]	y coordinate The y coordinate of the upper left corner of the area as a percentage of the total video area height
font size	<int>[0, 3]	font size 0: Other 1: Large 2: Medium 3: Small Setting other values is invalid and Returns -8 (parameter error). 0 means font size other than large, medium or small. It is valid when getting, but it is an illegal parameter when setting, and Returns

		-8
alignMode	<int>{0, 1}	Alignment Mode 0: Left alignment 1: Right-aligned
OSDInfoCount	<int>1	OSD information number Currently, each canvas can only set one OSDInfo, which can only be 1
OSDInfoAction	<string> {cover, add, remove}	OSDInfo loop operation behavior cover add remove When the operation behavior is set, if this behavior flag is not carried, the default operation behavior is add:. When the operation behavior is cover and add, OSDInfo must input ArrowI, OSDEnableFlag and OSDType, otherwise the parameters are considered invalid and -8 is Returned. When the operation behavior is add, if the line number already exists, the line will be overwritten. Regardless of the operation, arrowID must be entered, otherwise the parameter is considered invalid and -8 is Returned.
OSDInfoBegin	<unsigned int>1	OSD information start mark Can only be 1
arrowID	<int>0	Line Number ArrowID must be entered and can only be set to 0;
OSDEnableFlag	<unsigned char>{0, 1}	OSD enable flag 0: Disable 1: Enable

OSDBlinkFlag	<unsigned char>{0, 1}	OSD flashing logo Optional parameters 0: Disable 1: Enable
OSDBlinkInterval	<unsigned char>[1, n]	OSD flashing interval Optional parameters Integer starting from 1, The unit is temporarily set to seconds.
OSDType	<int>[1, 8]	OSD Type 1: Device name 2: Camera number 3: Camera name 4: Time watermark 5: Text watermark 6: PTZ position operation watermark 7: PTZ behavior operation watermark 8: PTZ temperature Setting other values is invalid and Returns -8 (parameter error). Some devices only support watermark types 1 to 5. There can be only one time watermark
info	<string>	Watermark information Currently, only text watermarks and time watermarks can set info information. Setting info for other watermark types is invalid. When the watermark type is a text watermark, it cannot contain English characters "< > % & \" / , ' ; = | +" and the number of characters cannot be greater than 256, otherwise -8 is Returned (parameter error). It does not make sense to include spaces,

		and space characters will be removed. When the watermark type is time watermark, it includes the following four types: YYYY-MM-DD hh:mm:ss ww: hh:mm:ss YYYY-MM-DD ww MM/DD/YYYY hh:mm:ss ww hh:mm:ss MM/DD/YYYY ww (Spaces in the time format are not valid in info, but there are spaces in the actual time display) Setting other values is invalid, but no error is Returned and the time format is not changed
next_OSDInfoURL	<unsigned int>[2, n]	The next OSD message starts Start from 2. If the value is 2, it means the following parameter is the second one. (Since each canvas can only set one OSDinfo at present, this parameter can no longer be used)
OSDInfoEnd	<unsigned int>[1, n]	OSD information end mark Indicates the number of OSDInfo
next_OSDCanvasURL	<unsigned int>[2, n]	The next OSDCanvas message starts Start from 2. If the value is 2, it means the following parameter is the second one.
OSDCanvas End	<unsigned int>[1, n]	OSDCanvas end flag Indicates the number of canvases

2.6.1.10.5. Watermark information (OSDInfo) (IPC The lite series/NVR)

2.6.1.10.5.1. Get OSDInfo parameters (getOSDInfo)

URL	http://192.168.2.193/cgi-bin/sensor.cgi?action=get&type= **OSDInfo** &cameraID=<cameraID>&osdinfoID =<osdinfoID>
Descripti	osdinfoID is an optional parameter. Without it, all canvas information of the

on	channel device will be obtained. Refer to OSDInfo parameter table
Example	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=OSDInfo&cameraID=1& OSDInfoID =1
Return	Type=1 Open=1 Token=osdToken_cam1_osdId1 X=0 Y=0 Customstr= (For other responses, Refer to General Response)

2.6.1.10.5.2. Set OSDInfo parameters (setOSDInfo)

URL	http://192.168.2.193/cgi-bin/sensor.cgi?action=set&type= **OSDInfo** &cameraID=<cameraID>[&<argument>=<value>...]
Description	For parameters, Refer to OSDInfo parameter table
Example	http://192.168.2.193/cgi-bin/sensor.cgi?action=set&type=OSDInfo&cameraID=1& OSDInfoID =1&Type=1&Open=1&Token=cxy2&X=800&Y=700&Customstr=cxy3
Return	OK (For other responses, Refer to General Response)

2.6.1.10.5.3. OSDInfo parameter meaning

OSDInfo Parameter Table

Table 2-6-1-7-2-3

parameter	data	Description
cameraID	<int>[0,n]	Camera ID
OSDInfoID	<int>	OSD information ID, currently only 1 and 2 1 represents time; 2 represents channel name
X	<int>[100,8300]	x-coordinate
Y	<int>[100.9400]	y coordinate

Open	<int>	Open Tag 0: Off 1: Open
Type	<int>	OSD Type 1: Time (time can only set x, y coordinates and switches) 2: Channel name (time and device name cannot be modified)
Token	<string>	describe The default description of time type is: time and cannot be modified
Customstr	<string>	Channel name (display content)
OSDInfoCoun t	<unsigned int>[0, n]	OSD information number
OSDInfoBegin	<unsigned int>1	Start flag, can only be 1
next_OSDInfoURL	<unsigned int>[2, n]	Next message mark
OSDInfoEnd	<unsigned int>[0, n]	OSD information end mark

2.6.1.11. Audio capability (IPC excluding the lite series)

2.6.1.11.1. Get audio capability parameters

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **audioAbility&cameraID=1**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= audioAbility&cameraID=1
Description	Refer to URL Descriptions
Return	audioInCount=1 audioInBegin=1 audioInType=3 audioInEnd=1 audioOutCount=1 audioOutBegin=1

	audioOutType=0 audioOutEnd=1 audioVolumeMin=0 audioVolumeMax=100

2.6.1.11.2. Audio capability parameter meaning

URL	Parameter Description	scope	type of data
audioInCount	Number of audio input types		int
audioInBegin	Audio input type start mark		int
audioInType	Audio input type 1: Built-in 2: External 3: Line input 4: Differential line input 5: Dual input		int
next_AudioInURL	Next audio input type starts marking		int
audioInEnd	Audio input type end marker		int
audioOutCount	Number of audio output types		int
audioOutBegin	Audio output type start mark		int
audioOutType	Audio output type 0: Automatic 1: External 2: Built-in		int
next_AudioOutURL	Next audio output type		int

	start mark		
audioOutEnd	Audio output type end mark		int
audioVolumeMin	Minimum volume		int
audioVolumeMax	Maximum volume		int

2.6.1.12.Microphone

2.6.1.12.1. Microphone parameter meaning

Microphone parameter table

Table 2-6-1-9-3-1

parameter	data	Description
cameraID	<int>	Channel Number
toneArmEnableFlag	<unsigned char>{0, 1}	Whether to enable the microphone 0: Disable 1: Enable
toneArmType	<int>[1, 5]	Microphone Type 1: Built-in 2: External 3: Line input 4: Differential line input 5: Dual input (Different devices may support different types)
volume	<int>[0, 100]	volume When the volume is greater than 100, it is set to 100

2.6.1.12.2. Get Microphone Parameters (getMicrophone)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **microphone** [&cameraID=<cameraID>]
Description	Refer to microphone parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=microphone&cameraID=1
Return	cameraID=1 toneArmEnableFlag=1 toneArmType=1 volume=50 (For other responses, Refer to General Response)

2.6.1.12.3. Set Microphone Parameters (setMicrophone)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **microphone** &cameraID=<cameraID>[&<argument>=<value>...]
Description	When the microphone type is not supported by the device, -8 is Returned. The microphone type depends on the device's own capabilities and can be obtained from the type drop-down menu on the web: Device->Microphone page. Parameters of Parametric Microphones
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=microphone&cameraID=1&toneArmEnableFlag=1&toneArmType=3&volume=100
Return	OK (For other responses, Refer to General Response)

2.6.1.13. Audio Output (AudioOutputParam) (IPC)

2.6.1.13.1. Get audio output parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=

	AudioOutputParam
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=AudioOutputParam
Return	audioOutputEnable=1 audioOutputType=0 audioOutputVolume=80 (For other responses, Refer to General Response)

2.6.1.13.2. Set audio output parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **AudioOutputParam** &audioOutputEnable=true&audioOutputType=0&audioOutputVolume=50
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=AudioOutputParam&audioOutputEnable= 1 &audioOutputType=0&audioOutputVolume=50
Return	OK (For other responses, Refer to General Response)

2.6.1.13.3. Audio output parameter meaning

parameter	**data**	**Description**
audioOutputEnable	<int>	Audio output 0: Off 1: On
audioOutputType	<int>	Audio Type 0: External 1: Built-in

audioOutputVolume	<int>[1, 5]	Audio output volume (0-100)

2.6.1.14. Voice denoise (IPC excluding the lite series)

2.6.1.14.1. Get Voice denoise parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **voiceDenoise**
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=voiceDenoise
Return	voiceDenoiRefer tonable=0

2.6.1.14.2. Set the Voice denoise parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **voiceDenoise&voiceDenoiRefer tonable=0**
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type= voiceDenoise&voiceDenoiRefer tonable=0
Return	OK (For other responses, Refer to General Response)

2.6.1.14.3. Meaning of Voice denoise parameters

URL	Parameter Description	scope	type of data
videoFormat	Video format	0-1	int

	0: NTSC 1: PAL		

2.6.1.15. High-speed dome PTZ ID (IPC excluding the lite series)

2.6.1.15.1. Get the high-speed dome PTZ ID (getIPDomePTZID)

URL	http://<servername> /cgi-bin/param.cgi?action=get&type=IPDomePTZID&cameraID= **<cameraID>**
Description	Device not supported, Returns -506 Refer to the high-speed dome head ID parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=IPDomePTZID&cameraID=1
Return	domePTZId=213 (For other responses, Refer to General Response)

2.6.1.15.2. Set the high-speed dome PTZ ID (setIPDomePTZID)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=IPDomePTZID **&** cameraID=<cameraID>[&domePTZId=<domePTZId>]
Description	domePTZId is an optional parameter. If it is included, the value will be changed. If it is not included, the existing value will not be changed. For parameters, Refer to the High Speed dome PTZ ID Parameter Table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=IPDomePTZID&cameraID=1&domePTZId=20
Return	OK (For other responses, Refer to General Response)

2.6.1.15.3. High-speed dome PTZ ID parameter meaning

High-speed dome PTZ ID parameter table

Table 2-6-1-10-3-1

parameter	data	Description
domePTZId	<int>[0, 255]	High-speed dome head ID As an optional parameter in Set
cameraID	<int>	Channel ID Required parameters for get and set

2.6.1.16. PTZTimer (IPC excluding the lite series)

2.6.1.16.1. Get PTZ timer parameters (getPTZTimer)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **PTZTimer** &cameraID=<cameraID>
Description	Refer to PTZ timer parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=PTZTimer&cameraID=1
Return	cameraID=1 mode=1 enableFlag=1 year=2018 month=3 day=2 hour=3 minute=2

	second=1 timerBegin=1 timeSegmentBegin=1111 timeSegmentEnd=2222 operatorType=16 operatorValue=1 timerEnd=1 (For other responses, Refer to General Response)

2.6.1.16.2. Set PTZ timer parameters (setPTZTimer) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **PTZTimer** &cameraID=<cameraID>[&<argument>=<value>]
Description	Refer to PTZ timer parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=PTZTimer&cameraID=1&enableFlag=1&mode=1&timerAction=cover&year=2018&month=3&day=2&hour=3&minute=2&second=1&timerBegin=1&operatorType=16&operatorValue=1&timeSegmentBegin=1111&timeSegmentEnd=2222&timerEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.1.16.3. Meaning of PTZ timer parameters

PTZ timer parameter table

Table 2-6-1-12-3-1

parameter	data	Description
cameraID	<int>	Channel ID

enableFlag	<unsigned char>{0, 1}	Whether to enable the PTZ timer flag 0: Disable 1: On
mode	<int>{1, 2}	Timer Mode 1:1 times 2: Daily cycle
year	<unsigned short>	Year
month	<unsigned short>[1, 12]	moon
day	<unsigned short>[1, 31]	day
hour	<unsigned short>[0, 59]	hour
minute	<unsigned short>[0, 59]	point
second	<unsigned short>[0, 59]	Second
timerAction	<string>	PTZ timer loop operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover
timeSegmentBegin	<int>	PTZ timer start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
nextTimeSegmentFlag	<int>	The next PTZ timer time period starts. Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of planned times is greater than 1, this flag must be carried. There is no specific requirement for

		the value.
timeSegmentEnd	<int>	PTZ timer end flag Indicates the number of settings. When the configuration behavior is set and the number of planned times is greater than 1, its value is the same as the last nextFlag, except for one with n=1.
timerBegin	<unsigned long>[0, 86400]	Starting time Range: 0-86400
timerEnd	<unsigned long>[0, 86400]	End Time Range: 0-86400
operatorType	<int>{16, 28, 21, 34}	PTZ operation type 16: Preset position call 28 : Track call 21: Scan 34: Parade Web currently supports setting timers for the above four types of PTZ
operatorValue	<int>	PTZ operation value

2.6.1.17. Face configuration (faceDetectParam) (IPC excluding the lite series)

2.6.1.17.1. Get face parameters (getfaceDetectParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get &type= faceDetectParam
Description	For parameter meanings, Refer to the face parameter configuration table .
Example	http://192.168.32.121/cgi-bin/param.cgi?action=get&type=faceDetectParam
Return	faceDetectEnable=1 upBodyEnable=1

	fullBodyEnable=0 displayTraceInfo=0 confidenceCoefficient=High smallestPixel=40 imageMatQuality=High snapshotMode=1 uploadInterval=6 yawDegree=80 tiltDegree=60 ftpUploadImageMat=0 ftpUploadWholeImage=0 detectAreaBegin=1 pointX1=9.090909 pointY1=25.384617 pointX2=29.268291 pointY2=18.846153 pointX3=47.450111 pointY3=16.538462 pointX4=65.853661 pointY4=30.000002 pointX5=81.374725 pointY5=58.076923 pointX6=72.949005 pointY6=81.153847 pointX7=64.079819 pointY7=91.538460 pointX8=49.223946 pointY8=93.846153 nextDetectArea=2 pointX1=62.084259 pointY1=10.769231 pointX2=68.957870

	pointY2=9.615385 pointX3=78.713974 pointY3=14.615385 pointX4=86.696228 pointY4=21.538462 pointX5=90.243896 pointY5=30.384615 pointX6=90.687363 pointY6=49.230770 pointX7=94.456764 pointY7=75.769234 pointX8=88.470062 pointY8=84.230766 detectAreaEnd=2 weekDayBegin=1 weekDay=2 startTime1=0 endTime1=30600 startTime2=32400 endTime2=86400 next_weekDayURL= 2 weekDay=4 startTime1=0 endTime1=86400 weekDayEnd= 2

2.6.1.17.2. Set face parameters (setfaceDetectParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=faceDetectParam&faceDetectEnable=<faceDetectEnable >&upBodyEnable=<upBodyEnable>&fullBodyEnable=<full

	BodyEnable>&displayTraceInfo=<displayTraceInfo>&confidenceCoefficient=<confidenceCoefficient>&smallestPixel=<smallestPixel>&imageMatQuality=<imageMatQuality>&snapshotMode=<snapshotMode>&uploadInterval=<uploadInterval>&yawDegree=<yawDegree>&tiltDegree=<tiltDegree>&ftpUploadImageMat=<ftpUploadImageMat>&ftpUploadWholeImage=<ftpUploadWholeImage>&weekDayBegin=1&weekDay=<weekDay>&startTime1=<startTime1>&endTime1=<endTime1>&next_weekDayURL=2…&weekDayEnd=2&detectAreaBegin=1&pointX1=20&pointY1=10&pointX2=30&pointY2=40&pointX3=20&pointY3=40…&nextDetectArea=2…&detectAreaEnd=2
Description	For parameter meanings, Refer to the face parameter configuration table.
Example	http://192.168.32.121/cgi-bin/param.cgi?action=set&type=faceDetectParam&faceDetectEnable=1&upBodyEnable=1&fullBodyEnable=0&displayTraceInfo=0&confidenceCoefficient=High&smallestPixel=40&imageMatQuality=High&snapshotMode=1&uploadInterval=6&yawDegree=80&tiltDegree=60&ftpUploadImageMat=0&ftpUploadWholeImage=0&weekDayBegin=1&weekDay= 0&startTime1=0&endTime1=86400&next_weekDayURL=2&weekDay=1&startTime1=0&endTime1=3600&startTime2=3600&endTime2=5400&startTime3=600&endTime3=800&weekDayEnd=2&detectAreaBegin=1&pointX1=20&pointY1=10&pointX2=30&pointY2=40&pointX3=20&pointY3=40&nextDetectArea=2&pointX1=50&pointY1=50&pointX2=60&pointY2=60&pointX3=80&pointY3=50&detectAreaEnd=2
Return	OK

2.6.1.17.3. Face parameter configuration table

parameter	type of data	Remark
faceDetectEnable	int<0, 1>	Face recognition enabled 1: Enable 0: Off
upBodyEnable	int<0, 1>	Upper body recognition enabled 1: Enable 0: Off

fullBodyEnable	int<0, 1>	Full body recognition enabled 1: Enable 0: Off
displayTraceInfo	int<0, 1>	Overlay tracking information 1: Enable 0: Off
confidenceCoefficient	string {Low,Mid,High}	Confidence Low: Low Mid: High:
smallestPixel	int<30,300>	Minimum pixel for face recognition
imageMatQuality	string {Low,Mid,High}	Cutout quality Low: Low Mid: High:
snapshotMode	int<0,1>	Snapshot mode 1: Timing 1: Optimal
uploadInterval	int<1, 10>	Upload picture interval (only needs to be set when the snapshot mode is timed)
yawDegree	int<0,90>	Side Angle
tiltDegree	int<0,90>	bevel
ftpUploadImageMat	int<0,1>	FTP send cutout 1: Enable 0: Off
ftpUploadWholeImage	int<0,1>	FTP send panorama 1: Enable 0: Off

detectAreaBegin	int<1>	Area start mark
pointX (1..8)	float<0.0,99.99>	X coordinate of point n constituting the detection area (up to 8 points can be set for each area)
pointY (1..8)	float<0.0,99.99>	The Y coordinate of point n that constitutes the detection area (each area can have up to 8 points)
nextDetectArea	int<2,n>	Next area sign
detectAreaEnd	int<1,n>	End of area sign
weekDayBegin	int<1>	Arming time start flag
weekDay	int<0,6>	which day 0 is Sunday
startTime (1..n)	<long>[0, 86400]	Arming start time
endTime n(1..n)	<long>[0, 86400]	Arming end time
weekDayEnd	int<1,n>	Arming time end flag

2.6.1.18.System (SystemParam) (IPC excluding the lite series/NVR)

2.6.1.18.1. Get system parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **SystemParam**
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=SystemParam
Return	language=1 webModel = 1 (For other responses, Refer to General Response)

2.6.1.18.2. Set system parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **SystemParam** &language=0&webModel=0
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=SystemParam&language=0&webModel=0
Return	OK (For other responses, Refer to General Response)

2.6.1.18.3. System parameter meaning

parameter	data	Description
language	<int>	language 1: English 2: Simplified Chinese 3: Russian 4. French 7: Spanish 8: Portuguese 9: Polish 16: Czech 25: Hungarian 26: Italian
webModel	<int>	Web Mode 1: HTTP 2 https and http ; (IPC) 3: HTTPS

2.6.1.19.MultiCamera (IPC excluding the lite series)

2.6.1.19.1. Get system parameters

URL	http://192.168.2.68/cgi-bin/param.cgi?action=get&type=multiCameraAbility
Description	Refer to parameter meaning
Example	http://192.168.2.68/cgi-bin/param.cgi?action=get&type=multiCameraAbility
Return	MultiCameraEnable=true MultiCameraButDisSupport=true MultiCameraWorkModeSupport=true (For other responses, Refer to General Response)

2.6.1.19.2. Meaning of multi-camera capability parameters

URL	Parameter Description	scope	type of data
MultiCameraEnable	Whether the multi-Refer to capability is enabled		Bool
MultiCameraButDisSupport	Multi-Refer to mode support		Bool
MultiCameraWorkModeSupport	Multi-camera support		Bool

2.6.1.19.3. Get multi-camera parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get &type=multiCamera
Description	Refer to URL Descriptions
Example	h http://192.168.2.68/cgi-bin/param.cgi?action=get&type=multiCamera
Return	videoFormat=0 frequency=60

2.6.1.19.4. Set the multi-camera parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= multiCamera & MultiCameraMode &ButtingDistance=6
Description	Refer to URL Descriptions
Example	http://192.168.2.68/cgi-bin/param.cgi?action=set&type=multiCamera&MultiCameraMode=0&ButtingDistance=6
Return	OK (For other responses, Refer to General Response)

2.6.1.19.5. Multi-camera parameter meaning

URL	Parameter Description	scope	type of data
ChannelNum	Camera Channel		int
ButtingDistance	Splicing distance	2-200m	int
MultiCameraMode	Multi-Refer to mode	0 , multi-channel 1 , splicing mode	Int

2.6.1.20. White light manual control (WhiteLedManualControl) (IPC)

2.6.1.20.1. Get white light mode (get WhiteLedManualControl)

URL	: //<servername>/cgi-bin/sensor.cgi?action=get&type=

	WhiteLedManualControl
Description	white light parameters
Example	http://192.168.2.126/cgi-bin/param.cgi?action=get&type=WhiteLedManualControl&cameraID=1
Return	WhiteLedManualMode=0 WhiteLedManualDuration=10 (For other responses, Refer to General Response)

2.6.1.20.2. Set white light parameters (set WhiteLamp)

URL	cameraID http://192.168.32.95/cgi-bin/sensor.cgi?action=set&type= WhiteLedManualControl & cameraID= = < RedBuleLampMode >...
Description	White light lamp parameters meaning
Example	http://192.168.2.126/cgi-bin/param.cgi?action=set&type=WhiteLedManualControl&cameraID=1&WhiteLedManualMode=1&WhiteLedManualDuration=10
Return	OK (For other responses, Refer to General Response)

2.6.1.20.3. Meaning of white light parameters

Table 2-8-10-3-1

URL	Parameter Description	scope	type of data
WhiteLampMode	Consecration 0: Off 1: Open	0-1	int

WhiteManualDuration	Manual control duration	Unit: s	int

2.6.1.21.White light manual control (WhiteLedManualControl) (IPC)

2.6.1.21.1. Get white light mode (get WhiteLedManualControl)

URL	http://192.168.32.95/cgi-bin/sensor.cgi?action=set&type= WhiteLedAlarmParam & cameraID =< cameraID >...
Description	white light parameters
Example	http://192.168.2.126/cgi-bin/param.cgi?userName=admin&password=admin&action=set&type=WhiteLedAlarmParam&cameraID=1&WhiteDisplayMode=1&WhiteFlickerDuration=15&weekDayCount=7&weekDayBegin=1&weekDay=0&startTime=0&endTime=86400&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&next_weekDayURL=3&weekDay=2&startTime=0&endTime=86400&next_weekDayURL=4&weekDay=3&startTime=0&endTime=86400&next_weekDayURL=5&weekDay=4&startTime=0&endTime=86400&next_weekDayURL=6&weekDay=5&startTime=0&endTime=86400&next_weekDayURL=7&weekDay=6&startTime=0&endTime=86400&weekDayEnd=7
Return	WhiteLedManualMode=0 WhiteLedManualDuration=10 (For other responses, Refer to General Response)

2.6.1.21.2. Set white light parameters (set WhiteLamp)

URL	cameraID http://192.168.32.95/cgi-bin/sensor.cgi?action=set&type= WhiteLedManualControl & cameraID= = < RedBuleLampMode >...
Description	White light lamp parameters meaning
Example	http://192.168.2.126/cgi-bin/param.cgi?action=set&type=WhiteLedManualControl&cameraID=1&Wh

	iteLedManualMode=1&WhiteLedManualDuration=10
Return	OK (For other responses, Refer to General Response)

2.6.1.21.3. Meaning of white light parameters

Table 2-8-10-3-1

URL	Parameter Description	scope	type of data
WhiteLampMode	Consecration 0: Off 1: Open	0-1	int
WhiteManualDuration	Manual control duration	Unit: s	int

2.6.1.22.White light alarm control (WhiteLedAlarmParam) (IPC)

2.6.1.22.1. Get white light alarm control (get WhiteLedAlarmParam ）

URL	: //<servername>/cgi-bin/sensor.cgi?action=get&type= WhiteLedAlarmParam
Description	white light alarm control parameters
Example	http://192.168.2.126/cgi-bin/param.cgi?action=get&type=WhiteLedAlarmParam&cameraID=1
Return	WhiteLampMode=0 (For other responses, Refer to General Response)

2.6.1.22.2. Set white light alarm control parameters (set WhiteLamp)

URL	http://192.168.32.95/cgi-bin/sensor.cgi?action=set&type= WhiteLedAlarmParam & cameraID = < cameraID >...
Description	white light alarm control parameters
Example	http://192.168.2.126/cgi-bin/param.cgi?action=set&type=WhiteLedAlarmParam&cameraID=1&WhiteFlickerDuration=30000&weekDayCount=7&weekDayBegin=1&weekDay=0&startTime=0&endTime=86400&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&next_weekDayURL=3&weekDay=2&startTime=0&endTime=86400&next_weekDayURL=4&weekDay=3&startTime=0&endTime=86400&next_weekDayURL=5&weekDay=4&startTime=0&endTime=86400&next_weekDayURL=6&weekDay=5&startTime=0&endTime=86400&next_weekDayURL=7&weekDay=6&startTime=0&endTime=86400&weekDayEnd=7
Return	OK (For other responses, Refer to General Response)

2.6.1.22.3. Meaning of white light alarm control parameters

Table 2-8-10-3-1

URL	Parameter Description	scope	type of data
WhiteFlickerDuration	Alarm duration	1s-60s	int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekday	which day	0-6	int
startTime	Arming start time (seconds)		int

endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int

2.6.1.23.Synchronize camera time (NVR)

2.6.1.23.1. Get the syncTime parameter (get syncTime)

URL	http://192.168.2.193/cgi-bin/system.cgi?action=get&type= **syncTime**
Description	Refer to syncTime center parameter table
Example	http://192.168.2.162/cgi-bin/param.cgi?action=get&type=syncTime
Return	syncTimeEnable=0 waitTime=3600 (For other responses, Refer to General Response)

2.6.1.23.2. Set the syncTime parameter (setNTPParam)

URL	http://192.168.2.193/cgi-bin/system.cgi?action=set&type= syncTime [&<argument>=<value>...]
Description	Refer to syncTime center parameter table
Example	http://192.168.2.162/cgi-bin/param.cgi?action=set&type=syncTime&syncTimeEnable=0&waitTime=3600
Return	OK (For other responses, Refer to General Response)

2.6.1.23.3. syncTime parameter meaning

NTP Center Parameters Table

Table 2-6-5-2-3-1

parameter	data	Description
syncTimeEnable	<int>	Is it enabled?
waitTime	<int>	Synchronize time and frequency

2.6.1.24.Get basic system settings parameters (NVR)

2.6.1.24.1. Get basic system settings parameters (get systemParam)

URL	http://192.168.2.193/cgi-bin/system.cgi?action=get&type= BasicSettings
Description	Refer to SystemParam Central Parameter Table
Example	http://192.168.2.162/cgi-bin/param.cgi?action=get&type=BasicSettings
Return	systemTemperatureUnit=1 systemOriginalScale=0 systemName=Device systemLanguage=english (For other responses, Refer to General Response)

2.6.1.24.2. Set system basic settings parameters (set systemParam)

URL	http://192.168.2.193/cgi-bin/system.cgi?action=set&type= BasicSettings [&<argument>=<value>...]
Description	SystemParam Central Parameter Table
Example	http://192.168.2.162/cgi-bin/param.cgi?action=set&type= BasicSettings &systemTemperatureUnit=1&systemOriginalScale=0&systemName=Device
Return	OK (For other responses, Refer to General Response)

2.6.1.24.3. Meaning of system basic setting parameters

systemParam **parameter table**

Table 2-6-5-2-3-1

parameter	data	Description
systemTemperatureUnit	<int>[1, 2]	1. Celsius 2. Fahrenheit
systemOriginalScale	<int>[0 1]	Whether to open the original ratio: 0 off 1 on
systemName	<string>	Device Name
systemLanguage	<string>	Device language (cannot be changed)

2.6.2. Stream Configuration

2.6.2.1. Basic Stream

2.6.2.1.1. Get the current video stream parameters (getAVStream)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=AVStream &cameraID = <cameraID>&streamID=<streamID>
Description	Refer to audio and video stream parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=AVStream&cameraID=1&streamID=1
Return	streamName=stream1(IPC excluding the lite series) videoEncoderType=4 audioEncoderType=102 resolution=1920*1080 frameRate=15 iFrameInterval=50 bitRateType=2 bitRate=2048 quality=5 streamEncoderFlag = 0 (For other responses, Refer to General Response)

2.6.2.1.2. Set the current video stream parameters (setAVStream) (IPC / NVR)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=AVStream &cameraID=<cameraID>&streamID=<streamID>[&<argument>=<value> **]**
Description	For parameters, Refer to the audio and video stream parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=AVStream&cameraID=1&streamID=1&streamName=tangtang&videoEncoderType=1&audioEncoderType=108&resolution=1280*720&frameRate=5&iFrameInterval=5&bitRateType=2&bitRate=5000&quality=9& streamEncoderFlag = 1
Return	OK (For other responses, Refer to General Response)

2.6.2.1.3. Get video stream capability (getAVStreamAbility) (IPC / NVR)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= streamAbility &cameraID=<cameraID>
Description	If streamID is included, the capability of the corresponding StreamID will be Returned. If streamID is not included, all stream capabilities of the CameraID will be Returned. Refer to the audio and video stream parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=streamAbility&cameraID=1
Return	IPC: AVStreamCount=3 AVStreamBegin=1 streamID=1 AVStreamEncoderAbilityCount=5 AVStreamEncoderAbilityBegin=1 streamEncoderType=8 videoResolutionCount =5 videoResolutionBegin=1 audioEncoderType=102 (NVR) audioEncoderType=103 (NVR) resolution=2592*1520 resolution=1280*720 minFrameRate=1 maxFrameRate=25

	minBit=200 maxBit=4096 ... resolution cycle next_videoResolutionURL=5 resolution=1280*720 videoResolutionEnd=5 … ... Stream encoding capabilities next_AVStreamEncoderAbilityURL=5 streamEncoderType=2 videoResolutionCount =5 videoResolutionBegin=1 resolution=2592*1520 stream ID ... Resolution Cycle next_videoResolutionURL=5 resolution=1280*720 videoResolutionEnd=5 AVStreamEncoderAbilityEnd=5 … next_AVStreamURL=3 streamID=3 AVStreamEncoderAbilityCount=5 AVStreamEncoderAbilityBegin=1 streamEncoderType=8 videoResolutionCount =3 videoResolutionBegin=1 resolution=640*480 … resolution cycle next_videoResolutionURL=3 resolution=320*240 videoResolutionEnd=3 … next_AVStreamEncoderAbilityURL=5 streamEncoderType=2 videoResolutionCount =3 videoResolutionBegin=1 resolution=640*480 … Resolution Cycle Stream Encoding Capability Stream ID next_videoResolutionURL=3 resolution=320*240 videoResolutionEnd=3 AVStreamEncoderAbilityEnd=5 AVStreamEnd=3 (For other responses, Refer to General Response)

2.6.2.1.4. Stream parameter meaning

Audio and video stream parameter table

Table 2-6-2-4-1

parameter	data	Description
streamName	<string>	Stream Name
videoEncoderType	<int>{1,2,4,5,8}	Video encoding type 1: H264 2: MJPEG 4: H264_MAIN 5: H264_HIGH 8: H265_MAIN
videoEncoderLevel	<int>	1: Low 2: Medium 3: High
audioEncoderType	<int>{102,103,107,108,109}	Audio encoding type 102:G711_Alaw 103:G711_Ulaw 107:ARM 108:PCM 109:NONE
resolution	<string>	Resolution 2592*1520 2560*1440 1304*1296 1920*1080 1280*720 704*576 640*480 640*368

		Different devices support different code streams with different resolutions, which can be obtained by obtaining capabilities
frameRate	<int>	Frame rate (fps) Range: Varies depending on the camera, generally 1-25 Note: The maximum frame rate supported by MJPEG is smaller than that of H264.
iFrameInterval	<int>[1,45]	I-frame interval In frames, the range depends on the resolution: between 1-45
bitRateType	<int>{1,2}	Bitrate Type 1: CBR fixed 2: VBR dynamic
bitRate	<int>	Bit rate (kbps) The bit rate is related to the resolution. When the resolution is 1920*1080, the bit rate range is: (500-12000) kbps When the resolution is less than 704×576, the bit rate range is: (100-6000) kbps When the resolution is 1280*720, the bit rate range is: (200-8000) kbps When the resolution is 352*288, the bit rate range is: (100-1500) kbps The specific bit rate capability range is subject to the obtained
quality	<int>{1, 2, 3, 4, 5, 6, 7, 8, 9}	quality Range: 1-9, 9 is the best
streamEncoderFlag	<int>	Intelligent coding switch

		0: Off 1: Open
AVStreamEncoderAbilityCount	<int>	The number of encoding capabilities supported by the stream
AVStreamEncoderAbilityBegin	<int>	Flow capacity loop body start mark This flag indicates the start of the stream's capabilities. This flag appears only when multiple stream capabilities are Returned and can only be 1.
streamEncoderType	<int>{1,2,4,5,8}	Stream encoding type The encoding types supported by the stream are: 1: H264 2: MJPEG 4: H264_MAIN 5: H264_HIGH 8: H265_MAIN
videoResolutionCount	<int>	The number of resolutions supported by this encoding type
videoResolutionBegin	<int>	Resolution loop body start marker This flag indicates the start of the supported resolution. This flag will only appear when multiple resolutions are supported and can only be 1.
next_videoResolutionURL	<int>	Next resolution URL flag Indicates that the next resolution is the nth supported
videoResolutionEnd	<int>	Resolution loop body end mark This flag corresponds to the corresponding Begin flag and indicates the number of resolutions

next_AVStreamEncoderURL	<int>	The next encoding capability URL for this stream ID Indicates that the next stream capability is the nth supported
next_AVStreamURL	<int>	Next stream capability URL Indicates that the next stream capability is the nth supported
AVStreamEncoderAbilityEnd	<int>	End mark of the flow loop This flag corresponds to the corresponding Begin flag and indicates the number of flow capabilities.
audioEncoderType（NVR）	<int>{102,103,107,108,109}	Audio encoding type 102:G711_Alaw 103:G711_Ulaw 107:ARM 108:PCM 109:NONE Note: The specific bit rate capability range is subject to the obtained bit rate capability range
min Frame Rate	int	Minimum frame rate (1)
max Frame Rate	int	Maximum frame rate (25/30)
min B it	int	Minimum bit rate (kbps)
max B it	int	Maximum bit rate (kbps)

2.6.2.2. Snapshot (IPC excluding the lite series)

2.6.2.2.1. Acquisition of capabilities

Note: The lite series's capture capability is the same as the stream capability of channel 1. When the stream is configured as 1080p, The lite series's capture resolution cannot be modified.

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **snapshot Ability&cameraID=1**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= snapshot Ability
Description	Refer to URL Descriptions The resolution of IPC capture is the full configuration item of the resolution of device stream 1 and stream 2; The lite series's capture resolution is consistent with the resolution of the device and device stream 1. It cannot be changed according to the interface, but can only be modified by modifying the encoding format; If you need to Refer to it, you can directly Refer to the flow configuration capability to obtain it
Return	resolutionCount=2 resolutionBegin=1 resolution=640x512 next_ResolutionURL=2 resolution=CIF resolutionEnd=1 qualityCount=3 qualityBegin=1 quality=1 next_QualityURL=2 quality=5 next_QualityURL=3 quality=9 qualityEnd=1

Capability Parameter Description

URL	Parameter Description	scope	type of data
resolutionCount	Resolution quantity		int
resolutionBegin	Resolution start mark		int
resolution	Resolution 640x512 1280x720 CIF		string

	D1		
next_ResolutionURL	Next resolution start mark		int
resolutionEnd	Resolution end marker		int
qualityCount	Quality Quantity		int
qualityBegin	Quality Start Mark		int
quality	quality 1: Low 5: Medium 9: High		int
next_QualityURL	Next articleQuality start mark		int
qualityEnd	Quality end mark		

2.6.2.2.2. Get snapshot parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **snapshot** &cameraID=1 &streamID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= snapshot &cameraID=1 &streamID=1
Return	ChannelID=1 SnapshotResolution=640x512 SnapshotQuality=5

2.6.2.2.3. Set capture parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **snapshot**

	&cameraID=1 &streamID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=snapshot&cameraID=1&streamID=1&SnapshotResolution=1280x720&SnapshotQuality=1
Return	OK (For other responses, Refer to General Response)

2.6.2.2.4. Meaning of snapshot parameters

URL	Parameter Description	scope	type of data
ChannelID	Channel Number		int
SnapshotResolution	Resolution quantity 1280x720 1280x1024 640x512		string
SnapshotQuality	Capture quality 1: Low 5: Medium 9: High		int

2.6.2.3. ROI

2.6.2.3.1. ROI capability (IPC excluding the lite series)

URL	**http** ://<ip>/cgi-bin/param.cgi?action=get&type=ROIAblity
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=ROIAblity
Description	Refer to URL Descriptions

Return	supportROI=1 maxNum=8 maxScale=50 levelCount=5 levelBegin=1 level=1 next_levelURL=1 level=2 next_levelURL=1 level=3 next_levelURL=1 level=4 next_levelURL=1 level=5 levelEnd=1

2.6.2.3.2. Capability Parameter Description

URL	Parameter Description	scope	type of data
Support ROI	ROI 0: Not supported 1: Support	0-1	int
maxNum	Maximum number of regions		int
maxScale	Maximum area ratio		int
levelCount	Number of levels		int
levelBegin	Level start mark		int
level	grade		int
next_levelURL	Next level start mark		int
levelEnd	Level end mark		int

2.6.2.3.3. Get ROI parameters (IPC/NVR)

URL	http: // <servername> **/cgi-bin/param.cgi?action=get&type=ROI&cameraID=1&streamID=1**
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=ROI&cameraID=1&streamID=1
Return	areaCount=8 areaBegin=1 areaID=1 enable=0 level=4 areaName=area1 topX=31.00 topY=27.00 width=60.00 height=49.00 next_areaURL=1 areaID=2 enable=0 level=5 areaName= topX=0.00 topY=0.00 width=0.00 height=0.00 next_areaURL=1 areaID=3 enable=0 level=5 areaName= topX=0.00 topY=0.00 width=0.00 height=0.00 next_areaURL=1 areaID=4 enable=0 level=5 areaName=

	topX=0.00 topY=0.00 width=0.00 height=0.00 next_areaURL=1 areaID=5 enable=0 level=5 areaName= topX=0.00 topY=0.00 width=0.00 height=0.00 next_areaURL=1 areaID=6 enable=0 level=5 areaName= topX=0.00 topY=0.00 width=0.00 height=0.00 next_areaURL=1 areaID=7 enable=0 level=5 areaName= topX=0.00 topY=0.00 width=0.00 height=0.00 next_areaURL=1 areaID=8 enable=0 level=5 areaName= topX=0.00 topY=0.00 width=0.00 height=0.00 areaEnd=1

2.6.2.3.4. Set ROI parameters (IPC/NVR)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**ROI**&cameraID=1&streamID=1&areaCount=8&areaBegin=1&areaID=1&enable=1&level=5&areaName=area1&topX=10.00&topY=12.00&width=40.00&height=36.00&next_areaURL=1&areaID=2&enable=1&level=3&areaName=area88&topX=66.00&topY=3.00&width=22.00&height=30.00&next_areaURL=1&areaID=3&enable=0&level=5&areaName=area3&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=4&enable=0&level=5&areaName=area4&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=5&enable=0&level=5&areaName=area5&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=6&enable=0&level=5&areaName=area6&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=7&enable=0&level=5&areaName=area7&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=8&enable=1&level=3&areaName=area8&topX=10&topY=20&width=30&height=40&areaEnd=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=ROI&cameraID=1&streamID=1&areaCount=8&areaBegin=1&areaID=1&enable=1&level=5&areaName=area1&topX=10.00&topY=12.00&width=40.00&height=36.00&next_areaURL=1&areaID=2&enable=1&level=3&areaName=area88&topX=66.00&topY=3.00&width=22.00&height=30.00&next_areaURL=1&areaID=3&enable=0&level=5&areaName=area3&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=4&enable=0&level=5&areaName=area4&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=5&enable=0&level=5&areaName=area5&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=6&enable=0&level=5&areaName=area6&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=7&enable=0&level=5&areaName=area7&topX=0.00&topY=0.00&width=0.00&height=0.00&next_areaURL=1&areaID=8&enable=1&level=3&areaName=area8&topX=10&topY=20&width=30&height=40&areaEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.2.3.5. ROI parameter meaning (IPC/NVR)

URL	Parameter Description	scope	type of data
areaCount	Number of regions		int
areaBegin	Area start mark		int
areaID	Region ID		int
enable	Enable 0: Off 1: On	0-1	int
level	grade		int
areaName	Region Name		int
topX	X coordinate		float
topY	Y coordinate		float
width	Width		float
height	high		float
next_areaURL	Next area start mark		int
areaEnd	Zone ends		int

2.6.2.4. SVCStream (IPC excluding the lite series)

2.6.2.4.1. SVCStream capability

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **SVCStreamAbility** &cameraID=1&StreamID=1
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= **SVCStreamAbility** &cameraID=1&StreamID=1
Description	Refer to URL Descriptions

Return	sourceStreamIdCount=2 sourceStreamIdBegin=1 sourceStreamId=1 next_sourceStreamIdURL=2 sourceStreamId=2 sourceStreamIdEnd=1 PFrameIntervalCount=4 PFrameIntervalBegin=1 PFrameInterval=1 next_PFrameIntervalURL=2 PFrameInterval=2 next_PFrameIntervalURL=3 PFrameInterval=3 next_PFrameIntervalURL=4 PFrameInterval=4 PFrameIntervalEnd=1

2.6.2.4.2. Capability Parameter Description

URL	Parameter Description	scope	type of data
sourceStreamIdCount	Number of elementary stream IDs		int
sourceStreamIdBegin	Elementary stream ID start marker		int
sourceStreamId	Elementary Stream ID		int
next_sourceStreamIdURL	Next basic stream ID starts marking		Int
sourceStreamIdEnd	End of elementary stream ID		int
PFrameIntervalCount	P frame ratio		int
PFrameIntervalBegin	P frame ratio start mark		int
PFrameInterval	P-frame ratio 1:1/2 2:1/3		int

	3:1/4 4:1/5		
next_PFrameIntervalURL	The next P frame starts marking		int
PFrameIntervalEnd	P frame ratio end marker		int

2.6.2.4.3. Get the accompanying stream parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **SVCStream** &cameraID=1 &streamID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= **SVCStream** &cameraID=1 &streamID=1
Return	SVCStreamID=4 SVCStreamName=stream70 sourceStreamID=2 PFrameInterval=2

2.6.2.4.4. Set the SVCStream parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **SVCStream** &cameraID=1 &streamID=1&SVCStreamID=4&SVCStreamName=stream70&sourceStreamID=2&PFrameInterval=2
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action= set &type= **SVCStream** &cameraID=1 &streamID=1&SVCStreamID=4&SVCStreamName=stream70&sourceStreamID=2&PFrameInterval=2

Return	OK (For other responses, Refer to General Response)

2.6.2.4.5. Meaning of SVCStream parameters

URL	Parameter Description	scope	type of data
SVCStreamID	Companion stream ID		int
SVCStreamName	Companion stream name		int
sourceStreamID	Elementary Stream ID		int
PFrameInterval	P- frame interval		int

2.6.3. Video recording configuration

2.6.3.1. Recording Policy (recordPolicy)

2.6.3.1.1. Get recording policy parameters (getRecordPolicy)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **recordPolicy** &cameraID=<cameraID>
Description	Refer to the corresponding table of recording strategy parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=recordPolicy&cameraID=1
Return	cameraID=1 RecordOpenFlag=0 RecordGeneralOpen=0 (the lite series) RecordMontionOpen=0 (the lite series) RecordAlarmOpen=0 (the lite series) SaveDays=7 StreamId=1 AudioOpenFlag=1

	DiskGroupId=1 weekDayBegin=1 weekDay=2 startTime1=0 endTime1=86400 weekDayEnd=1 PreRecordTime = 10 (For other responses, Refer to General Response)

2.6.3.1.2. Set recording policy parameters (setRecordPolicy)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **recordPolicy** &cameraID=<cameraID>&StreamId=<StreamId>&DiskGroupId =<DiskGroupId >[&<argument>=<value>...]	
Description	cameraID, StreamId, DiskGroupId are required URL For parameters, Refer to the corresponding table of recording strategy parameters.	
Example	IPC: http://192.168.32.151/cgi-bin/param.cgi?action=set&type=recordPolicy&cameraID=1&RecordOpenFlag=0&SaveDays=7&StreamId=1&AudioOpenFlag=1&DiskGroupId=1&weekDayBegin=1&weekDay=2&startTime1=0&endTime1=86400&weekDayEnd=1&scheduleTimeAction=cover&PreRecordTime=10	NVR/the lite series: http://192.168.2.193/cgi-bin/ param .cgi?action=set&type=recordPolicy&cameraID=1&RecordOpenFlag=1&AudioOpenFlag=0&AnrOpenFlag=0&recordType=6&scheduleTimeAction=add&weekDayBegin=1&weekDay=0&startTime=0&endTime=86400&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&next_weekDayURL= 3&weekDay=2&startTime=0&endTime=86400&next_weekDayURL=4&weekDay=3&startTime=0&endTime=86400&next_weekDayURL=5&weekDay=4&startTime=0&endTime=86400&next_weekDayURL=6&weekDay=5&startTime=0&endTime=86400&next_weekDayURL=7&weekDay=6&startTime=0&endTime=86400&weekDayEnd=7

Return	OK (For other responses, Refer to General Response)

2.6.3.1.3. Meaning of recording strategy parameters

Recording strategy parameter correspondence table

Table 2-6-3-1-3-1

parameter	data	Description
RecordOpenFlag	<int>{0,1}	Planned video start sign 0: Disable 1: Enable
cameraID	<int>	aisle
StreamId	<int>	Stream ID
SaveDays	<int>	Number of days to save
AudioOpenFlag	<int> {0,1}	Is the video audio enabled? 0: Disable 1: Enable
AnrOpenFlag(NVR)	<int>{0,1}	Is the video loop writing enabled? 0: Disable 1: Enable
Record Type (NVR)	<int>[1,6]	Recording type (NOTE: IPC does not have this parameter) 1: Timing 2: Alarm 3: Motion detection 4: I/O 5: Motion detection or I/O 6: Motion detection and I/O Note: You can only set one type at a time. If you pass multiple types, the last one will prevail. You don't need to pass types for remove and clean.

SaveDays(the lite series)	<int>[1,90]	The number of days to save the video. If AnrOpenFlag is 0, this parameter must be set (NOTE: NVR does not have this parameter)
RecordGeneralOpen (the lite series)	<int>{0,1}	Is the regular recording switch turned on? 0: Disable 1: Enable
RecordMontionOpen (the lite series)	<int>{0,1}	Is the motion detection recording switch turned on? 0: Disable 1: Enable
DiskGroupId	<int>	Disk Group ID This item must be consistent with the video directory
PreRecordTime	<int>	Alarm recording duration
planning time		
weekDayCount	<int>	Deployment days Maximum 7
scheduleTimeAction	<string>	Planning time behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover
weekDayBegin	<int>	The flag of the defense days cycle starts When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
weekDay	<int> [0,6]	which day 0-6,0 for Sunday
startTime	<long> [0,86400]	Arming start time

		Unit: Seconds
endTime(1..3)	<long>[0,86400]	Arming end time
next_weekDayURL	<int>[2,n]	Next scheduled time URL start mark Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of planned times is greater than 1, this flag must be carried. There is no specific requirement for the value.
weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the value, set the number of days

2.6.3.2. Recording directory (recordDirInfo)

2.6.3.2.1. Get recording directory parameters (getRecordDirInfo)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **recordDirInfo** [&diskId=<diskId>]
Description	Carrying diskId means obtaining the corresponding disk directory information, and not carrying it means obtaining all disk information Refer to the video directory parameter corresponding table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=recordDirInfo
Return	recordDirInfoBegin=1 recordDirInfoBegin=1 diskName=SD0001 diskPath=SD0001 diskWholePath=SD0001 enableFlag=1 alarmThreshold=90 attribute=1 video directory parameter loop body diskType=2 freeSpace=0 Video directory groupID=2 status=1 usableSpace=0

	channel=1 (TBD: New nvr parameter, channel number) hostId=1 (TBD: New nvr parameter, number) module=windows (TBD: Added nvr parameter, type) SN=sn 1 (TBD: Newly added nvr parameter, serial number) fileSystemFormat=8 … recordDirInfoNextURL=2 ... recordDirInfoEnd=2 (For other responses, Refer to General Response)

2.6.3.2.2. Set recording directory parameters (setRecordDirInfo)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **recordDirInfo** &diskId=<diskId>[&<argument>=<value>...]
Description	cameraID, StreamId, DiskGroupId are required URL (TBD: nvr currently does not support disk directory settings) 1. When setting the recording directory parameters, the parameters that can be changed are fileSystemFormat, groupID, enableFlag, diskName, and alarmThreshold . If the disk type is an SD card, setting fileSystemFormat is invalid, and it will take effect for other disk types; 2. diskId is a required parameter. fileSystemFormat, groupID, enableFlag, diskName, alarmThreshold are all optional parameters, and the remaining parameters cannot be changed; 3. When the device does not support multi-channel, the default groupID is 1. When setting the group ID of the recording directory, it must be consistent with the group ID of the recording strategy, otherwise it will affect the recording. For parameters, Refer to the corresponding table of video catalog parameters.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=recordDirInfo&diskId=1&diskName=SD0001&enableFlag=1&groupID=2
Return	OK (For other responses, Refer to General Response)

2.6.3.2.3. Meaning of video directory parameters

Video directory parameter correspondence table

parameter	data	Description
diskId	<int>	Disk ID It is an optional parameter when getting. If you carry this parameter, you can get the corresponding disk directory information. Otherwise, you can get all the disk directory information. It is a required parameter when setting.
recordDirInfoCount	<int>	Number of video directories
recordDirInfoBegin	<int>	Video directory loop body start mark
recordDirInfoNextURL	<int>[2,n]	Next video directory URL start mark Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of video directories is greater than 1, this flag must be carried. There is no specific requirement for the value.
recordDirInfoEnd	<int>	Video directory loop end mark
diskName	<string>	Disk Name
diskPath	<string>	Disk Path
diskWholePath	<string>	Disk Path
alarmThreshold	<int>	Alarm threshold
attribute	<int>	User Available Disk Properties The default is 1. Network shared disk: 0 means read-only, 1 means writable, 2 means redundant SD card: 1 for normal recording (readable and writable), 2 for temporary storage when

		network disk connection fails (redundant), 11 (N/A) Local disk: Read-write (1) Read-only (0) Redundant (2)
enableFlag	<int>{0,1}	Whether to enable 0: Disable 1: Enable
diskType	<int>[1, 4]	Disk Type Local disk (1), SD (2), FTP disk (3), network shared disk (4)
freeSpace	<int>	Remaining disk space The unit is M
groupID	<int>	Disk group number of the directory The default value is 1.
status	<int>	Disk Status Network shared disk: normal (0), connection failed (1) FTP disk: normal (0), connection failed (1) SD: unformatted (2), normal (0), read-only (3), abnormal (4), no card inserted (5) Local disk: unformatted (2), normal (0), abnormal (4), sleep (6)
usableSpace	<int>	Used disk space
fileSystemFormat	<int>	File system format (When action=set, this URL is required except when the disk type is SD card) SD Card: 1: Customized SDCard file system 2: Fat32 file system 3:Ext2

		4:Ext3 netdisc: 5: CIFS file system 0: Unknown file system Local Disk: 2: Fat32 file system
Channel(NVR)	<int>	Channel id (physical location) (TBD: new nvr parameter)
hostId(NVR)	<int>	Master ID (physical location) (TBD: Added nvr parameter)
module(NVR)	<string>	Model (TBD: Added nvr parameter)
SN(NVR)	<string>	Disk serial number (TBD: new nvr parameter)

2.6.3.3. Manual recording (IPC excluding the lite series)

2.6.3.3.1. Start manual recording

URL	http://<servername>/cgi-bin/param.cgi?action= **start** &type= **manualRecord** &cameraID=1
Description	
Example	http://192.168.2.21/cgi-bin/param.cgi?action=start&type=manualRecord &cameraID=1
Return	OK (For other responses, Refer to General Response)

2.6.3.3.2. Stop manual recording

URL	http://<servername>/cgi-bin/param.cgi?action= **stop** &type= **manualRecord** &cameraID=1
Description	
Example	http://192.168.2.21/cgi-bin/param.cgi?action= stop &type=manualRecord &cameraID=1
Return	OK (For other responses, Refer to General Response)

2.6.3.4. Device Disk Information (deviceDiskInfo)

2.6.3.4.1. Get device disk information (getDeviceDiskInfo)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **deviceDiskInfo**
Description	For parameters, Refer to the device disk information parameter table ;
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=deviceDiskInfo
Return	diskInfoBegin=1 diskID=1 diskTotalSize=14912 diskFreeSize=64 diskStatus=1 next_diskInfoURL=2 diskID=2 diskTotalSize=0 diskFreeSize=0 diskStatus=0 diskInfoEnd=2 (For other responses, Refer to General Response)

2.6.3.4.2. Format device disk (resetDeviceDiskInfo) (IPC)

URL	http://192.168.2.193/cgi-bin/ record .cgi ?action= format & diskID= < diskID >
Description	For parameters, Refer to the device disk information parameter table ;
Example	http://192.168.2.193/cgi-bin/record.cgi?action=format&diskID=0
Return	OK (For other responses, Refer to General Response)

2.6.3.4.3. Meaning of device disk information parameters

Device disk information parameter table

parameter	data	Description
diskInfoCount	<int>[0, n]	Disk information number
diskInfoBegin	<int>1	Disk information start mark Can only be 1
diskID	<int>[0, n]	Disk Number
diskTotalSize	<int>[0, n]	Total disk space
diskFreeSize	<int>[0, n]	Remaining disk space
diskStatus	<int>[-1, 24]	Disk Status 1: Normal state 2: Abnormal state 3: The disk does not exist 4: Disk write protection 5: The disk is not formatted 6: The disk is being formatted (Refer to Disk Status for details)
next_diskInfoURL	<int>[2, n]	The next disk information starts

		Start from 2.
diskInfoEnd	<int>[0, n]	End of disk information mark Indicates the number of disk information

Table 2-6-1-11-2-1

2.6.4. Alarm Configuration

2.6.4.1. Alarm output (alarmOut) (IPC excluding the lite series/NVR)

2.6.4.1.1. Get alarm output device parameters (getAlarmOut)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **alarmOut** &alarmOutID=<alarmOutID>
Description	Refer to the alarm output device parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=alarmOut&alarmOutID=1
Return	alarmOutID=1 alarmOutName= alarmValidSignal=0 alarmMode=1 alarmTime=0 TimingEnable=1 weekDayCount=2 weekDayBegin=1 weekDay=1 startTime=3600 endTime=30600 next_weekDayURL=2 weekDay=2 startTime=3600 endTime=30600 weekDayEnd=2

2.6.4.1.2. Set alarm output device parameters (setAlarmOut)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **alarmOut** [&<argument>=<value>...]
Description	For parameters, Refer to the alarm output device parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=alarmOut&alarmOutID=1&alarmOutName=runFinish&alarmMode=2&alarmValidSignal=1&alarmOutFrequency=0.000000&alarmTime=0&TimingEnable=1&weekDayCount=3&weekDayBegin=1&weekDay=3&startTime=14400&endTime=27000&next_weekDayURL=2&weekDay=4&startTime=50400&endTime=63000&next_weekDayURL=3&weekDay=5&startTime=50400&endTime=63000&weekDayEnd=3
Return	OK (For other responses, Refer to General Response)

2.6.4.1.3. Meaning of alarm output device parameters

Alarm output device parameter table

Table 2-6-4-1-3-1

parameter	data	Description
alarmOutName	<string>	Alarm output name
alalrmOutID	<int>	Action ID
alarmValidSignal	<int>{0,1}	Alarm valid signal 1: Closed 0: Disconnect
alarmMode	<int>{1,2}	Alarm mode 1: Switch mode 2: Square wave mode
alarmOutFrequency	<float>	Alarm frequency

alarmTime	<int>	Alarm duration In milliseconds
TimingEnable	<int>	Timing alarm output 0: Off 1: On
weekDayCount	<int>	Number of defenses
weekDayBegin	<int>	Arming start indicator
weekDay	<int>	Day of the week (0-6)
startTime	<int>	Arming start time (in seconds)
endTime	<int>	Arming end time (in seconds)
next_weekDayURL	<int>	Next scheduled time URL start mark
weekDayEnd	<int>	End flag of the loop of defense days

2.6.4.2. Alarm Center

2.6.4.2.1. Get alarm center parameters (getAlarmCenter) (IPC excluding the lite series)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **alarmCenter** &IPProtoVer=<IPProtoVer>
Description	Refer to alarm center parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=alarmCenter&IPProtoVer=1
Return	IPProtoVer=1 alarmCenterServerIP=192.168.1.7 alarmCenterServerPort=65 (For other responses, Refer to General Response)

2.6.4.2.2. Set alarm center parameters (setAlarmCenter) (IPC excluding the lite series)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **alarmCenter** &IPProtoVer=<IPProtoVer>[&<argument>=<value>...]
Description	For parameters, Refer to the alarm center parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=alarmCenter&IPProtoVer=1&alarmCenterServerIP=192.168.1.7&alarmCenterServerPort=65
Return	OK (For other responses, Refer to General Response)

2.6.4.2.3. Alarm center parameters

Alarm center parameter table

Table 2-6-4-2-3-1

parameter	data	Description
alarmCenterServerIP	<string>	Alarm center IP
alarmCenterServerPort	<unsigned short>	Alarm center port When the input value is greater than the maximum value of unsigned short, 65535, the value is treated as 65535.

2.6.4.3. Motion detection alarm (motionAlarm)

2.6.4.3.1. Acquisition capability (IPC excluding the lite series)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **motionAlarmAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= motionAlarmAbility
Description	Refer to URL Descriptions

Return	maxWidthCellNumber=22 minWidthCellNumber=22 maxHeightCellNumber=18 minHeightCellNumber=18 minSensitivity=1 maxSensitivity=10 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.4.3.2. Capability Parameter Description

URL	Parameter Description	scope	type of data
maxWidthCellNumber	Maximum area width blocks		int
minWidthCellNumber	Minimum area width blocks		int
maxHeightCellNumber	Maximum number of high blocks in a region		int
minHeightCellNumber	Minimum area high block number		int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start		int

	mark		
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		int
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.4.3.3. Get motion detection alarm linkage parameters (getMotionAlarm)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **motionAlarm** &cameraID=<cameraID>
Description	1. When the value of weekDay is determined, the time period is also determined, and the format is startTime1, endTime1, startTime2, endTime2, startTime3, endTime3… When weekday=2, it indicates that there are two time periods, and the parameters are startTime1, endTime1, startTime2, and endTime2. When weekday = 1, it indicates that there is one time period, and the parameters are startTime1 and endTime1. When weekday = 0, you need to fill in the time period parameter. When there is no scheduled time period from Monday to Sunday, there is no scheduled time parameter loop body. 2. When motionDetectionEnableFlag=0, there is no motion detection loop. 3. When the alarm PTZ event is 0, there is no alarm PTZ loop. Refer to Motion Detection Alarm Linkage Parameters for details.

Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=motionAlarm&cameraID=1
Return	motionDetectionEnableFlag=1 alarmInterval=10 sensitivity=3 motionDetectStreamEnable=0 alarmOut=0 alarmRecord=1 alarmSMTP=0 alarmFTP=1 alarmSound=1 alarmSoundType=4 motionDetectionAreaCount=1 motionDetectionAreaBegin=1 topX=152 topY=70 width=95 height=70 motionDetectionAreaEnd=1 weekDayCount=2 weekDayBegin=1 weekDay=1 startTime=21600 endTime=27000 next_weekDayURL=2 weekDay=2 startTime=25200 endTime=27000 weekDayEnd=2

2.6.4.3.4. Set motion detection alarm linkage parameters (setMotionAlarm)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **motionAlarm** &cameraID=1[&<argument>=<value>...]
Description	For parameters, Refer to Motion Detection Alarm Linkage Parameters.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=motionAlarm&cameraID=1&motionDetectionEnableFlag=1&alarmInterval=10&sensitivity=3&motionDetectStreamEnable=0&motionDetectionAction=cover&motionDetectionAreaCount=3&motionDetectionAreaBegin=1&topX=

	342&topY=28&width=76&height=70&next_motionDetectionAreaURL=2&topX=19&topY=56&width=114&height=70&next_motionDetectionAreaURL=3&topX=190&topY=98&width=114&height=84&motionDetectionAreaEnd=3&weekDayCount=9&weekDayBegin=1&weekDay=0&startTime=10800&endTime=28800&next_weekDayURL=2&weekDay=0&startTime=77400&endTime=79200&next_weekDayURL=3&weekDay=1&startTime=77400&endTime=79200&next_weekDayURL=4&weekDay=2&startTime=77400&endTime=79200&next_weekDayURL=5&weekDay=3&startTime=77400&endTime=79200&next_weekDayURL=6&weekDay=4&startTime=27000&endTime=50400&next_weekDayURL=7&weekDay=4&startTime=77400&endTime=79200&next_weekDayURL=8&weekDay=5&startTime=77400&endTime=79200&next_weekDayURL=9&weekDay=6&startTime=77400&endTime=79200&weekDayEnd=9&alarmOut=0&alarmRecord=1&alarmSMTP=0&alarmFTP=1&alarmSound=1&alarmSoundType=4
Return	OK (For other responses, Refer to General Response)

2.6.4.3.5. Motion detection alarm linkage parameter meaning (IPC)

Motion detection alarm linkage parameter table (IPC)

Table 2-6-4-3-3-1

parameter	data	Description
motionDetectionEnableFlag	<unsigned char>{0,1}	Motion detection on sign 0: Disable 1: Start
sensitivity	<int>	Sensitivity The value range depends on the device capability.
alarmInterval	<int>[1,1800]	Alarm interval Alarm interval (1-1800 seconds)
cameraID	<int>	Device Channel This item is required during configuration.
motionDetectStreamEnable	<int>	Motion detection flow 0: Off

		1: On
alarmOut	int	Alarm Output 0: Off 1: On
alarmOut2	int	Alarm 2 output 0: Off 1: On
alarmRecord	int	Alarm video 0: Off 1: On
alarmSMTP	int	Alarm Email 0: Off 1: On
alarmFTP	int	FTP Upload 0: Off 1: On
alarmSound	int	Sound detection alarm 0: Off 1: On
alarmSoundType	int	Audio alarm file (0-13)
alarmLED	int	LED Alarm 0: Off 1: On
alarmWhiteLED	int	White light alarm 0: Off 1: On
Motion detection area		

motionDetectionAreaCount	<int>	Number of detection areas, start mark of motion detection loop
motionDetectionAction	<int>	Detection area loop operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover
motionDetectionAreaBegin	<int>	Detection area start mark When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
topX	<int>	X coordinate The x coordinate of the upper left corner of the detection area. Note: According to the 420×260 resolution standard, the area size is determined by the coordinates of the upper left point and the height and width of the detection area;
topY	<int>	Y coordinate The y coordinate of the upper left corner of the detection area
width	<int>	width Detection area width
height	<int>	high Detection area height
next_motionDetectionAreaURL	<int>	Next article Motion detection area identification

		Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
motionDetectionAreaEnd	<int>	Motion detection loop end flag When the configuration behavior is set, this flag must be carried. For values
planning time		
weekDayCount	<int>	Deployment days Maximum 7
weekDayBegin	<int>	Arming time loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
scheduleTimeAction	<int>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover remove: remove
weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0, 86400]	Arming start time

		Range: 0-86400
endTime(1..3)	<long>[0, 86400]	Arming end time Range: 0-86400, must be matched with startTime
next_weekDayURL	<int>	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one.
weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried for the number of value loop bodies
Alarm PTZ events		
alarmPTZActionCount	<int>	Number of alarm PTZ events The number of alarm PTZ events allowed varies depending on the device.
alarmPTZActionBegin	<int>	Alarm PTZ event loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
alarmPTZAction	<string>	Alarm PTZ event loop operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover
PTZChannelID	<int>	PTZ channel ID
PTZActionType	<int>	PTZ operation type

		Operation type (preset position, track, etc.)
PTZActionID	<int>	Operation ID Preset position ID, track ID, etc. previously set by the user
next_PTZAcitonURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
alarmPTZActionEnd	<int>	PTZ loop ends When the configuration behavior is set, this flag must be carried, and the value indicates the number of loop bodies

2.6.4.3.6. Motion detection alarm linkage parameter meaning (the lite series)

Motion detection alarm linkage parameter table

Table 2-6-4-2-3-1

parameter	data	Description
motionDetectionEnableFlag	<unsigned char>{0,1}	Motion detection on sign 0: Disable 1: Start
sensitivity	<int>[0,3]	Sensitivity 0: Low 1: Medium 2: High 3: Highest

alarmInterval	<int>[1,1800]	Alarm interval Alarm interval (1-1800 seconds) (TBD:nvr does not have this parameter, default Return is 10)
cameraID	<int>	Device Channel This item is required during configuration.
Motion detection area		
motionDetectionAreaCount	<int>	Number of detection areas, start mark of motion detection loop
areaParamAction	<string>	Detection area loop operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover remove: remove
motionDetectionAreaBegin	<int>	Detection area start mark When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
topX	<int>	X coordinate The x coordinate of the upper left corner of the detection area. Note: According to the 420×260 resolution standard, the area size is determined by the coordinates of the upper left point and the height and width of the detection area;
topY	<int>	Y coordinate The y coordinate of the upper left corner of the detection area

width	<int>	width Detection area width
height	<int>	high Detection area height
next_motionDetectionAreaURL	<int>	Next article Motion detection area identification Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
motionDetectionAreaEnd	<int>	Motion detection loop end flag When the configuration behavior is set, this flag must be carried. For values
planning time		
weekDayCount	<int>	Deployment days Maximum 7
weekDayBegin	<int>	Arming time loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
scheduleTimeAction	<string>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover remove: remove clean: Clear all

weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0, 86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0, 86400]	Arming end time Range: 0-86400, must be matched with startTime
next_weekDayURL	<int>	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one.
weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the number of value loop bodies
Linkage Events		
AlarmLinkageCount	<int>	Number of linkages
AlarmLinkageParam	<string>	Alarm linkage operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover remove: remove clean: Clear all
ActionType	<int>[1,12]	Action Type 1: I/O 2: SMTP 3: PTZ 4: RECORD 5: Buzzer (TBD: Added nvr parameter)

		6: Message pop-up window (TBD: Add nvr parameter) 7: Message push (TBD: Add nvr parameter) 8: Attachment email (TBD: Add nvr parameter) 9: Video pop-up (TBD: Add nvr parameter) 10: FTP 11: Full screen event 12: Camera alarm output
relayTime	<int>[0,3600]	I/O linkage related parameters: Alarm time (seconds) (0 means alarm all the time)
relayPort1	<int>{0,1}	I/O linkage related parameters: Alert Port Number 1 0: Off 1: On
relayPort 2	<int>{0,1}	I/O linkage related parameters: Alert Port Number 2 0: Off 1: On
ptzChannel	<int>[1,16]	PTZ linkage related parameters: Channel Number
ptzPreset	<int>[1,16]	PTZ linkage related parameters: Preset
recordTime	<int>{30,40,50,60}	Video linkage related parameters: Video recording duration
triggerChannel	<string>	Video linkage trigger channel collection string Such as: ch1_ch2_ch3 Indicates linkage triggering of channel 1, channel 2, and channel 3

		clean ： Clear All
fullScreenTime	<int>[0,3600]	Full screen event linkage related parameters: Full screen time (seconds)
cameraPort1	<int>{0,1}	Camera alarm output linkage related parameters: Alert Port Number 1 0: Off 1: On
cameraPort 2	<int>{0,1}	Camera alarm output linkage related parameters: Alert Port Number 2 0: Off 1: On
ActionID	<int>	Action ID The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number. (TBD: nvr does not have this parameter, and Returns 1 by default)
AlarmLinkageBegin	<int>	Loop body start mark
next_AlarmLinkageURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.

AlarmLinkageEnd	<int>	Alarm linkage end flag When the configuration behavior is set, this flag must be carried, and the value is the number of loop bodies

2.6.4.4. IO Alarm (IPC excluding the lite series/NVR)

2.6.4.4.1. Get I/O alarm linkage parameters (get IOalarmLinkage)

URL	: //<servername> **/cgi-bin/param.cgi?action=get&type=IOalarmLinkage&alarmInID=1**
Description	When there is no planned time period from Monday to Sunday, there is no planned time parameter loop body When alarmIOEnableFlag=0, there is no motion detection loop. When the alarm output event is 0, there is no alarm output loop body When the alarm PTZ event is 0, there is no alarm PTZ loop. Refer to I/O alarm linkage parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=IOalarmLinkage&alarmInID=1
Return	EnableFlag=0 ValidLevel=1 SourceName=scomputer weekDayBegin=1 weekDay=1 startTime1=5400 endTime1=21600 …… planning time weekDay=5

	startTime1=41400 endTime1=43200 weekDayEnd=4 AlarmLinkageBegin=1 ActionID=1 ActionType=1 … next_AlarmLinkageURL=3 Alarm linkage ActionID=1 ActionType=4 AlarmLinkageEnd=3 (For other responses, Refer to General Response)

2.6.4.4.2. Set I/O alarm linkage parameters (set IOalarmLinkage)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=IOalarmLinkage **&** alarmInID=1[&<argument>=<value>...]
Description	For parameters, Refer to I/O alarm linkage parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=IOalarmLinkage&alarmInID=1&EnableFlag=0&ValidLevel=1&SourceName=scomputer&weekDayBegin=1&weekDay=1&startTime1=5400&endTime1=21600&next_weekDayURL=1&weekDay=2&startTime1=5400&endTime1=21600&startTime2=32400&endTime2=63000&next_ weekDayURL=2&weekDay=3&startTime1=32400&endTime1=63000&next_weekDayURL=3&weekDay=5&startTime1=41400&endTime1=43200&weekDayEnd=4&AlarmLinkageBegin=1&ActionID=1&ActionType=1&next_AlarmLinkageURL=2&ActionID=1&ActionType=2&next_AlarmLinkageURL=3&

	ActionID=1&ActionType=4&AlarmLinkageEnd=3
Return	OK (For other responses, Refer to General Response)

2.6.4.4.3. I/O alarm linkage parameter meaning

I/O alarm linkage parameter table

Table 2-6-4-4-3-1

parameter	data	Description
alarmInID	<int>	Alarm input ID
EnableFlag	<unsigned char>{0,1}	Whether to start IO alarm 0: Disable 1: Start
ValidLevel	<int>{0,1}	Trigger Mode 0: Disconnect 1: Connect
SourceName	<string>	Source Name
planning time		
weekDay Count	<int>[0, 7]	Deployment days Maximum 7
weekDayBegin	<int>	Planned time loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
scheduleTimeAction	<int>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add the

		loop body. cover:cover
weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0,86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0,86400]	Arming end time Range: 0-86400
next_ weekDay URL	<int>	Next scheduled time URL Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
weekDay End	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the number of value loop bodies
Alarm PTZ events		
alarmPTZActionCount	<int>	Number of alarm PTZ events The number of alarm PTZ events allowed varies depending on the device.
alarmPTZActionBegin	<int>	Alarm PTZ event loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
alarmPTZAction	<string>	Alarm PTZ event loop operation behavior

		When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover remove: remove
PTZChannelID	<int>	PTZ channel ID
PTZActionType	<int>	PTZ operation type Operation type (preset position, track, etc.)
PTZActionID	<int>	Operation ID Preset position ID, track ID, etc. previously set by the user
next_PTZAcitonURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
alarmPTZActionEnd	<int>	PTZ loop ends When the configuration behavior is set, this flag must be carried, and the value indicates the number of loop bodies
Linkage Events		
AlarmLinkageCount	<int>	Number of linkages
AlarmLinkageParam	<string>	Alarm linkage operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body.

		cover:cover
ActionType	<int>[1, 4]	Action Type 1: I/O (id:1. Alarm output 1 id: 2. Alarm output 2) 2: SMTP 3: PTZ 4: RECORD 7: FTP 10.audio 11: LED
ActionID	<int>	Action ID The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number.
AlarmLinkageBegin	<int>	Loop body start mark
next_AlarmLinkageURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
AlarmLinkageEnd	<int>	Alarm linkage end flag When the configuration behavior is

		set, this flag must be carried, and the value indicates the number of loop bodies

2.6.4.5. Disk Alarm (IPC excluding the lite series/NVR)

2.6.4.5.1. Get disk alarm parameters (getDiskAlarmParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **diskAlarm** &alarmInID=1
Description	Refer to Disk Alarm Parameters Table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=diskAlarm&alarmInID=1
Return	diskFullAlarmCheckFlag=1 diskErrorAlarmCheckFlag=0 NoDiskAlarmEnableFlag=0 AlarmInterval=345 AlarmLinkageBegin=1 ActionID=1 ActionType=1 AlarmLinkageEnd=1 (For other responses, Refer to General Response)

2.6.4.5.2. Set disk alarm parameters (setDiskAlarmPram)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **diskAlarm** &alarmInID=1[&<argument>=<value>...]
Description	For parameters, Refer to the disk alarm parameter table , and for responses, Refer to the general response text.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=diskAlarm&alarmInID=1&diskFullAlarmCheckFlag=1&diskErrorAlarmCheckFlag=0&NoDiskAlarmEnableFlag=0&AlarmInterval=345&AlarmLinkageBegin=1&ActionID=1&ActionType=1&AlarmLinkageEnd=1
Return	OK

	(For other responses, Refer to General Response)

2.6.4.5.3. Disk alarm parameter meaning

Disk alarm parameter table

Table 2-6-4-5-3-1

parameter	data	Description
diskFullAlarmCheckFlag	<unsigned char>{0,1}	Disk full alarm detection flag 0: Disable 1: Start
diskErrorAlarmCheckFlag	<unsigned char>{0,1}	Disk error alarm detection flag 0: Disable 1: Start
NoDiskAlarmEnableFlag	<unsigned char>{0,1}	Enable the no disk alarm flag 0: Disable 1: Start
AlarmInterval	<int>[10, 86400]	Alarm interval 10-86400 seconds
Alarm PTZ		
alarmPTZActionCount	<int>	Number of alarm PTZ events The number of alarm PTZ events allowed varies depending on the device.
alarmPTZActionBegin	<int>	Alarm PTZ event loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
alarmPTZAction	<string>	Alarm PTZ event loop operation behavior

		When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover
PTZChannelID	<int>	PTZ channel ID
PTZActionType	<int>	PTZ operation type Preset position, track, etc.
PTZActionID	<int>	Operation ID Preset position ID, track ID, etc. previously set by the user
next_PTZAcitonURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
alarmPTZActionEnd	<int>	PTZ loop ends When the configuration behavior is set, this flag must be carried. For values that are the number of loop bodies
Linkage Events		
AlarmLinkageCount	<int>	Number of linkages
AlarmLinkageParam	<string>	Alarm linkage operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover remove: remove

ActionType	<int>[1, 4]	Action Type 1: I/O (id:1. Alarm output 1 id: 2. Alarm output 2) 2: SMTP 3: PTZ 4: RECORD 7: FTP 10.audio 11: LED
ActionID	<int>	Action ID The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number.
AlarmLinkageBegin	<int>	Loop body start mark
next_AlarmLinkageURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
AlarmLinkageEnd	<int>	Alarm linkage end flag When the configuration behavior is set, this flag must be carried, and the value indicates the number of

		loop bodies

2.6.4.6. Exception Alarm (NVR)

2.6.4.6.1. Get exception alarm input alarm parameters (get exceptionAlarm)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type= exceptionAlarm &cameraID=<cameraID>
Description	1. When the value of weekDay is determined, the time period is also determined, and the format is startTime1, endTime1, startTime2, endTime2, startTime3, endTime3… When weekday=2, it indicates that there are two time periods, and the parameters are startTime1, endTime1, startTime2, and endTime2. When weekday = 1, it indicates that there is one time period, and the parameters are startTime1 and endTime1. When weekday = 0, you need to fill in the time period parameter. When there is no scheduled time period from Monday to Sunday, there is no scheduled time parameter loop body. For details, Refer to **Abnormal Alarm Input** Alarm Linkage Parameters
Example	http://192.168.2.162/cgi-bin/ param .cgi?action=get&type=exceptionAlarm
Return	exAlarmEnableFlag=1 exAlarmInterval=60 excTypeDisK=1 excTypeIPConfict=1 excTypeNetworkDisconnect=1 AlarmLinkageBegin=1 ActionID=1 ActionType=5 next_AlarmLinkageURL=2 ActionID=1 ActionType=7 AlarmLinkageEnd=2 (For other responses, Refer to General Response)

2.6.4.6.2. Set exception alarm input alarm parameters (set exceptionAlarm)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type= exceptionAlarm &channelId=1[&<argument>=<value>...]

Description	For parameters, Refer to Abnormal Alarm Parameters
Example	http://192.168.2.162/cgi-bin/ param .cgi?action=set&type=exceptionAlarm&exAlarmEnableFlag=1&exAlarmInterval=60&excTypeDisK=1&excTypeIPConfict=1&excTypeNetworkDisconnect=1&AlarmLinkageBegin=1&ActionID=1&ActionType=5&next_AlarmLinkageURL=2&ActionID=1&ActionType=7&AlarmLinkageEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.4.6.3. Abnormal alarm input linkage parameter table

Table 2-6-7-13-3

parameter	data	Description
exAlarmEnableFlag	<unsigned char>{0,1}	Open sign 0: Disable 1: Start
exAlarmInterval	<int>	Abnormal interval
excTypeDisK	<int> <0,1>	Disk exception type is turned on 0: Disable 1: Start
excTypeIPConfict	<int> <0,1>	IP conflict abnormal opening 0: Disable 1: Start
excTypeNetworkDisconnect	<int> <0,1>	Network disconnect on 0: Disable 1: Start
planning time		
weekDayCount	<int>	Deployment days Maximum 7
weekDayBegin	<int>	Arming time loop body start flag

		When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
scheduleTimeAction	<string>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover remove: remove clean: Clear all
weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0, 86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0, 86400]	Arming end time Range: 0-86400, must be matched with startTime
next_weekDayURL	<int>	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one.
weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the number of value loop bodies
Linkage Events		
AlarmLinkageCount	<int>	Number of linkages
AlarmLinkageParam	<string>	Alarm linkage operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop

		body. cover:cover remove: remove clean: Clear all
ActionType	<int>[1,12]	Action Type 1: I/O 2: SMTP 3: PTZ 4: RECORD 5: Buzzer (TBD: Added nvr parameter) 6: Message pop-up window (TBD: Add nvr parameter) 7: Message push (TBD: Add nvr parameter)
relayTime	<int>[0,3600]	I/O linkage related parameters: Alarm time (seconds) (0 means alarm all the time)
relayPort1	<int>{0,1}	I/O linkage related parameters: Alert Port Number 1 0: Off 1: On
relayPort 2	<int>{0,1}	I/O linkage related parameters: Alert Port Number 2 0: Off 1: On
ActionID	<int>	Action ID The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number. (TBD: nvr does not have this parameter, and Returns 1 by

		default)
AlarmLinkageBegin	<int>	Loop body start mark
next_AlarmLinkageURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
AlarmLinkageEnd	<int>	Alarm linkage end flag When the configuration behavior is set, this flag must be carried, and the value is the number of loop bodies

2.6.4.7. Flash light alarm output (ledOutput) (NVR)

2.6.4.7.1. Get the flash light alarm input alarm parameters (get ledOutput) (NVR)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type= ledOutput&cameraID &cameraID=<cameraID>
Description	1. When the value of weekDay is determined, the time period is also determined, and the format is startTime1, endTime1, startTime2, endTime2, startTime3, endTime3… When weekday=2, it indicates that there are two time periods, and the parameters are startTime1, endTime1, startTime2, and endTime2. When weekday = 1, it indicates that there is one time period, and the parameters are startTime1 and endTime1. When weekday = 0, you need to fill in the time period parameter. When there is no scheduled time period from Monday to Sunday, there is no scheduled time parameter loop body. Refer to Motion Detection Alarm Linkage Parameters for details.
Example	http://192.168.2.162/cgi-bin/

	param .cgi?action=get&type=ledOutput&cameraID=1
Return	ledAlarmTime=20 weekDayBegin=1 weekDay=1 startTime=21600 endTime=37800 next_weekDayURL=2 weekDay=2 startTime=21600 endTime=37800 weekDayEnd=2 AlarmLinkageEnd=2 (For other responses, Refer to General Response)

2.6.4.7.2. Set the flash alarm input alarm parameters (set exceptionAlarm) (NVR)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type= ledOutput &channelId=1[&<argument>=<value>...]
Description	Parameters Refer to video parameters
Example	http://192.168.2.162/cgi-bin/ param .cgi?action=set&type=ledOutput&cameraID=1&ledAlarmTime=20&weekDayBegin=1&weekDay=1&startTime=21600&endTime=37800&next_weekDayURL=2&weekDay=2&startTime=21600&endTime=37800&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.4.7.3. Flash light alarm input linkage parameter table

Table 2-6-6-7-3-1

parameter	data	Description
ledAlarmTime	Int	Alarm time
planning time		
weekDayCount	<int>	Deployment days Maximum 7
weekDayBegin	<int>	Arming time loop body start flag

		When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
scheduleTimeAction	<string>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover remove: remove clean: Clear all
weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0, 86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0, 86400]	Arming end time Range: 0-86400, must be matched with startTime
next_weekDayURL	<int>	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one.
weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the number of value loop bodies

2.6.4.8. Camera alarm input (cameraIO) (NVR)

2.6.4.8.1. Get camera alarm input alarm parameters (get cameraIO)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type= cameraIO

	&cameraID=<cameraID>
Description	1. When the value of weekDay is determined, the time period is also determined, and the format is startTime1, endTime1, startTime2, endTime2, startTime3, endTime3… When weekday=2, it indicates that there are two time periods, and the parameters are startTime1, endTime1, startTime2, and endTime2. When weekday = 1, it indicates that there is one time period, and the parameters are startTime1 and endTime1. When weekday = 0, you need to fill in the time period parameter. When there is no scheduled time period from Monday to Sunday, there is no scheduled time parameter loop body.
Example	http://192.168.2.162/cgi-bin/ param .cgi?action=get&type=cameraIO&cameraID=1
Return	cameraIOEnableFlag=1 cameraIOSourceId=1 cameraIOValidLevel=0 triggerChannel=ch3 weekDayBegin=1 weekDay=0 startTime=3600 endTime=21600 next_weekDayURL=2 weekDay=1 startTime=0 endTime=86400 weekDayEnd=2 AlarmLinkageBegin=1 ActionID=1 ActionType=6 next_AlarmLinkageURL=2 ActionID=1 ActionType=5 AlarmLinkageEnd=2 (For other responses, Refer to General Response)

2.6.4.8.2. Set the camera alarm input alarm parameters (set videoLoss)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type= cameraIO &channelId=1[&<argument>=<value>...]

Description	For parameters, Refer to Camera Alarm Input Parameters
Example	http://192.168.2.162/cgi-bin/alarm.cgi?action=set&type=cameraIO&cameraID=3&cameraIOEnableFlag=1&AlarmLinkageCount=3&AlarmLinkageParam=cover&AlarmLinkageBegin=1&ActionID=1&ActionType=5&next_AlarmLinkageURL=2&ActionID=2&ActionType=6&AlarmLinkageEnd=2&weekDayBegin=1&weekDay=0&startTime=3600&endTime=21600&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.4.8.3. Camera alarm input linkage parameter table

Table 2-6-6-8-3-1

parameter	data	Description
cameraIOEnableFlag	<unsigned char>{0,1}	Camera alarm input open flag 0: Disable 1: Start
cameraID	<int>	Device Channel This item is required during configuration.
planning time		
weekDayCount	<int>	Deployment days Maximum 7
weekDayBegin	<int>	Arming time loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
scheduleTimeAction	<string>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not

		carried, the default is to add in a loop. cover:cover remove: remove clean: Clear all
weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0, 86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0, 86400]	Arming end time Range: 0-86400, must be matched with startTime
next_weekDayURL	<int>	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one.
weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the number of value loop bodies
Linkage Events		
AlarmLinkageCount	<int>	Number of linkages
AlarmLinkageParam	<string>	Alarm linkage operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover remove: remove clean: Clear all
ActionType	<int>[1,12]	Action Type 1: I/O 2: SMTP

		3: PTZ 4: RECORD 5: Buzzer (TBD: Added nvr parameter) 6: Message pop-up window (TBD: Add nvr parameter) 7: Message push (TBD: Add nvr parameter)
relayTime	<int>[0,3600]	I/O linkage related parameters: Alarm time (seconds) (0 means alarm all the time)
relayPort1	<int>{0,1}	I/O linkage related parameters: Alert Port Number 1 0: Off 1: On
relayPort 2	<int>{0,1}	I/O linkage related parameters: Alert Port Number 2 0: Off 1: On
ActionID	<int>	Action ID The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number. (TBD: nvr does not have this parameter, and Returns 1 by default)
AlarmLinkageBegin	<int>	Loop body start mark
next_AlarmLinkageURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the

		configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
AlarmLinkageEnd	<int>	Alarm linkage end flag When the configuration behavior is set, this flag must be carried, and the value is the number of loop bodies

2.6.4.9. Privacy maskinging alarm (shelterConfig) (IPC lite series/NVR)

2.6.4.9.1. Get privacy maskinging alarm parameters (getShelterConfig)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type= **shelterConfig** &channelId =1
Description	Refer to Privacy Mask Configuration Parameters
Example	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=shelterConfig&channelId =1

Return	triggerChannel=ch1 channelId=1 enableFlag=1 weekDayBegin=1 weekDay=0 startTime=0 endTime=86400 next_weekDayURL=2 weekDay=1 startTime=0 endTime=86400 next_weekDayURL=3 weekDay=2 startTime=0 endTime=86400 weekDayEnd=3 AlarmLinkageBegin=1 ActionID=1 ActionType=6 next_AlarmLinkageURL=2 ActionID=1 ActionType=5 next_AlarmLinkageURL=3 ActionID=1 ActionType=7 next_AlarmLinkageURL=4 ActionID=1 ActionType=1 AlarmLinkageEnd=4 (For other responses, Refer to General Response)

2.6.4.9.2. Set privacy masking alarm parameters (setShelterConfig)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type=shelterConfig&channelId=1[&<argument>=<value>...]
Description	For parameters, Refer to Privacy Mask Configuration Parameters.
Example	http://192.168.2.193/cgi-bin/param.cgi?action=set&type=shelterConfig&triggerChannel=ch1&channelI

	d=1&enableFlag=1&weekDayBegin=1&weekDay=0&startTime=0&endTime=86400&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&next_weekDayURL=3&weekDay=2&startTime=0&endTime=86400&next_weekDayURL=4&weekDay=3&startTime=0&endTime=86400&next_weekDayURL=5&weekDay=4&startTime=0&endTime=86400&next_weekDayURL=6&weekDay=5&startTime=0&endTime=86400&next_weekDayURL=7&weekDay=6&startTime=0&endTime=86400&weekDayEnd=7&AlarmLinkageBegin=1&ActionID=1&ActionType=6&next_AlarmLinkageURL=2&ActionID=1&ActionType=5&next_AlarmLinkageURL=3&ActionID=1&ActionType=7&next_AlarmLinkageURL=4&ActionID=1&ActionType=1&AlarmLinkageEnd=4
Return	OK (For other responses, Refer to General Response)

2.6.4.9.3. Privacy mask parameter meaning

Privacy mask configuration parameter table

Table 2-6-4-6-3-1

parameter	data	Description
channelId	<int>	Channel Number
enableFlag	[0, 1]	Mask configuration enable flag 1: Enable 0: Disable
planning time		
weekDayCount	<int>	Deployment days Maximum 7
weekDayBegin	<int>	Arming time loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
scheduleTimeAction	<int>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover

		remove: remove clean: Clear all
weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0, 86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0, 86400]	Arming end time Range: 0-86400, must be matched with startTime
next_weekDayURL	<int>	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one.
weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the number of value loop bodies
Linkage Events		
AlarmLinkageCount	<int>	Number of linkages
AlarmLinkageParam	<string>	Alarm linkage operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover remove: remove clean: Clear all
ActionType	<int>[1,9]	Action Type 1: I/O 2: SMTP 3: PTZ 4: RECORD 5: Buzzer (TBD: Added nvr parameter)

		6: Message pop-up window (TBD: Add nvr parameter) 7: Message push (TBD: Add nvr parameter) 8: Attachment email (TBD: Add nvr parameter) 9: Video pop-up (TBD: Add nvr parameter) 10: FTP 11: Full screen event 12: Camera alarm output
relayTime	<int>[0,3600]	I/O linkage related parameters: Alarm time (seconds) (0 means alarm all the time)
relayPort1	<int>{0,1}	I/O linkage related parameters: Alert Port Number 1 0: Off 1: On
relayPort 2	<int>{0,1}	I/O linkage related parameters: Alert Port Number 2 0: Off 1: On
ptzChannel	<int>[1,16]	PTZ linkage related parameters: Channel Number
ptzPreset	<int>[1,16]	PTZ linkage related parameters: Preset
recordTime	<int>{30,40,50,60}	Video linkage related parameters: Video recording duration
triggerChannel	<string>	Video linkage trigger channel collection string Such as: ch1_ch2_ch3 Indicates linkage triggering of channel 1, channel 2, and channel 3

		clean ： Clear All
fullScreenTime	<int>[0,3600]	Full screen event linkage related parameters: Full screen time (seconds)
cameraPort1	<int>{0,1}	Camera alarm output linkage related parameters: Alert Port Number 1 0: Off 1: On
cameraPort 2	<int>{0,1}	Camera alarm output linkage related parameters: Alert Port Number 2 0: Off 1: On
ActionID	<int>	Action ID (TBD: nvr does not have this parameter, and Returns 1 by default) The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number.
AlarmLinkageBegin	<int>	Loop body start mark
next_AlarmLinkageURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
AlarmLinkageEnd	<int>	Alarm linkage end flag

		When the configuration behavior is set, this flag must be carried, and the value is the number of loop bodies

2.6.4.10. Video loss alarm (videoLoss) (NVR)

2.6.4.10.1. Get video loss alarm parameters (get videoLoss)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type= videoLoss &cameraID=<cameraID>
Description	1. When the value of weekDay is determined, the time period is also determined, and the format is startTime1, endTime1, startTime2, endTime2, startTime3, endTime3… When weekday=2, it indicates that there are two time periods, and the parameters are startTime1, endTime1, startTime2, and endTime2. When weekday = 1, it indicates that there is one time period, and the parameters are startTime1 and endTime1. When weekday = 0, you need to fill in the time period parameter. When there is no scheduled time period from Monday to Sunday, there is no scheduled time parameter loop body. **Video Loss** Alarm Linkage Parameters for details.
Example	http://192.168.2.161/cgi-bin/param.cgi?action=get&type=videoLoss &cameraID=1
Return	videoLossEnableFlag=1 triggerChannel=ch1 weekDayBegin=1 weekDay=0 startTime=3600 endTime=21600 next_weekDayURL=2

	weekDay=1 startTime=0 endTime=86400 weekDayEnd=2 AlarmLinkageBegin=1 ActionID=1 ActionType=6 next_AlarmLinkageURL=2 ActionID=1 ActionType=5 next_AlarmLinkageURL=3 ActionID=1 ActionType=7 next_AlarmLinkageURL=4 ActionID=1 ActionType=3 ptzChannel=1 ptzPreset=1 next_AlarmLinkageURL=5 ActionID=1 ActionType=4 recordTime=30 next_AlarmLinkageURL=6

	ActionID=1 ActionType=2 next_AlarmLinkageURL=7 ActionID=1 ActionType=1 relayTime=0 relayPort1=0 relayPort2=0 AlarmLinkageEnd=7 (For other responses, Refer to General Response)

2.6.4.10.2. Set video loss alarm parameters (set videoLoss)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type= videoLoss &channelId=1[&<argument>=<value>...]
Description	Parameters Refer to video parameters
Example	http://192.168.0.121/cgi-bin/param.cgi?action=set&type=videoLoss&cameraID=1&videoLossEnableFlag=1&AlarmLinkageCount=3&AlarmLinkageParam=cover&AlarmLinkageBegin=1&ActionID=1&ActionType=5&next_AlarmLinkageURL=2&ActionID=2&ActionType=6&AlarmLinkageEnd=2&weekDayBegin=1&scheduleTimeAction=cover&weekDay=0&startTime=3600&endTime=21600&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.4.10.3. Video loss alarm linkage parameter table

Table 2-11-17-3

parameter	data	Description
videoLossEnableFlag	<unsigned char>{0,1}	Video loss on flag

		0: Disable 1: Start
cameraID	<int>	Device Channel This item is required during configuration.
planning time		
weekDayCount	<int>	Deployment days Maximum 7
weekDayBegin	<int>	Arming time loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
scheduleTimeAction	<string>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover:cover remove: remove clean: Clear all
weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0, 86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0, 86400]	Arming end time Range: 0-86400, must be matched with startTime
next_weekDayURL	<int>	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one.

weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the number of value loop bodies
Linkage Events		
AlarmLinkageCount	<int>	Number of linkages
AlarmLinkageParam	<string>	Alarm linkage operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover remove: remove clean: Clear all
ActionType	<int>[1,12]	Action Type 1: I/O 2: SMTP 3: PTZ 4: RECORD 5: Buzzer (TBD: Added nvr parameter) 6: Message pop-up window (TBD: Add nvr parameter) 7: Message push (TBD: Add nvr parameter)
relayTime	<int>[0,3600]	I/O linkage related parameters: Alarm time (seconds) (0 means alarm all the time)
relayPort1	<int>{0,1}	I/O linkage related parameters: Alert Port Number 1 0: Off 1: On
relayPort 2	<int>{0,1}	I/O linkage related parameters:

		Alert Port Number 2 0: Off 1: On
ActionID	<int>	Action ID The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number. (TBD: nvr does not have this parameter, and Returns 1 by default)
AlarmLinkageBegin	<int>	Loop body start mark
next_AlarmLinkageURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
AlarmLinkageEnd	<int>	Alarm linkage end flag When the configuration behavior is set, this flag must be carried, and the value is the number of loop bodies

2.6.4.11.Day night switch alarm (IPC excluding the lite series)

设置了格式： 字体：（默认）Times New Roman，（中文）宋体

2.6.4.11.1. Get Day night switch alarm parameters

设置了格式： 字体：（中文）新宋体

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=dayNightAlarm&cameraID=<cameraID>
Description	Once the value of weekDay is determined, the time periods are also determined, formatted as startTime1, endTime1, startTime2,

	endTime2, startTime3, endTime3, and so on When weekday=2, it indicates that there are two time periods, with parameters startTime1, endTime1, startTime2, and endTime2. When weekday=1, it indicates that there is one time period, with parameters startTime1 and endTime1. When weekday=0, time period parameters need to be specified. If there are no scheduled time periods from Monday to Sunday, no schedule time parameters are required. For details, see the motion detection alarm linkage parameters.
Example	http://192.168.2.162/cgi-bin/param.cgi?action=get&type=dayNightAlarm&cameraID=1
Return	dayNightAlarmEnableFlag=1 alarmOut=0 alarmRecord=0 alarmSMTP=0 alarmFTP=0 weekDayCount=2 weekDayBegin=1 weekDay=1 startTime=21600 endTime=37800 next weekDayURL=2 weekDay=2 startTime=21600 endTime=37800 weekDayEnd=2 (For other responses, Refer to General Response)

2.6.4.11.2. Set Day night switch alarm parameters

设置了格式：字体：（中文）新宋体

URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type=ledOutput&channelId=1[&<argument>=<value>...]
Description	Parameters Refer to video parameters
Example	http://192.168.0.120/cgi-bin/param.cgi?action=set&type=dayNightAlarm&cameraID=1&dayNightAlarmEnableFlag=1&alarmOut=1&alarmOut2=0&alarmRecord=1&alarmSMTP=1&alarmFTP=1&weekDayCount=2&weekDayBegin=1&weekDay=1&startTime=21600&endTime=37800&next weekDayURL=2&weekDay=2&startTime=21600&endTime=37800&weekDayEnd=2

Return	OK (For other responses, Refer to General Response)

2.6.4.11.3. Day night switch alarm linkage parameter table

设置了格式：字体：（中文）新宋体

Parameter	Data	Description
dayNightAlarmEnableFlag	Int	Enable alarm
alarmOut	Alarm output 0: Off 1: On	0-1
alarmOut2	Alarm 2 output 0: Off 1: On	0-1
alarmRecord	Alarm record 0: Off 1: On	0-1
alarmSMTP	Alarm SMTP 0: Off 1: On	0-1
alarmFTP	FTP upload 0: Off 1: On	0-1
Planning time		
weekDayCount	<int>	Deployment days Maximum 7
weekDayBegin	<int>	Arming time loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value

scheduleTimeAction	<string>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add in a loop. cover: cover remove: remove clean: clean
weekDay	<int>[0, 6]	Which day 0-6,0 for Sunday
startTime(1..3)	<long>[0, 86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0, 86400]	Arming end time Range:0-86400,must be matched with startTime
next_weekDayURL	<int>	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one
weekDayEnd	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried for the number of value loop bodies

带格式的：左

带格式的：左

带格式的：左

设置了格式：字体：(中文) 宋体

带格式的：两端对齐

2.6.5. Privacy mask (blindAreaAlarm)

2.6.5.1. Acquisition capability (IPC excluding the lite series)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **blindAreaAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= blindAreaAbility

Description	Refer to URL Descriptions
Return	streamID=1 blindAreaRate=100 maxBlindAreaNum=4 blindTypeCount=1 blindTypeBegin=1 blindType=1 blindColorCount=9 blindColorBegin=1 blindColor=FFFFFF next_blindColorURL=2 blindColor=000000 next_blindColorURL=3 blindColor=FF0000 next_blindColorURL=4 blindColor=FF6400 next_blindColorURL=5 blindColor=FFFF00 next_blindColorURL=6 blindColor=00FF00 next_blindColorURL=7 blindColor=00FFFF next_blindColorURL=8 blindColor=0000FF next_blindColorURL=9 blindColor=FF00FF blindColorEnd=1 blindTypeEnd=1

2.6.5.2. Capability parameter meaning

URL	Parameter Description	scope	type of data
streamID	Stream ID		int
blindAreaRate	The percentage of the occluded area to the source resolution		int
maxBlindAreaNum	Maximum number of occlusion areas		int
blindTypeCount	Number of masking types		int

blindTypeBegin	Mask type start flag		int
blindType	Masking Type 1: Color block 2: Mosaic 3: Color block + mosaic		int
blindColorCount	Number of mask colors		int
blindColorBegin	Mask color start mark		int
blindColor	Mask color (hex)		string
next_blindColorURL	Next mask color starts marking		int
blindColorEnd	Mask color end marker		int
next_blindTypeURL	Next mask type start mark		int
blindTypeEnd	Mask type end marker		int

2.6.5.3. go to privacy mask (IPC excluding the lite series)

URL	http://<ip>/cgi-bin/param.cgi?action=go to&type= **blindArea**
Example	http://192.168.17.189/cgi-bin/param.cgi?action= go to &type= blindArea
Description	Refer to URL Descriptions
Return	OK (For other responses, Refer to General Response)

2.6.5.3.1. go to privacy mask parameter meaning

URL	Parameter Description	scope	type of data
cameraID	Channel Number		int

areaID	Region ID		int

2.6.5.4. Get the privacy masking parameters (getBlindArea)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **blindArea** &cameraID=1
Description	Refer to Privacy Mask Parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=blindArea&cameraID=1
Return	BlindAreaParamBegin=1 areaID=4 enableFlag=1 topX=14 topY=22 Detection area parameters height=31 width=27 BlindAreaName=PrivacyMask4 blindType=1 … next_areaParamURL=3 areaID=3 enableFlag=1 topX=10 topY=68 Detection area parameters height=16 width=16 BlindAreaName=PrivacyMask3 blindType=1 BlindAreaParamEnd=3 (For other responses, Refer to General Response)

2.6.5.5. Set the privacy mask parameters (setBlindArea)

URL	http://<servername>/cgi-bin/param.cgi?userName=<username>&password=<assword>&action=set&type=blindArea&cameraID=1[&<argument>=<value>...]

Description	For parameters, Refer to Privacy Masking Parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=blindArea&cameraID=1&areaParamAction=add& & **BlindAreaParamCount** = 3 &BlindAreaParamBegin=1&areaID=4&enableFlag=1&topX=14&topY=22&height=31&width=27&BlindAreaName=PrivacyMask4&blindType=1&next_areaParamURL=2&areaID=2&enableFlag=1&topX=61&topY=39&height=49&width=17&BlindAreaName=PrivacyMask2&blindType=1&next_areaParamURL=3&areaID=3&enableFlag=1&topX=10&topY=68&height=16&width=16&BlindAreaName=PrivacyMask3&blindType=1&BlindAreaParamEnd=3
Return	OK (For other responses, Refer to General Response)

2.6.5.6. Delete the privacy mask parameter (deleteBlindArea)

URL	http ://<servername>/cgi-bin/param.cgi?userName=<username>&password=<password>action=delete&type= **blindAre a** &cameraID=1[&<argument>=<value>...]
Description	Carrying the areaID URL means deleting the specified area, White not carrying the areaID URL means deleting all areas For parameters, Refer to Deleting Privacy Mask Parameters.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=delete&type=blindArea&cameraID=1&areaID=2
Return	OK (For other responses, Refer to General Response)

2.6.5.7. Privacy mask parameter meaning

Privacy Masking Parameters Table

Table 2-6-4-6-4-1

parameter	data	Description
BlindAreaParamCount	<int>	Number of masked areas
BlindAreaParamBegin	<int>	Masked area start sign

		When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
next_areaParamURL	<int>	Next masked area URL start mark Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
BlindAreaParamEnd	<int>	End of masked area When the configuration behavior is set, this flag must be carried, and the value is the number of settings
cameraID	<int>	Channel ID
areaID	<int>	Region ID
enableFlag	<int>{0, 1}	Whether to enable masking 1: Start 0: Disable
topX	<int>[0, 100]	X coordinate The x coordinate of the upper left corner of the area as a percentage of the total video area width (value range 0-100)
topY	<int>[0, 100]	Y coordinate The y coordinate of the upper left corner of the area as a percentage of the total video area width (value range 0-100)
width	<int>	width The percentage of the area width to the total width of the video area
height	<int>	high The percentage of the area height to the total video area height

BlindAreaName	<string>	Mobile Area Name
blindType	<int>[1, 3]	Masking Type 1: Color block 2: Mosaic 3: Color block + mosaic Support types vary depending on device capabilities
blindColor	<string>	RGB color (hexadecimal)
areaParamAction	<string>	Masking area loop operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover: indicates coverage

2.6.6. Audio alarm output (IPC excluding the lite series)

2.6.6.1. Get the Audio alarm output parameters

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **audioAlarm&cameraID=1**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= audioAlarm&cameraID=1
Description	Refer to URL Descriptions
Return	audioAlarmCount=14 audioAlarmBegin=1 fileId=0 fileName=high_temperature_alarm.wav cycle=1 next_AudioAlarmURL=2 fileId=1 fileName=normal_temperature.wav cycle=1 next_AudioAlarmURL=3 fileId=2 fileName=low_temperature_alarm.wav cycle=1 next_AudioAlarmURL=4

	fileId=3 fileName=hello_welcome.wav cycle=1 next_AudioAlarmURL=5 fileId=4 fileName=verification_success.wav cycle=1 next_AudioAlarmURL=6 fileId=5 fileName=verification_failed.wav cycle=1 next_AudioAlarmURL=7 fileId=6 fileName=temperature_rise_warning.wav cycle=1 next_AudioAlarmURL=8 fileId=7 fileName=temperature_rise_alarm.wav cycle=1 next_AudioAlarmURL=9 fileId=8 fileName=temperature_range_alarm.wav cycle=1 next_AudioAlarmURL=10 fileId=9 fileName=temperature_diff_alarm.wav cycle=1 next_AudioAlarmURL=11 fileId=10 fileName=temperature_diff_warning.wav cycle=1 next_AudioAlarmURL=12 fileId=11 fileName=high_temperature_warning.wav cycle=1 next_AudioAlarmURL=13 fileId=12 fileName=fire_detected_please_process_immediately.wav cycle=1 next_AudioAlarmURL=14 fileId=13 fileName=smoking_is_prohibited_in_this_area.wav cycle=1 audioAlarmEnd=1

	weekDayCount=7 weekDayBegin=1 weekDay=0 startTime=0 endTime=86400 next_weekDayURL=2 weekDay=1 startTime=0 endTime=86400 next_weekDayURL=3 weekDay=2 startTime=0 endTime=86400 next_weekDayURL=4 weekDay=3 startTime=0 endTime=86400 next_weekDayURL=5 weekDay=4 startTime=0 endTime=86400 next_weekDayURL=6 weekDay=5 startTime=0 endTime=86400 next_weekDayURL=7 weekDay=6 startTime=0 endTime=86400 weekDayEnd=7

2.6.6.2. Set the Audio alarm output parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**audioAlarm**&cameraID=1&audioAlarmCount=6&audioAlarmBegin=1&fileId=0&cycle=100&next_AudioAlarmURL=2&fileId=1&cycle=2&next_AudioAlarmURL=3&fileId=2&cycle=3&next_AudioAlarmURL=4&fileId=3&cycle=4&next_AudioAlarmURL=5&fileId=4&cycle=5&next_AudioAlarmURL=6&fileId=5&cycle=6&audioAlarmEnd=1&weekDayCount=3&weekDayBegin=1&weekDay=0&startTime=12600&endTime=34200&next_weekDayURL=2&weekDay=3&startTime=43200&endTime=57600&next_weekDayURL=3&weekDay=5&startTime=66600&endTime=84600&weekDayEnd=3

Description	查看字段 Description
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type= **audioAlarm** &cameraID=1&audioAlarmCount=6&audioAlarmBegin=1&fileId=0&cycle=100&next_AudioAlarmURL=2&fileId=1&cycle=2&next_AudioAlarmURL=3&fileId=2&cycle=3&next_AudioAlarmURL=4&fileId=3&cycle=4&next_AudioAlarmURL=5&fileId=4&cycle=5&next_AudioAlarmURL RL=6&fileId=5&cycle=6&audioAlarmEnd=1&weekDayCount=3&weekDayBegin=1&weekDay=0&startTime=12600&endTime=34200&next_weekDayURL=2&weekDay=3&startTime=43200&endTime=57600&next_weekDayURL=3&weekDay=5&startTime=66600&endTime=84600&weekDayEnd=3
Return	OK (For other responses, Refer to General Response)

2.6.6.3. Meaning of Audio alarm output parameters

URL	Parameter Description	scope	type of data
audioAlarmCount	Number of Audio alarms		int
audioAlarmBegin	Audio alarm start indicator		int
fileId	File number		int
fileName	file name		string
cycle	Loop times (1-10) (100 loop playback)		int
next_AudioAlarmURL	Next Audio alarm start mark		int
audioAlarmEnd	Audio alarm end mark		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (in seconds)		int

endTime	Arming end time (in seconds)		int
next_weekDayURL	Next scheduled time URL start mark		int
weekDayEnd	End flag of the loop of defense days		int

2.6.7. Abnormal Audio Detection Alarm (AudioAbnormalAlarm) (IPC excluding the lite series)

2.6.7.1. Get Abnormal Audio detection alarm linkage parameters (get AudioAbnormalalarmLinkage)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **AudioAbnormal**
Description	When there is no planned time period from Monday to Sunday, there is no planned time parameter loop body When AudioAbnormal EnableFlag = 0, there is no motion detection loop. When the alarm output event is 0, there is no alarm output loop body When the alarm PTZ event is 0, there is no alarm PTZ loop. Refer to **AudioAbnormal** alarm linkage parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type= ***AudioAbnormal***
Return	EnableFlag = 0 suddenRiRefer tonable =1 riseSensitivity=38 riseThreshold = 5 0 suddenDropEnable=1 dropSensitivity=38 dropThreshold=88 weekDayBegin=1 weekDay=1 startTime1=5400 endTime1=21600 …… planning time weekDay=5 startTime1=41400

	endTime1=43200 weekDayEnd=4 AlarmLinkageBegin=1 ActionID=1 ActionType=1 … next_AlarmLinkageURL=3 Alarm linkage ActionID=1 ActionType=4 AlarmLinkageEnd=3 (For other responses, Refer to General Response)

2.6.7.2. Set the Abnormal Audio detection alarm linkage parameters (set AudioAbnormalalarmLinkage)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **AudioAbnormal** &alarmInID=1[&<argument>=<value>...]
Description	For parameters, Refer to **AudioAbnormal** alarm linkage parameters.
Example	http://192.168.2.81/cgi-bin/param.cgi?action=set&type=AudioAbnormal&EnableFlag=0&suddenRiRefer tonable=1&riseSensitivity=59&riseThreshold=29&suddenDropEnable=1&dropSensitivity=38&dropThreshold=88&weekDayBegin=1&weekDay=1&startTime1=5400&endTime1=21600&next_weekDayURL=1&weekDay=2&startTime1=5400&endTime1=21600&startTime2=32400&endTime2=63000&next_weekDayURL=2&weekDay=3&startTime1=32400&endTime1=63000&next_weekDayURL=3&weekDay=5&startTime1=41400&endTime1=43200&weekDayEnd=4&AlarmLinkageBegin=1&ActionID=1&ActionType=1&next_AlarmLinkageURL=2&ActionID=1&ActionType=2&next_AlarmLinkageURL=3&ActionID=1&ActionType=4&AlarmLinkageEnd=3
Return	OK (For other responses, Refer to General Response)

2.6.7.3. Meaning of Abnormal Audioity detection alarm linkage parameters

Abnormal Audioity detection **alarm linkage parameter table**

Table 2-6-4-4-3-1

parameter	data	Description
EnableFlag	<unsigned char>{0,1}	Whether to start the Abnormal Audioity detection alarm 0: Disable 1: Start
suddenRiRefer tonable	<int>{0,1}	Whether to activate the sound intensity steep rise switch 0: Disable 1: Start
suddenDropEnable	<int>{0,1}	Whether to activate the sound intensity steep drop switch 0: Disable 1: Start
riseSensitivity	<int>{ 1 ,1 00 }	Rise sensitivity (only effective when the sound intensity rise switch is turned on)
riseThreshold	<int>{ 1 ,1 00 }	Rising threshold (only effective when the sound intensity rise switch is turned on)
dropSensitivity	<int>{ 1 ,1 00 }	Reduced sensitivity (only when the sound intensity drop is turned on Switch effective)
dropThreshold	<int>{ 1 ,1 00 }	Falling threshold (only when the sound intensity drop is turned on Switch effective)
planning time		
weekDay Count	<int>[0, 7]	Deployment days Maximum 7
weekDayBegin	<int>	Planned time loop body start flag When the configuration behavior is set, this flag must be carried, and there is no specific requirement for

		the value
scheduleTimeAction	<int>	Schedule time loop operation When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover
weekDay	<int>[0, 6]	which day 0-6,0 for Sunday
startTime(1..3)	<long>[0,86400]	Arming start time Range: 0-86400
endTime(1..3)	<long>[0,86400]	Arming end time Range: 0-86400
next_ weekDay URL	<int>	Next scheduled time URL Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
weekDay End	<int>	End flag of the loop of defense days When the configuration behavior is set, this flag must be carried. For the number of value loop bodies
Alarm PTZ events		
alarmPTZActionCount	<int>	Number of alarm PTZ events The number of alarm PTZ events allowed varies depending on the device.
alarmPTZActionBegin	<int>	Alarm PTZ event loop body start flag

		When the configuration behavior is set, this flag must be carried, and there is no specific requirement for the value
alarmPTZAction	<string>	Alarm PTZ event loop operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover
PTZChannelID	<int>	PTZ channel ID
PTZActionType	<int>	PTZ operation type Operation type (preset position, track, etc.)
PTZActionID	<int>	Operation ID Preset position ID, track ID, etc. previously set by the user
next_PTZAcitonURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value.
alarmPTZActionEnd	<int>	PTZ loop ends When the configuration behavior is set, this flag must be carried, and the value indicates the number of loop bodies
Linkage Events		
AlarmLinkageCount	<int>	Number of linkages

AlarmLinkageParam	<string>	Alarm linkage operation behavior When the configuration behavior is set, if this behavior flag is not carried, the default is to add the loop body. cover:cover
ActionType	<int>[1, 4]	Action Type 1: I/O (id:1. Alarm output 1 id: 2. Alarm output 2) 2: SMTP 3: PTZ 4: RECORD 7: FTP 10.audio 11: LED
ActionID	<int>	Action ID The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number.
AlarmLinkageBegin	<int>	Loop body start mark
next_AlarmLinkageURL	<int>	Next alarm PTZ event ID Start from 2. If the value is 2, it means that the following parameter is the second one. When the configuration behavior is set and the number of loop bodies is greater

		than 1, this flag must be carried. There is no specific requirement for the value.
AlarmLinkageEnd	<int>	Alarm linkage end flag When the configuration behavior is set, this flag must be carried, and the value indicates the number of loop bodies

2.6.8. Network alarm (networkAbnormalAlarm) (IPC excluding the lite series)

2.6.8.1. Get network alarm parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=**networkAbnormalAlarm**
Description	Refer to parameter meaning
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=networkAbnormalAlarm
Return	networkCardId =1 networkAlarmEnable =0 alarmInterval =10 AlarmLinkageCount = 1 AlarmLinkageParam = 1 AlarmLinkageBegin = 1 ActionType=1 ActionID =1 AlarmLinkageEnd = 1 (For other responses, Refer to General Response)

2.6.8.2. Set network alarm parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**networkAbnormalAlarm**&networkCardId=1&networkAlarmEnable=1&alarmInterval=300&AlarmLink

	ageCount=1&AlarmLinkageBegin=1&ActionType=1&ActionID=10&AlarmLinkageEnd=1
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=networkAbnormalAlarm&networkCardId=1&networkAlarmEnable=1&alarmInterval=300&AlarmLinkageCount=1&AlarmLinkageBegin=1&ActionType=1&ActionID=10&AlarmLinkageEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.8.3. Meaning of network alarm parameters

parameter	data	Description
networkCardId	<int>	Network card ID
networkAlarmEnable	<int>	Network abnormality alarm 0: Off 1: On
alarmInterval	<int>	Alarm interval (10-86400 seconds)
AlarmLinkageCount	<int>	Number of linkages
AlarmLinkageParam	<int>	Alarm linkage operation behavior
AlarmLinkageBegin	<int>	Loop body start mark
ActionType	<int>	Action Type 1: I/O (id:1. Alarm output 1 id: 2. Alarm output 2)

		2: SMTP 3: PTZ 4: RECORD 7: FTP 10.audio 11: LED
ActionID	<int>	Action ID The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number.
next_AlarmLinkageURL	<int>	Next Linkage Alarm Alarm
AlarmLinkageEnd	<int>	Alarm linkage end flag

2.6.9. Message Push (messagePush) (IPC excluding the lite series)

2.6.9.1. Get message push parameters

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=messagePush
Description	Refer to parameter meaning
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=messagePush
Return	messagePushEnable =1 (For other responses, Refer to General Response)

2.6.9.2. Set message push parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **messagePush** &messagePushEnable=1
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type= messagePush&messagePushEnable=1
Return	OK (For other responses, Refer to General Response)

2.6.9.3. Meaning of message push parameters

parameter	data	Description
messagePushEnable	<int>	Message push switch 0: Off 1: On

2.6.10. External device configuration

2.6.10.1.External PTZ

2.6.10.1.1. Get PTZ capability parameters

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **ptzDeviceAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= ptzDeviceAbility
Description	Refer to URL Descriptions
Return	ptzSerialPortCount=1 ptzSerialPortBegin=1 ptzSerialPort=1 ptzSerialPortEnd=1

	ptzBaudRateCount=9 ptzBaudRateBegin=1 ptzBaudRate=300 next_BaudRateURL=2 ptzBaudRate=1200 next_BaudRateURL=3 ptzBaudRate=2400 next_BaudRateURL=4 ptzBaudRate=4800 next_BaudRateURL=5 ptzBaudRate=9600 next_BaudRateURL=6 ptzBaudRate=19200 next_BaudRateURL=7 ptzBaudRate=38400 next_BaudRateURL=8 ptzBaudRate=57600 next_BaudRateURL=9 ptzBaudRate=115200 ptzBaudRateEnd=1 ptzDataBitCount=5 ptzDataBitBegin=1 ptzDataBit=4 next_DataBitURL=2 ptzDataBit=5 next_DataBitURL=3 ptzDataBit=6 next_DataBitURL=4 ptzDataBit=7 next_DataBitURL=5 ptzDataBit=8 ptzDataBitEnd=1 ptzStopBitCount=3 ptzStopBitBegin=1 ptzStopBit=0 next_StopBitURL=2 ptzStopBit=1 next_StopBitURL=3 ptzStopBit=2 ptzStopBitEnd=1 ptzParityCount=5 ptzParityBegin=1 ptzParity=0 next_ParityURL=2

	ptzParity=1 next_ParityURL=3 ptzParity=2 next_ParityURL=4 ptzParity=3 next_ParityURL=5 ptzParity=4 ptzParityEnd=1

2.6.10.1.2. PTZ capability parameter meaning

URL	Parameter Description	scope	type of data
ptzSerialPortCount	PTZ serial port quantity		int
ptzSerialPortBegin	PTZ serial port start mark		int
ptzSerialPort	PTZ serial port 1:COM1 2: COM2 3:COM3		int
next_SerialPortURL	Next PTZ serial port start mark		int
ptzSerialPortEnd	PTZ serial port end mark		int
ptzBaudRateCount	PTZ baud rate quantity		int
ptzBaudRateBegin	PTZ baud rate start mark		int
ptzBaudRate	PTZ baud rate		int
next_BaudRateURL	Next PTZ baud rate start mark		int
ptzBaudRateEnd	PTZ baud rate end flag		int
ptzDataBitCount	PTZ data bit number		int
ptzDataBitBegin	PTZ data bit start mark		int
ptzDataBit	PTZ data bit		int

next_DataBitURL	The next PTZ data position starts marking		int
ptzDataBitEnd	PTZ data bit end mark		int
ptzStopBitCount	Number of PTZ stop positions		int
ptzStopBitBegin	PTZ stop position start mark		int
ptzStopBit	PTZ stop position 0:1 1:1.5 2:2		float
next_StopBitURL	Next PTZ stop position start mark		int
ptzStopBitEnd	PTZ stop position end mark		int
ptzParityCount	PTZ parity number		int
ptzParityBegin	PTZ parity check start flag		int
ptzParity	PTZ parity check 0: None 1: Odd 2: Even 3: Mark 4: Space		int
next_ParityURL	Next PTZ parity check start mark		int
ptzParityEnd	PTZ parity check end mark		int

2.6.10.1.3. Get external PTZ parameters (getPTZParam) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=PTZ **&** cameraID=<cameraID>
Description	Refer to the external PTZ parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=PTZ&cameraID=1
Return	PTZCount=1 PTZBegin=1 PTZType=0 PTZEnableFlag=0 PTZDeviceID=1 PTZProtocol=0 comID=1 baudRate=115200 dataBits=8 stopBits=0 parity=3 PTZEnd=1 (For other responses, Refer to General Response)

2.6.10.1.4. Set external PTZ parameters (setPTZParam) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=PTZ **[** &<argument>=<value>...]
Description	Refer to the external PTZ parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=PTZ&cameraID=1&PTZBegin=1&PTZEnableFlag=1 &PTZDeviceID=1 &comID=1&PTZProtocol=0&baudRate=115200&dataBits=8&stopBits=0&parity=3&PTZEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.10.1.5. External PTZ parameters meaning

External PTZ Parameters

Table 2-6-5-1-3-1

parameter	data	Description
PTZCount	<int>	Number of PTZ parameters
PTZBegin	<int>	PTZ parameter start marker Indicates the start of PTZ information, can only be 1
PTZEnableFlag	<unsigned char>{0,1}	Enable PTZ flag 0: Disable 1: Enable Setting other values is invalid and Returns -8 (parameter error).
cameraID	<int>	Channel Number
internalPTZID	<int>	Built-in PTZ ID The PTZ parameters of the built-in PTZ are fixed and can be changed by setting the PTZ ID.
PTZ Type	<int>{0, 1}	PTZ Type 0: Bolt 1: High-speed dome PTZType is the inherent performance of the device, which can only be obtained but not set
PTZDeviceID	<int>	PTZ device address PTZ ID
PTZProtocol	<int>{0, 1}	PTZ Protocol 0: PELCO_D protocol 1: PELCO_P protocol Setting other values is invalid and Returns

		-8 (parameter error).
comID	<int>	Serial port ID of the PTZ connection Serial port number
baudRate	<int>{300,1200,2400,4800,9600,19200,38400,57600,115200}	Bit rate 300 1200 2400 4800 9600 19200 38400 57600 115200 Currently only the above values are supported. Setting other values is invalid and Returns -8 (parameter error)
dataBits	<int>[4, 8]	Data bits Range: (4-8) Setting other values is invalid and Returns -8 (parameter error).
stopBits	<int>[0, 2]	Stop bits 0:1 1:1.5 2:2 Setting other values is invalid and Returns -8 (parameter error).
parity	<int>[0, 4]	Parity bit 0: No verification (None) 1: Odd parity 2: Even parity 3: Mark verification

		4: Space check (Space) Setting other values is invalid and Returns -8 (parameter error).
next_PTZURL	<int>	Next PTZ parameter Start from 2. If the value is 2, it means the following parameter is the second one.
PTZEnd	<int>	PTZ parameter end marker Indicates the number of PTZ parameters

2.6.10.2.PTZ Keyboard

2.6.10.2.1. Get PTZ keyboard parameters (getPTZ KeyboardParam) (IPC)

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=PTZ Keyboard
Description	Refer to PTZ keyboard parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=PTZ Keyboard
Return	enableFlag=1 interfaceType=1 comID=2 baudRate=1200 dataBits=8 stopBits=1 parity=4 (For other responses, Refer to General Response)

2.6.10.2.2. Set PTZ keyboard parameters (setPTZ KeyboardParam) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **PTZ Keyboard** [&<argument>=<value>...]
Description	For parameters, Refer to PTZ keyboard parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=PTZ Keyboard&enableFlag=1&interfaceType=1&comID=2&baudRate=1200&data

	Bits=8&stopBits=1&parity=4
Return	OK (For other responses, Refer to General Response)

2.6.10.2.3. Meaning of PTZ keyboard parameters

PTZ Keyboard Parameters

Table 2-6-5-2-3-1

parameter	data	Description
interfaceType	<int>	Interface Type 1: RS485 serial port type Currently only RS485 is supported. Setting other values is invalid and Returns -8
baudRate	<int>{300,1200,2400,4800,9600,19200,38400,57600,115200}	Bit rate Currently only 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, and 115200 are supported. Setting other values is invalid. Otherwise, -8 is Returned.
dataBits	<int>[4, 8]	Data bits Setting other values is invalid and Returns -8
stopBits	<int>[0,2]	Stop bits 0:1 1:1.5 2:2 Setting other values is invalid and Returns -8 (parameter error).
parity	<int>[0,4]	Parity bit 0: No verification (None) 1: Odd parity 2: Even parity

		3: Mark verification 4: Space check (Space) Setting other values is invalid and Returns -8 (parameter error).

2.6.11. Internet service

2.6.11.1.SMTP Service

2.6.11.1.1. SMTP test (IPC excluding the lite series)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=SMTPTest&serverAddr=smtp.163.com&serverPort=25&SMTPUserName=15082478237@163.com1&SMTPPassword=UNOXFYUFQZLOOGNQ1&senderEmailAddress=15082478237@163.com1&recipientEmailAddress1=2528200656@qq.com1&transportMode= **1**
Description	If no parameters are passed, the parameters are obtained from the device for testing.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=SMTPTest&serverAddr=smtp.163.com&serverPort=25&SMTPUserName=15082478237@163.com1&SMTPPassword=UNOXFYUFQZLOOGNQ1&senderEmailAddress=15082478237@163.com1&recipientEmailAddress1=2528200656@qq.com1&transportMode= 1
Return	OK (For other responses, Refer to General Response)

2.6.11.1.2. Get SMTP service parameters (getSMTPParam)

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=SMTP
Description	Refer to SMTP service parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=SMTP

Return	serverAddr =asdf serverPort =2001 SMTPUserName=tang SMTPPassword=tag senderEmailAddress=tag transportMode=0 attachmentImageQuality=2 (IPC) recipientEmailAddress1=1 recipientEmailAddress2= recipientEmailAddress3= recipientEmailAddress4=heheh recipientEmailAddress5= anonymousSendEnable = 1 (IPC) sendInterval =10(IPC) (For other responses, Refer to General Response)

2.6.11.1.3. Set SMTP service parameters (setSMTPParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=SMTP **[** &<argument>=<value>...]
Description	For parameters, Refer to the SMTP service parameter table.
Example	(ipc) http://192.168.32.151/cgi-bin/param.cgi?action=set&type=SMTP&serverAddr=smtp.163.com&serverPort=25&SMTPUserName=15082478237@163.com1&SMTPPassword=UNOXFYUFQZLOOGNQ1&senderEmailAddress=15082478237@163.com1&recipientEmailAddress1=2528200656@qq.com1&recipientEmailAddress2=2&recipientEmailAddress3=3&recipientEmailAddress4=4&recipientEmailAddress5=5&transportMode=1&attachmentImageQuality=3&anonymousSendEnable=1&sendInterval=51 (NVR/the lite series) http://192.168.2.193/cgi-bin/param.cgi?action=set&type=SMTP&serverAddr=cxy&serverPort=9999&S

	MTPUserName=cxy&SMTPPassword=cxy&senderEmailAddress=98&transportMode=0&recipientEmailAddress1=cxy&recipientEmailAddress2=cxy2&recipientEmailAddress3=cxy3&sendInterval=99
Return	OK (For other responses, Refer to General Response)

2.6.11.1.4. SMTP service parameter meaning

SMTP service parameter table

Table 2-6-6-1-3-1

parameter	data	Description
serverAddr	<string>	SMTP server address Cannot be empty, otherwise -8 is Returned (parameter error) It does not make sense to include spaces, and space characters will be removed.
serverPort	<unsigned short>[0,65535]	SMTP server port When the input value is greater than the maximum value of unsigned short, 65535, the value is treated as 65535.
SMTPUserName	<string>	Account Cannot be empty and cannot contain English characters "< > % & \" / , ' ; = | +". The number of characters cannot be greater than 32, otherwise -8 is Returned. It does not make sense to include spaces, and space characters will be removed.
SMTPPassword	<string>	password Must be all English characters, cannot be empty and cannot contain English characters "< > % & \" / , ' ; = | +", the number of characters cannot be greater than 20, otherwise -8 is Returned (parameter error)

		It does not make sense to include spaces, and space characters will be removed.
senderEmailAddress	<string>	Sender's address Cannot be empty, the number of characters cannot be greater than 128, otherwise -8 is Returned (parameter error) It does not make sense to include spaces, and space characters will be removed.
transportMode	<int>[0, 2]	Mail transfer mode 0: No encryption 1: SSL secure connection 2: Starttls command transmission Setting other values is invalid and Returns -8 (parameter error).
attachmentImageQuality	<int>[1, 3]	Image quality of email attachments (IPC) 1: High 2: Medium 3: Low Setting other values is invalid and Returns -8 (parameter error).
recipientEmailAddress1	<string>	Recipient Address 1 The first recipient address cannot be empty and the number of characters cannot be greater than 128, otherwise -8 is Returned (parameter error) It does not make sense to include spaces, and space characters will be removed.
recipientEmailAddress2	<string>	Recipient Address 2 The number of characters cannot be greater than 128, otherwise -8 is Returned It does not make sense to include spaces,

		and space characters will be removed.
recipientEmailAddress3	<string>	Recipient Address 3 The number of characters cannot be greater than 128, otherwise -8 is Returned It does not make sense to include spaces, and space characters will be removed.
recipientEmailAddress4	<string>	Recipient Address 4 The number of characters cannot be greater than 128, otherwise -8 is Returned It does not make sense to include spaces, and space characters will be removed.
recipientEmailAddress5	<string>	Recipient Address 5 The number of characters cannot be greater than 128, otherwise -8 is Returned It does not make sense to include spaces, and space characters will be removed.
AnonymousSendEnable (IPC)	<int>[0, 1]	Anonymous Send Switch (IPC) 0: Off 1: On
SendInterval (IPC)	<int>[0, 60]	Sending interval (0-60 seconds) (IPC)
ImageNum (IPC)	<int>[0.1,5]	Number of images (IPC)
ImageInterval (IPC)	<int>[1,5]	Picture Interval (IPC)

2.6.11.2.NTP parameters (NTPParam)

2.6.11.2.1. Get NTP parameters (getNTPParam)

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=NTP
Descripti	Refer to NTP center parameter table

on	
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=NTP
Return	enableFlag=1 IPProtoVer=1 NTPIP=192.168.1.7 NTPPort=3 NTPCheckTime=3600 (For other responses, Refer to General Response)

2.6.11.2.2. Set NTP parameters (setNTPParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=NTP **[** &<argument>=<value>...]
Description	NTP parameters currently only support IPV4, that is, IPProtover=1; if IPV6 information is set, the NTP enable switch will be in the off state; for parameters, Refer to the NTP center parameter table , and for responses, Refer to the general response text
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=NTP&IPProtoVer=1&enableFlag=1&NTPIP=192.168.1.7&NTPPort=3 &NTPCheckTime=3600
Return	OK (For other responses, Refer to General Response)

2.6.11.2.3. Test NTP parameters (testNTPParam) (the lite series)

URL	http://192.168.2.193/cgi-bin/system.cgi?action=test&type=NTP **[** &<argument>=<value>...]
Description	NTP parameters currently only support IPV4. For parameters, Refer to the NTP Center Parameters Table . For responses, Refer to the General Response Text

Example	http://192.168.2.193/cgi-bin/system.cgi?action=test&type=NTP
Return	Success: The ntp test success!! Failed: The ntp test failed!! (For other responses, Refer to General Response)

2.6.11.2.4. NTP parameter meaning

NTP Center Parameters Table

Table 2-6-6-2-3-1

parameter	data	Description
NTPIP	<string>	IP address of the NTP server If the IP format does not match, -8 is Returned (parameter error).
NTPPort	<int>[0, 65535]	NTP server port When the input value is greater than 65535, it is considered as 65535
enableFlag	<unsigned char>{0,1}	Whether to enable NTP flag 0: Disable 1: Enable
IPProtover	<int>{1, 2}	Protocol Version 1:IPV4 2: IPV6
NTPCheckTime	<int>{11,99999}	NTP verification interval (greater than 10s)

2.6.11.3.DDNS Service

2.6.11.3.1. Acquisition Capability (IPC)

URL	(IPC)	(NVR/the lite series)

	http ://<ip>/cgi-bin/param.cgi?action=get&type=DDNSAbility	http://192.168.2.193/cgi-bin/network.cgi?action=ability&type=DDNS
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=DDNSAbility	http://192.168.2.193/cgi-bin/param.cgi?action=ability&type=DDNS
Description	Refer to URL Descriptions	
Return	supportDDNS=0 DDNSAddress= DDNSProviderCount=3 DDNSProviderBegin=1 DDNSProviderID=1 DDNSProviderName=3322_ddns DDNSProviderHostHostName=3322.org next_DDNSProviderURL=2 DDNSProviderID=2 DDNSProviderName=dyndns_ddns DDNSProviderHostHostName=dyndns.org next_DDNSProviderURL=3 DDNSProviderID=3 DDNSProviderName=no-ip_ddns DDNSProviderHostHostName=no-ip.com DDNSProviderEnd=1 networkCardCount=1 networkCardBegin=1 networkCardName=eth0 networkCardEnd=1	DDNSCount=1 DDNSBegin=1 enable=0 providerName=no_ip domainName=1234 DDNSAccounts=tang DDNSPassword=1 DDNSEND=1

2.6.11.3.2. Capability Parameter Description

URL	Parameter Description	scope	type of data
supportDDNS	DDNS 0: Not supported		int

	1: Support		
DDNSAddress	DDNS server address		string
DDNSProviderCount	Number of DDNS providers		int
DDNSProviderBegin	DDNS provider starts identification		int
DDNSProviderID	DDNS Provider ID		int
DDNSProviderName	DDNS Provider Name		string
DDNSProviderHostHostName	DDNS provider hostname		string
next_DDNSProviderURL	Next DDNS provider starts identification		int
DDNSProviderEnd	DDNS provider end mark		int
networkCardCount	Number of network cards		int
networkCardBegin	Network card start mark		int
networkCardName	Network card name		string
next_networkCardURL	Next network card start mark		int
networkCardEnd	Network card end mark		int

2.6.11.3.3. DDNS Test

URL	http://<servername>/cgi-bin/param.cgi?action=test&type= **DDNS** &providerID=1&domainName=1234&DDNSAccounts=tang&DDNSPassword=1& DDNSNetworkCardName=eth0
Description	If no parameters are transmitted, the parameters are obtained from the device for testing (NVR does not transmit parameters)

Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=DDNS&providerID=1&domainName=1234&DDNSAccounts=tang&DDNSPassword=1& DDNSNetworkCardName=eth0
Return	OK (For other responses, Refer to General Responses)

2.6.11.3.4. Get DDNS service parameters (getDDNS) (IPC)

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=DDNS
Description	Refer to DDNS service parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=DDNS
Return	enableFlag=1 providerID=1 (IPC) domainName=1234 DDNSAccounts=tang DDNSPassword=1 DDNSNetworkCardName=eth0 (IPC) (For other responses, Refer to General Response)

2.6.11.3.5. Set DDNS service parameters (setDDNS) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **DDNS** [&<argument>=<value>...]
Description	For parameters, Refer to the DDNS service parameter table , and for responses, Refer to the general response text.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=DDNS&enableFlag=1&providerID=1&domainName=1234&DDNSAccounts=tang&DDNSPassword=1&

	DDNSNetworkCardName=eth0
Return	OK (For other responses, Refer to General Response)

2.6.11.3.6. Meaning of DDNS service parameters

DDNS Service Parameters Table

Table 2-6-6-3-3-1

parameter	data	Description
providerID	<int>[0, 3]	Provider ID (IPC) 1:ddns_3322 2: ddns_dyndns 3: ddns_noip
domainName	<string>	DDNS domain name Cannot be empty and cannot contain English characters "< > % & \" / , ' ; = | +". The number of characters cannot be greater than 64, otherwise -8 is Returned. It does not make sense to include spaces, and space characters will be removed.
DDNSAccounts	<string>	DDNS Account Cannot be empty and cannot contain English characters "< > % & \" / , ' ; = | +". The number of characters cannot be greater than 32, otherwise -8 is Returned. It does not make sense to include spaces, and space characters will be removed.
DDNSPassword	<string>	DDNS password Must be all English characters, cannot be empty and cannot contain English characters "< > % & \" / , ' ; = | +", the number of characters cannot be greater than 32, otherwise -8 is Returned (parameter error)

		It does not make sense to include spaces, and space characters will be removed.
DDNSNetwork CardName	<string>	DDNS network card name (IPC)

2.6.11.4.PPPoE Service (PPPoE) (IPC)

2.6.11.4.1. Get PPPoE service parameters (getPPPoE) (IPC)

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=PPPoE
Description	Refer to PPPoE service parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=PPPoE
Return	enableFlag=1 PPPoEUserName=tang PPPoEPassword=1 (For other responses, Refer to General Response)

2.6.11.4.2. Set PPPoE service parameters (setPPPoE) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=PPPoE **[** &<argument>=<value>...]
Description	For parameters, Refer to the PPPoE Service Parameters Table , and for responses, Refer to the General Response Text.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=PPPoE&enableFlag=1&PPPoEUserName=tang&PPPoEPassword=1
Return	OK (For other responses, Refer to General Response)

2.6.11.4.3. PPPoE service parameter meaning

PPPoE Service Parameters Table

Table 2-6-6-4-3-1

parameter	data	Description
PPPoEUserName	<string>	PPPoE Username It cannot be empty and cannot contain English characters "< > % & \" / , ' ; = | +". The number of characters cannot be greater than 32, otherwise -8 is Returned (parameter error) It does not make sense to include spaces, and space characters will be removed.
PPPoEPassword	<string>	PPPoE Password Must be all English characters, cannot be empty and cannot contain English characters "< > % & \" / , ' ; = | +", the number of characters cannot be greater than 32, otherwise -8 is Returned It does not make sense to include spaces, and space characters will be removed.

2.6.11.5. UPNP Service (UPNP) (IPC excluding the lite series)(Other devices are not developed)

2.6.11.5.1. Get UPNP service parameters (getUPNP) (IPC)

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=UPNP
Description	Refer to UPNP service parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=UPNP
Return	enableFlag=1 (For other responses, Refer to General Response)

2.6.11.5.2. Set UPNP service parameters (setUPNP) (IPC)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=UPNP **[** &<argument>=<value>...]
Description	For parameters, Refer to UPNP service parameters
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=UPNP&enableFlag=1
Return	OK (For other responses, Refer to General Response)

2.6.11.5.3. UPNP service parameter meaning

UPNP Service Parameter Table

Table 2-6-6-5-3-1

parameter	data	Description
enableFlag	<unsigned char>{0, 1}	Enable flag. 0: Disable 1: Enable Setting other values is invalid and Returns -8

2.6.11.6.802.1X (ieee8021X) (IPC)

2.6.11.6.1. Obtaining 802.1X Parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **ieee8021X**
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=ieee8021X
Return	ieee8021XEnable=1 eapMethod=0 (IPC)

	account =username ieee8021Password =password (For other responses, Refer to General Response)

2.6.11.6.2. Setting 802.1X parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **ieee8021X** &ieee8021XEnable=1&eapMethod=0&account=username&ieee8021Password=pwd
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=ieee8021X&ieee8021XEnable=1&eapMethod=0&account=username&ieee8021Password=pwd
Return	OK (For other responses, Refer to General Response)

2.6.11.6.3. 802.1X Parameters

parameter	data	Description
ieee8021XEnable	<int>	802.1X switch 0: Off 1: On
eapMethod (IPC)	<int>	EAP Method 0: EAP-MD5 1: EAP-TLS
account	<string>	account
ieee8021Password	<string>	password

2.6.11.7.Port Mapping

2.6.11.7.1. Get port mapping parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **portMapping**	
Description	Refer to parameter meaning	
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=portMapping	
Return	(IPC) mapEnable=1 mapMethod=1 httpsEnable=1 httpsExternalPort=4431 httpsExternalIp=113.87.162.248 httpsStatus=0 sslEnable=1 sslExternalPort=20011 sslExternalIp=113.87.162.248 sslStatus=0 httpEnable=1 httpExternalPort=801 httpExternalIp=113.87.162.248 httpStatus=0 rtspEnable=1 rtspExternalPort=5542 rtspExternalIp=113.87.162.248 rtspStatus=0 controlEnable=1 controlExternalPort=30011 controlExternalIp=113.87.162.248 controlStatus=0 (For other responses, Refer to General Response)	(NVR/the lite series) mapEnable=1 mapMethod=1 httpPort=1027 httpsPort=1327 dataPort=1127 clientPort=30003

2.6.11.7.2. Set port mapping parameters

UR	http://<servername>/cgi-bin/param.cgi?action=set&type= **portMapping** &mapEnable=1&mapMethod=1&httpEnable=1&httpExternalPort=801&rtspEnable=0&rt

L	spExternalPort=5542&controlEnable=1&controlExternalPort=30011&httpsEnable=0&httpsExternalPort=4431&sslEnable=1&sslExternalPort=20011	
Description	Refer to parameter meaning	
Example	(IPC) http://192.168.2.21/cgi-bin/param.cgi?action=set&type=portMapping&mapEnable=1&mapMethod=1&httpEnable=1&httpExternalPort=801&rtspEnable=0&rtspExternalPort=5542&controlEnable=1&controlExternalPort=30011&httpsEnable=0&httpsExternalPort=4431&sslEnable=1&sslExternalPort=20011	(NVR/the lite series) http://192.168.2.193/cgi-bin/network.cgi?action=set&type=portMapping&mapEnable=1&mapMethod=1&clientPort=30003&httpPort=1027&dataPort=1127&httpsPort=1327
Return	OK (For other responses, Refer to General Response)	

2.6.11.7.3. Port mapping parameter meaning

parameter	data	Description
mapEnable	<int>	Mapping switch 0: Off 1: On
mapMethod	<int>	Mapping method 1: Automatic 2: Manual
IPC		
sslEnable	<int>	SSL mapping switch

		0: Off 1: On
sslExternalPort	<int>	External Ports
sslExternalIp	<string>	External IP address (cannot be set)
sslStatus	<int>	Status (not configurable) 0: Not effective 1: Effective
httpEnable	<int>	HTTP mapping switch 0: Off 1: On
httpExternalPort	<int>	External Ports
httpExternalIp	<string>	External IP address (cannot be set)
httpStatus	<int>	Status (not configurable) 0: Not effective 1: Effective
rtspEnable	<int>	RTSP mapping switch 0: Off 1: On
rtspExternalPort	<int>	External Ports
rtspExternalIp	<string>	External IP address (cannot be set)
rtspStatus	<int>	Status (not configurable) 0: Not effective 1: Effective
controlEnable	<int>	Control mapping switch 0: Off 1: On
controlExternalPort	<int>	External Ports
controlExternalIp	<string>	External IP address (cannot be set)

controlStatus	<int>	Status (not configurable) 0: Not effective 1: Effective
httpsEnable	<int>	HTTPS mapping switch 0: Off 1: On
httpsExternalPort	<int>	External Ports
httpsExternalIp	<string>	External IP address (cannot be set)
httpsStatus	<int>	Status (cannot be set) 0: Not effective 1: Effective
(NVR/the lite series)		
clientPort	<int>[1025,65534]	As an optional parameter when set, it is invalid when auto is 0
httpPort	<int>[1025,65534]	As an optional parameter when set, it is invalid when auto is 0
dataPort	<int>[1025,65534]	Data (RTSP) connection port As an optional parameter when set, it is invalid when auto is 0
httpsPort	<int>[1025,65534]	As an optional parameter when set, it is invalid when auto is 0

2.6.11.8.FTP parameters (ftp) (IPC excluding the lite series/NVR)(Other devices are not developed)

2.6.11.8.1. FTP test (IPC excluding the lite series)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=FTPTest **&** ftpAddress=192.168.2.189&ftpPort=21&account=account&ftpPassword=password&ftpPath=/path &ftpSecurityEnable=0

Description	If no parameters are passed, the parameters are obtained from the device for testing.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=FTPTest&ftpAddress=192.168.2.189&ftpPort=21&account=account&ftpPassword=password&ftpPath=/path&ftpSecurityEnable=0
Return	OK (For other responses, Refer to General Response)

2.6.11.8.2. Get FTP parameters

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=ftp
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=ftp
Return	ftpEnable=1 ftpAddress=baidu.com ftpPort=23 account=123 ftpPassword=321 ftpPath=path mediaType=2 recordTime=6 ftpSecurityEnable=1 (For other responses, Refer to General Response)

2.6.11.8.3. Setting FTP parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **ftp** &ftpEnable=1&ftpAddress=192.168.2.189&ftpPort=21&account=account&ftpPassword=password&ftpPath=/path
Description	Refer to parameter meaning

Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=ftp&ftpEnable=1&ftpAddress=192.168.2.189&ftpPort=21&account=account&ftpPassword=password&ftpPath=/path&mediaType=1&recordTime=5&ftpSecurityEnable=0
Return	OK (For other responses, Refer to General Response)

2.6.11.8.4. FTP parameter meaning

parameter	data	Description
ftpEnable	<int>	FTP switch 0: Off 1: On
ftpAddress	<string>	FTP Address
ftpPort	<int>	FTP Port
account	<string>	account
ftpPassword	<string>	password
ftpPath	<string>	FTP Path
mediaTypeexcluding the lite series	<int>	media type 1: Snapshot 2: Video Recording
recordTime (IPC)	<int>	Video recording time (5-60 seconds)
ftpSecurityEnable (IPC excluding the lite series)	<int>	FTP over SSL/TLS (FTPS) 0: Off 1: On

2.6.11.9.IP Filtering

2.6.11.9.1. Get IP filtering parameters

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=ipFilter
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=ipFilter
Return	ipFilterEnable=0 ipFilterType = 1 blacklistCount=1 blacklistBegin=1 startIp=128.128.101.15 endIp=128.128.101.200 describe=testb (IPC) blacklistEnd=1 whitelistCount=1 whitelistBegin=1 startIp=192.168.2.189 endIp=192.168.2.200 describe=testw (IPC) whitelistEnd=1 (For other responses, Refer to General Response)

2.6.11.9.2. Set IP filtering parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **ipFilter** &ipFilterEnable=1&blacklistCount=1&blacklistBegin=1&startIp=128.128.1.1&endIp=128.128.1.3&describe=describe&blacklistEnd=1
Description	Refer to parameter meaning (enter the correct IP address)

Example	(IPC) http://192.168.2.21/cgi-bin/param.cgi?action=set&type=ipFilter&ipFilterEnable=1&ipFilterType=1&blacklistCount=1&blacklistBegin=1&startIp=128.128.101.15&endIp=128.128.101.200&describe=testb&blacklistEnd=1&whitelistCount=1&whitelistBegin=1&startIp=192.168.2.189&endIp=192.168.2.200&describe=testw&whitelistEnd=1	(NVR/IPCexcluding the lite series) Add： http://192.168.2.193/cgi-bin/network.cgi?action=set&type=ipFilter&ipFilterEnable=1&ipFilterType=0&blackListCount=3&blackListBegin=1&startIp=128.128.101.15&endIp=128.128.101.200&next_BlackListURL=2&startIp=128.128.101.202&endIp=128.128.221.200&next_BlackListURL=3&startIp=111.111.111.111&endIp=111.111.222.222&blackListEnd=3&whiteListCount=1&whiteListBegin=1&startIp=128.128.101.222&endIp=255.255.255.255&whiteListEnd=1 delete: http://192.168.2.193/cgi-bin/network.cgi?action=set&type=ipFilter&ipFilterEnable=1&ipFilterType=0&ipFilterParamAction=remove&blackListCount=1&blackListBegin=1&startIp=128.128.101.202&endIp=128.128.221.200&blackListEnd=1
Return	OK (For other responses, Refer to General Response)	

2.6.11.9.3. IP filtering parameters meaning

parameter	data	Description
ipFilterEnable	<int>	IP filter switch 0: Off 1: On
blacklistCount	<int>	Blacklist quantity
blacklistBegin	<int>	Blacklist start mark

ipFilterType	<int>	Black and white list 1: Blacklist; 2: Whitelist
RemoveIP (IPC excluding the lite series)	<int>	Delete IP
startIp	<string>	Start IP
endIp	<string>	End IP
Describe (IPC excluding the lite series)	<string>	describe
next_BlacklistURL	<int>	Next Blacklist
blacklistEnd	<string>	Blacklist end mark
whitelistCount	<int>	Number of whitelists
whitelistBegin	<int>	Whitelist start flag
startIp	<string>	Start IP
endIp	<string>	End IP
Describe (IPC excluding the lite series)	<string>	describe
next_WhitelistURL	<int>	Next whitelist
whitelistEnd	<int>	Whitelist end marker
ipFilterParamAction (NVR)	<string>	Delete ip:remove

2.6.11.10. SNMP

2.6.11.10.1.SNMP security level capability (IPC excluding the lite series)

URL	**http** ://<ip>/cgi-bin/param.cgi?action=get&type=SNMPSecurityLevelAbility

Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=SNMPSecurityLevelAbility
Description	Refer to URL Descriptions
Return	securityLevelCount=3 securityLevelBegin=1 securityLevelID=1 securityLevelName=noauth next_securityLevelURL=2 securityLevelID=2 securityLevelName=auth next_securityLevelURL=3 securityLevelID=3 securityLevelName=priv securityLevelEnd=1

2.6.11.10.2.Capability Parameter Description

URL	Parameter Description	scope	type of data
securityLevelCount	Number of security levels		int
securityLevelBegin	Security level start mark		int
securityLevelID	Security Level ID		int
securityLevelName	Security Level Name		string
next_securityLevelURL	Next security level start mark		int
securityLevelEnd	Security level end indicator		int

2.6.11.10.3.Get SNMP parameters

URL	http ://<servername> **/cgi-bin/param.cgi?action=get&type=SNMP**
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=SNMP

Return	SNMPv1Enable=1 SNMPv2cEnable=1 writeCommunity=write readCommunity=read trapAddress=192.168.1.1 trapPort=1025 trapCommunity=communityname SNMPv3Enable=1 readSecurityName=sread readSecurityLevel=2 readAuthAlgorithm=2 readAuthPassword=authpassword1232312 readEncryptAlgorithm=0 readEncryptPassword=passwd writeSecurityName=swrite writeSecurityLevel=3 writeAuthAlgorithm=2 writeAuthPassword=authWrite213123231 writeEncryptAlgorithm=2 writeEncryptPassword=aesdasdafsfdfgd SNMPPort=1026 (For other responses, Refer to General Response)

2.6.11.10.4.Setting SNMP parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**SNMP**&SNMPv1Enable=1&SNMPv2cEnable=1&writeCommunity=writename&readCommunity=readname&trapAddress=128.128.1.1&trapPort=8848&trapCommunity=trapname&SNMPv3Enable=1&readSecurityName=rsname&readSecurityLevel=0&readAuthAlgorithm&=1&readAuthPassword=123&readEncryptAlgorithm=0&readEncryptPassword=321&writeSecurityName=wsname&writeSecurityLevel=1&writeAuthAlgorithm=1&writeAuthPassword=321123&writeEncryptAlgorithm1=1&writeEncryptPassword=345&SNMPPort=162
Description	Refer to parameter meaning
Exa	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=SNMP&SNMPv1Enable=1&SNMPv2cEnable=1&write

mple	Community=writename&readCommunity=readname&trapAddress=128.128.1.1&trapPort=8848&trapCommunity=trapname&SNMPv3Enable=1&readSecurityName=rsname&readSecurityLevel=0&readAuthAlgorithm=1&readAuthPassword=123&readEncryptAlgorithm=0&readEncryptPassword=321&writeSecurityName=wsname&writeSecurityLevel=1&writeAuthAlgorithm=1&writeAuthPassword=321123&writeEncryptAlgorithm1=1&writeEncryptPassword=345&SNMPPort=162
Return	OK (For other responses, Refer to General Response)

2.6.11.10.5.Meaning of SNMP parameters

parameter	data	Description
SNMPv1Enable	<int>	SNMPv1 switch 0: Off 1: On
SNMPv2cEnable	<int>	SNMPv2c 0: Off 1: On
writeCommunity	<string>	Write the community name
readCommunity	<string>	Read the community name
trapAddress	<string>	Trap Address
trapPort	<int>	Trap Port
trapCommunity	<string>	Trap group name
SNMPv3Enable	<int>	SNMPv3 0: Off 1: On
readSecurityName	<string>	Read Security Name

readSecurityLevel	<int>	Read Security Level -1: None 0: noauth 1: auth 2: priv
readAuthAlgorithm	<int>	Read Authentication Method -1: None 0: MD5 1: SHA
readAuthPassword	<string>	Read authentication password
readEncryptAlgorithm	<int>	Read encryption method -1: None 0: DES 1: AES
readEncryptPassword	<string>	Read Encrypted Password
writeSecurityName	<string>	Write Security Name
writeSecurityLevel	<int>	Write security level - 1: none 0: noauth 1: auth 2: priv
writeAuthAlgorithm	<int>	Write authentication method - 1: None 0: MD5 1: SHA
writeAuthPassword	<string>	Write authentication password

writeEncryptAlgorithm	<int>	Write encryption method -1: None 0: DES 1: AES
writeEncryptPassword	<string>	Write encrypted password
SNMPPort	<int>	SNMP Port

2.6.11.11. QOS (QOS) (IPC excluding the lite series)

2.6.11.11.1.Get QOS parameters

URL	http ://<servername>/cgi-bin/param.cgi?action=get&type= **QOS**
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=QOS
Return	AVDscp=24 alarmDscp=25 ctrlDscp=26 (For other responses, Refer to General Response)

2.6.11.11.2.Setting QOS parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **QOS** &AVDscp=51&alarmDscp=51&ctrlDscp=53
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=QOS&AVDscp=51&alarmDscp=51&ctrlDscp

	=53
Return	OK (For other responses, Refer to General Response)

2.6.11.11.3.QOS parameter meaning

parameter	data	Description
AVDscp	<int>	Audio/Video Dscp(0-63)
alarmDscp	<int>	Alarm Dscp(0-63)
ctrlDscp	<int>	Control Dscp(0-63)

2.6.11.12. Platform Access (IPC)

2.6.11.12.1.Get platform access parameters

URL	http ://<servername> **/cgi-bin/param.cgi?action=get&type=platformAccess**
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= platformAccess
Return	platformAccessEnable=1 domainName=domainName port=233 accessUsername=accessUsername accessPassword=accessPassword encryptionEnable=0 (For other responses, Refer to General Response)

2.6.11.12.2.Set platform access parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **platformAccess** &domainName=https://baidu.com&port=443&accessUsername=username&accessPassword=password&encryptionEnable=0
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type= platformAccess & platformAccessEnable =1 &domainName=https://baidu.com&port=443&accessUsername=username&accessPassword=password&encryptionEnable=0
Return	OK (For other responses, Refer to General Response)

2.6.11.12.3.Meaning of platform access parameters

parameter	data	Description
platformAccessEnable	<int>	Platform access switch 0: Off 1: On
domainName	<string>	domain name
port	<int>	port
accessUsername	<string>	username
accessPassword	<string>	password
encryptionEnable	<int>	Encryption switch 0: Off 1: On

2.6.11.13. BonjourService(IPC Excluding the lite series)

2.6.11.13.1.Get BonjourService

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **bonjourService**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=bonjourService
Description	Refer to URL Descriptions
Return	enable=0

2.6.11.13.2.Setting up BonjourService

URL	http://<ip>/cgi-bin/param.cgi?action=set&type= **bonjourService&enable=1**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type= bonjourService&enable=1
Description	Refer to URL Descriptions
Return	OK (For other responses, Refer to General Response)

2.6.11.13.3.Parameter Description

URL	Parameter Description	scope	type of data
enable	Bonjour service switch 0: Off 1: On		int

2.6.11.14. P2P

2.6.11.14.1.Get P2P status

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **p2pStatus**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= p2pStatus
Description	Refer to URL Descriptions
Return	status = 0

2.6.11.14.2.P2P Status Parameters

URL	Parameter Description	scope	type of data
status	P2P Status 0: Offline 1: Online		int

2.6.11.14.3.Get P2P parameters

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **p2pParam**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= p2pParam
Description	Refer to URL Descriptions
Return	enable=1 UUID=testuuid

2.6.11.14.4.Setting P2P parameters

URL	http://<ip>/cgi-bin/param.cgi?action=set&type= **p2pParam&enable=1 &UUID=testuuid**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type= **p2pParam** &enable=1 &UUID=testuuid
Description	Refer to URL Descriptions
Return	OK (For other responses, Refer to General Response)

2.6.11.14.5.P2P Parameters

URL	Parameter Description	scope	type of data
enable	P2P service switch 0: Off 1: On		int
UUID	UUID		string

2.6.11.15. QRCode(IPC excluding the lite series)

2.6.11.15.1.Get QR Code

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **QRCode**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= QRCode
Description	Refer to URL Descriptions
Return	QRCode=iVBORw0KGgoAAAANSUhEUgAAABQAAAAUCAYAAACNiR0NA =

2.6.11.15.2.QRCode Parameters

URL	Parameter Description	scope	type of data
QRCode	QR code image (base64)		string

2.6.11.16. HTTPS (lite series /NVR)

2.6.11.16.1.Get HTTPS parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=HTTPS
Description	For parameters, Refer to HTTPS parameter meanings.
Example	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=HTTPS
Return	httpsEnable=0

2.6.11.16.2.Setting up HTTPS

URL	http://<servername>/cgi-bin/ param .cgi?action=settype=HTTPS&httpsEnable=0
Description	For parameters, Refer to HTTPS parameter meanings.
Example	http://192.168.2.193/cgi-bin/network.cgi?action=set&type=HTTPS&httpsEnable=0
Return	OK (For other responses, Refer to General Response)

2.6.11.16.3.HTTPS parameter meaning

HTTPS parameter table

Table 2-6-5-9-3-1

parameter	data	Description
httpsEnable	<int>{0,1}	https switch 0: Off 1: On Entering other parameters Returns -5002 (parameter value exceeds the range)

2.6.11.17. POE (NVR)

2.6.11.17.1.Get POE service parameters (getPOEParam)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=POE
Description	Refer to POE service parameter table
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=get&type=POE
Return	ip=169.254.10.121 netmask=255.255.0.0 geteway=169.254.10.1 autoPoe=1 (For other responses, Refer to General Response)

2.6.11.17.2.Set POE service parameters (setPOEParam)

URL	http://192.168.2.193/cgi-bin/network.cgi?action=set&type=POE **[** &<argument>=<value>...]
Description	For parameters, Refer to the POE service parameter table.
Example	http://192.168.2.193/cgi-bin/network.cgi?action=set&type=POE&ip=169.254.10.122&netmask=255.254.0.0&geteway=169.254.11.1&autoPoe=0
Return	OK (For other responses, Refer to General Response)

2.6.11.17.3.POE service parameter meaning

POE Service Parameter Table

Table 2-6-5-1-3-1

parameter	data	Description
ip	<string>	ip address
netmask	<string>	Mask
geteway	<string>	Gateway
autoPoe	<int>{0,1}	Automatic PoE switch

2.6.11.18. natPort (NVR)

2.6.11.18.1.Get natPort service parameters (getNatPortParam)

URL	http://192.168.2.193/cgi-bin/ param.cgi?action=get&type= **natPort**
Description	Refer to natPort service parameter table
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=get&type=natPort
Return	natStartPort=40001 natEndPort=40080 natPortNum=80 (For other responses, Refer to General Response)

2.6.11.18.2.Set natPort service parameters (setNatPortParam)

URL	http://192.168.2.193/cgi-bin/network.cgi?action=set&type=natPort [&<argument>=<value>...]
Description	For parameters, Refer to the natPort service parameter table.
Example	http://192.168.2.193/cgi-bin/network.cgi?action=set&type=natPort&natStartPort=40002

Return	OK (For other responses, Refer to General Response)

2.6.11.18.3.natPort service parameter meaning

natPort Service Parameters Table

Table 2-6-5-1-3-1

parameter	data	Description
natStartPort	<int>	NAT start port
natEndPort	<int>	NAT end port (cannot be modified, controlled by the start port + port number)
natPortNum	<int>	NAT port number (cannot be modified)

2.6.12. protocol

2.6.12.1.Protocol Information (protocolInfo)

2.6.12.2. **E**xplain **:lite series** Configure together in C

2.6.12.2.1. Get protocol information parameters (getProtocolInfo) (IPC excluding the lite series/NVR)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **protocolInfo**
Description	Refer to the protocol information parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=protocolInfo
Return	protocolName=ONVIF protocolVersion=v17.06 protocolSoftwareVersion=v17.06_build000029 rtspRule = rtsp://ip:port/snl/live/cameraid/streamed

	rtspExample=rtsp://192.168.2.21:554/snl/live/1/1 onvifUuid=4e043800-d3d9-122f-b19a-001c27561164 (For other responses, Refer to General Response)

2.6.12.2.2. Protocol information parameter meaning

Protocol Information Parameter Table

Table 2-6-7-1-2-1

parameter	type of data	Description
protocolName	<string>	Protocol Name
protocolVersion	<string>	Protocol Version
protocolSoftwareVersion	<string>	Protocol software version
rtspRule	<string>	RTSP Rules
rtspExample	<string>	RTSP Example
onvifUuid	<string>	Onvif Uuid

2.6.12.3. Protocol Security (IPC excluding the lite series)

2.6.12.3.1. Get protocol security parameters (getProtocolSecurity)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **protocolSecurity**
Description	Refer to the protocol security parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=protocolSecurity
Return	protocolSecurityFlag=1 (For other responses, Refer to General Response)

2.6.12.3.2. Set protocol security parameters (setProtocolSecurity)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **protocolSecurity** [&protocolSecurityFlag=<protocolSecurityFlag>]
Description	*Note: Temporarily only applicable to Onvif protocol For parameters, Refer to the protocol security parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=protocolSecurity&protocolSecurityFlag=1
Return	OK (For other responses, Refer to General Response)

2.6.12.3.3. Meaning of protocol security parameters

Protocol Security Parameters Table

Table 2-6-7-2-3-1

parameter	data	Description
protocolSecurityFlag	<unsigned char>{0, 1}	User Agreement Security Parameters 0: Disable 1: Enable As an optional parameter in Set, carrying it means setting, and not carrying it means not making changes

2.6.12.4.CMS Configuration (cmsConfigure) (IPC)

2.6.12.4.1. Get CMS configuration parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **cmsConfigure**
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= cmsConfigure

Return	SupportPro =Onvif,cgi(the lite series) runingPro=Onvif,cgi (the lite series) protocolName=Onvif (the lite series) protocolVersion=22.06(the lite series) protocolUuid=dbb2a840-0d59-11e9-a04c-001ea400433d(the lite series) OnvifEnable=0 ProfileGEnable=0 Media2Enable=0 MetadataStreamEnable=1 IntelligentAnalysisSwitchEnable=0 OnvifOnlyHttpsEnable=0 (IPC is excluding the lite series) StreamOnlyHttpsEnable=0 (IPC excluding the lite series) (For other responses, Refer to General Response)

2.6.12.4.2. Setting CMS configuration parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **cmsConfigure** &onvifEnable=1&profileGEnable=0&username=username&media2Enable=1&intelligentAnalysisEnable=0&onvifOnlyHttpsEnable=1&streamOnlyHttpsEnable=0	
Description	Refer to parameter meaning	
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=cmsConfigure&OnvifEnable=1&ProfileGEnable=1&Media2Enable=1&IntelligentAnalysisSwitchEnable=1&OnvifOnlyHttpsEnable=1&StreamOnlyHttpsEnable=1	http://192.168.2.193/cgi-bin/network.cgi?action=set&type= cmsConfigure &protocolName=Onvif&protocolEnable=1&extendListCount=5&extendListBegin=1&Onvif=true&next_extendListURL=2&Profile_G=true&next_extendListURL=3&Media2=true&next_extendListURL=4&Intelligent_Analysis=true&next_extendListURL=5&User_Verification=false&extendListEnd=5
Return	OK (For other responses, Refer to General Response)	

2.6.12.4.3. CMS configuration parameter meaning

parameter	data	Description
onvifEnable	<int>	Onvif switch 0: Off 1: On
profileGEnable	<int>	Profile G switch 0: Off 1: On
media2Enable	<int>	Media2 switch 0: Off 1: On
intelligentAnalysisEnable	<int>	Intelligent Analysis Switch 0: Off 1: On
onvifOnlyHttpsEnable	<int>	Onvif Only Https switch 0: Off 1: On
streamOnlyHttpsEnable	<int>	Stream Only Https switch 0: Off 1: On
MetadataStreamEnable	<int>	MetadataStreamEnable switch: 0: Off 1: On

2.6.12.5. Multicast parameters (multicastParameters) (IPC Excluding the lite series) (Other equipment is not yet developed)

2.6.12.5.1. Get multicast parameters

URL	**http** ://<servername>/cgi-bin/param.cgi?action=get&type=multicastParameters
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=multicastParameters
Return	channelCount=1 channelBegin=1 channelId=1 streamCount=2 streamBegin=1 streamId=1 videoAddress=238.255.255.254 videoPort=25331 audioAddress=238.255.255.254 audioPort=25431 sourceAddress=238.255.255.254 sourcePort=25531 next_StreamURL=2 streamId=2 videoAddress=238.255.255.253 videoPort=25342 audioAddress=238.255.255.253 audioPort=25442 sourceAddress=238.255.255.253 sourcePort=25542 streamEnd=2 channelEnd=1 (For other responses, Refer to General Response)

2.6.12.5.2. Setting multicast parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=multicastParameters& channelCount=1&channelBegin=1&channelId=1&streamCount=2&streamBegin=1&streamId=1&videoAddress=238.255.255.254&videoPort=25331&audioAddress=238.255.255.254&audioPort=25431&sourceAddress=238

	.255.255.254&sourcePort=25531&next_StreamURL=2&streamId=2&videoAddress=238.255.255.253&videoPort=25342&audioAddress=238.255.255.253&audioPort=25442&sourceAddress=238.255.255.253&sourcePort=25542&streamEnd=2&channelEnd=1
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=multicastParameters & channelCount=1&channelBegin=1&channelId=1&streamCount=2&streamBegin=1&streamId=1&videoAddress=238.255.255.254&videoPort=25331&audioAddress=238.255.255.254&audioPort=25431&sourceAddress=238.255.255.254&sourcePort=25531&next_StreamURL=2&streamId=2&videoAddress=238.255.255.253&videoPort=25342&audioAddress=238.255.255.253&audioPort=25442&sourceAddress=238.255.255.253&sourcePort=25542&streamEnd=2&channelEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.12.5.3. Meaning of multicast parameters

parameter	data	Description
channelCount	<int>	Number of channels
channelBegin	<int>	Channel start mark
channelId	<int>	Channel ID
streamCount	<int>	Number of streams
streamBegin	<int>	Stream start indicator
streamId	<int>	Stream ID
videoAddress	<string>	Video URL
videoPort	<int>	Video Port
audioAddress	<string>	Audio Address
audioPort	<int>	Audio Ports
sourceAddress	<string>	source address

sourcePort	<int>	Source Port
next_StreamURL	<int>	Next stream start marker
streamEnd	<int>	End of stream marker
next_ChannelURL	<int>	Next channel indicator
channelEnd	<int>	Channel end mark

2.6.12.6. Protocol Management (NVR)

2.6.12.6.1. Get protocol management parameters (get protocol Management

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type= **protocolManagement** [&cameraID=<cameraID>]
Description	Refer to Protocol Management Parameters
Example	http://192.168.2.162/cgi-bin/param.cgi?action=get&type=protocolManagement&protocolID=1
Return	protocolID=1 protocolName=Custom 1 protocolMainStreamEnable=1 protocolMainPort=554 protocolMainPath= protocolSubStreamEnable=0 protocolSubPort=554 protocolSubPath= (For other responses, Refer to General Response)

2.6.12.6.2. Set protocol management parameters (set protocol Management)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type= protocol Management & protocolID =< protocolID >..
Description	Refer to Protocol Management Parameters
Examp	http://192.168.2.162/cgi-bin/param.cgi?action=set&type=protocolManagement&protocolID= 1

le	&protocolName=Custom 1&protocolMainStreamEnable=1&protocolMainPort=554&protocolMainPath=&protocolSubStreamEnable=1&protocolSubPort=554&protocolSubPath=
Return	OK (For other responses, Refer to General Response)

2.6.12.6.3. Meaning of protocol management parameters

Protocol Management **Parameter Table**

parameter	data	Description
protocolID	<int>	Protocol channel number
protocolName	<string>	Protocol Name
protocolMainStreamEnable	<int>	Protocol stream main stream switch
protocolMainPort	<int>[0, 100]	Protocol main stream port
protocolMainPath	<string>	Protocol main stream path
protocolSubStreamEnable	<int>	Protocol stream sub-stream switch
protocolSubPort	<int>[0, 100]	Protocol substream port
protocolSubPath	<string>	Protocol substream path

2.6.13. LPR Configuration (LPR)

2.6.13.1. Black and white list

2.6.13.1.1. Get the number of black and white names (getPlateSize)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **PlateSize**
Description	For parameters, Refer to the license plate information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=PlateSize

Return	PlateSize=2 (For other responses, Refer to General Response)

2.6.13.1.2. Get the blacklist and whitelist (getLprPlateNum)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **LprPlateNum** &BeginIndex=<BeginIndex>&EndIndex =< EndIndex >
Description	For parameters, Refer to the license plate information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=LprPlateNum&BeginIndex=0&EndIndex=10
Return	PlateParamBegin=1 PlateText=5MVL305 LprPlateType=1 StartTime=1540373771 EndTime=1540460171 NextUrl=2 PlateText=DD652 LprPlateType=0 StartTime=1540373771 EndTime=1540460171 PlateParamEnd=2 (For other responses, Refer to General Response)

2.6.13.1.3. Add blacklist and whitelist (addLprPlateNum)

URL	http://<servername>/cgi-bin/param.cgi?action=add&type= **LprPlateNum** [&<argument>=<value>...]
Description	For parameters, Refer to the license plate information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=add&type=LprPlateNum&PlateParamBegin=1&PlateText=5MVL303&LprPlateType=1&StartTime=1540373771&EndTime=1540460171&NextUrl=2&PlateText=DD651&LprPlateType=0&StartTime=1540373771&EndTime=1540460171&PlateParamEnd=2

Return	OK (For other responses, Refer to General Response)

2.6.13.1.4. Delete blacklist and whitelist (deleteLprPlateNum)

URL	http://<servername>/cgi-bin/param.cgi?action= delete&type= **LprPlateNum** [&<argument>=<value>...]
Description	For parameters, Refer to the license plate information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=delete&type=LprPlateNum&PlateParamBegin=1&PlateText=5MVL303&LprPlateType=1&StartTime=1540373771&EndTime=1540460171&NextUrl=2&PlateText=DD651&LprPlateType=0&StartTime=1540373771&EndTime=1540460171&PlateParamEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.13.1.5. Modify the blacklist and whitelist (modify LprPlateNum)

URL	http://<servername>/cgi-bin/param.cgi?action= modify&type= **LprPlateNum** [&<argument>=<value>...]
Description	For parameters, Refer to the license plate information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=modify&type=LprPlateNum&OldListBegin=1&PlateParamBegin=1&PlateText=5MVL303&LprPlateType=1&StartTime=1540373771&EndTime=1540460171&NextUrl=2&PlateText=DD651&LprPlateType=0&StartTime=1540373771&EndTime=1540460171&PlateParamEnd=2&OldListEnd=1&NewListBegin=1&PlateParamBegin=1&PlateText=DD652&LprPlateType=0&StartTime=1540373771&EndTime=1540460171&NextUrl=2&PlateText=5MVL305&LprPlateType=1&StartTime=1540373771&EndTime=1540460171&PlateParamEnd=2&NewListEnd=1
Return	OK

	(For other responses, Refer to General Response)

2.6.13.1.6. License plate information parameter table

Table 2-6-8-1-6-1

parameter	data	Description
PlateText	<string>	License plate number
Type	<int>{0, 1}	License Plate Type 0: Blacklist, 1: White single name
StartTime	<long>	Validity start time
EndTime	<long>	Validity deadline
PlateSize	<int>	Number of blacklists and whitelists
BeginIndex	<int>	Get the starting number of the license plate information
EndIndex	<int>	Get the license plate ending number
Length	<int64>	File Length Unit Byte

2.6.13.2.License plate configuration linkage information

2.6.13.2.1. Get license plate configuration linkage information (LprLinkParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **LprLinkParam**
Description	For parameters, Refer to the license plate information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=LprLinkParam

Return	BlackListUpload=0 BlackListOpen=0 BlackListSMTP=0 WhiteListUpload=0 WhiteListOpen=1 WhiteListSMTP=0 NoListUpload=0 NoListOpen=0 NoListSMTP=0 SnapshotUpload=0 OpenLevel=1 OpenBarrierDuration=20 OSD=0 OSDDuration=60 (For other responses, Refer to General Response)

2.6.13.2.2. Set license plate configuration linkage information (LprLinkParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **LprLinkParam** [&<argument>=<value>...]
Description	For parameters, Refer to the license plate information parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=LprLinkParam&BlackListUpload=1&BlackListOpen=1&BlackListSMTP=1&WhiteListUpload=1&WhiteListOpen=0&WhiteListSMTP=1&NoListUpload=1&NoListOpen=1&NoListSMTP=1&SnapshotUpload=1&OpenLevel=0&OpenBarrierDuration=20&OSD=0&OSDDuration=80
Return	OK (For other responses, Refer to General Response)

2.6.13.2.3. License plate information link parameter table

Table 2-6-8-2-3-1

parameter	data	Description
BlackListUpload	<int>{0, 1}	Blacklist license plate screenshot FTP

		upload 0: Do not upload 1: Upload
BlackListOpen	<int>{0, 1}	Blacklist license plate opening 0: Do not open the gate 1: Open the gate
BlackListSMTP	<int>{0, 1}	Blacklist license plate email linkage 0: Do not upload 1: Upload
WhiteListUpload	<int>{0, 1}	Whitelist license plate screenshot FTP upload 0: Do not upload 1: Upload
WhiteListOpen	<int>{0, 1}	Whitelist license plate opening 0: Do not open the gate 1: Open the gate
WhiteListSMTP	<int>{0, 1}	Whitelist license plate email linkage 0: Do not upload 1: Upload
NoListUpload	<int>{0, 1}	Upload the screenshot of the license plate not on the list to FTP 0: Do not upload 1: Upload
NoListOpen	<int>{0, 1}	The gate is open for license plates not on the list 0: Do not open the gate 1: Open the gate
NoListSMTP	<int>{0, 1}	Email linkage for license plates not on the list 0: Do not upload

		1: Upload
SnapshotUpload	<int>{0, 1}	Upload screenshots to FTP 0: Do not upload 1: Upload
OpenLevel	<int>{0, 1}	Opening level 0: Low 1: High
OpenBarrierDuration	<int>	Gate opening duration
OSD	<int>{0, 1}	License plate recognition information OSD display 0: Do not display 1: Display
OSDDuration	<int>	OSD display duration (Zero is always displayed)

2.6.13.3.License plate configuration information

2.6.13.3.1. Set license plate configuration information (LprConfigParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **LprConfigParam** [&<argument>=<value>...]
Description	For parameters, Refer to the license plate configuration parameter table.
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=LprConfigParam&MinWidth=150&Credibility=0.850000&Angle=100&RoiTopX=50&RoiTopY=50&RoiWith=100&RoiHeight=100
Return	OK (For other responses, Refer to General Response)

2.6.13.3.2. Get license plate configuration information (LprConfigParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **LprConfigParam**
Description	Refer to the license plate configuration parameter table
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=LprConfigParam
Return	MinWidth=130 Credibility=0.650000 Angle=100 RoiTopX=0 RoiTopY=0 RoiWith=100 RoiHeight=100 (For other responses, Refer to General Response)

2.6.13.3.3. License plate configuration parameter table

Table 2-6-8-3-3-1

parameter	data	Description
MinWidth	<int>	Minimum license plate width
Credibility	<float>	Credibility Default is 0.5, reserved for future use
Angle	<int>	The angle of the car Based on the video screen, with the horizontal right direction as the X-axis and the vertical downward direction as the Y-axis, the angle of intersection between the vehicle's route and

		the X-axis
RoiTopX	<int>	License plate recognition ROI area X value
RoiTopY	<int>	License plate recognition ROI area Y value
RoiWith	<int>	License plate recognition ROI area Width
RoiHeight	<int>	License plate recognition ROI area height

2.6.13.4.License plate records (PlateInfo)

2.6.13.4.1. Current license plate retrieval (getPlateInfo)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **PlateInfo**
Description	Refer to the license plate retrieval information parameter description
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=PlateInfo
Return	UID=1 Time=2018-10-24 11:36:13 PlateNUM=DD651 Country=ISL Action=7 ListType=0 Direction=0 (For other responses, Refer to General Response)

2.6.13.4.2. Deleting license plate information (deletePlateInfo)

URL	http://<servername>/cgi-bin/param.cgi?action=delete&type= **PlateInfo** &Type=<Type>[&<argument>=<value>...]
Description	When Type=0, the loop body only needs to carry the UID loop part; When Type=1, the loop body only needs to carry the PlateNum loop part. Refer to the license plate retrieval information parameter description
Example	http://192.168.32.151/cgi-bin/param.cgi?action=delete&type=PlateInfo&Type=1&PlateNumBegin=1&PlateNum=MVL303&PlateNumEnd=1 or http://192.168.32.151/cgi-bin/param.cgi?action=delete&type=PlateInfo&Type=0&UIDBegin=1&UID=1&UIDEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.13.4.3. Searching for license plate records (queryPlateInfo)

URL	http://<servername>/cgi-bin/param.cgi?action= **query** &type= **PlateInfo** &startTime=<startTime>&endTime=<endTime> &Country=<Country>&PlateText=<PlateText>&Direction=<Direction >& ListType=<ListType>
Description	Refer to the license plate retrieval information parameter description
Example	http://192.168.32.151/cgi-bin/param.cgi?action=query&type=PlateInfo&startTime=20181024010100&endTime=20181025010100&Country=ALL&PlateText=DD651&Direction=4&ListType=3
Return	PlateBegin UID=4

	Time=2018-10-24 06:25:53 PlateNUM=DD651 Country=ISL Action=7 ListType=0 Direction=0 NextPlate UID=2 Time=2018-10-24 05:55:47 PlateNUM=DD651 Country=ISL Action=7 ListType=0 Direction=0 PlateEnd (For other responses, Refer to General Response)

2.6.13.4.4. License plate retrieval information parameter description

Table 2-6-8-4-4-1

parameter	data	Description
userName	<string>	Login Username
password	<string>	login password

Action	<string>	action get Current license plate retrieval delete Delete license plate record
type	<string>	type License plate information
UID	<int>	Serial number
Time	<string>	License plate warning time Time format yyyy--mm--dd hh:mm:ss
PlateNUM	<string>	License Plate
Country	<string>	License plate country Value cannot be empty
Action	<int>[1, 3]	action 1: Open the gate; 2: FTP upload; 3: Open the gate, upload via FTP
ListType	<int>[0, 2]	List Type 0: blacklist; 1: Whitelist; 2: Non-list
Direction	<int>[0, 3]	Driving direction 0:Unknown; 1:Undefined;2:In(same direction); 3: Out (toward)
ImageLen	<int>	Retrieve the current image data length
ImageData	<string>	Retrieve the current image data
Type	<int>[0, 1]	License plate number type 0: sequence number; 1: License Plate

UID	<int>	Serial number
UIDBegin	<int>	UID list start mark Value cannot be empty
UIDNextUrl	<int>	UID data separator Value cannot be empty
UID	<int>	Number of license plate information lists The value is the number of UID list data
PlateNum	<string>	License Plate The license plate number to be deleted
PlateNumBegin	<int>	Start of license plate list Value cannot be empty
PlateNumEnd	<int>	End of license plate list The value is the number of PlateNum list data
PlateNumNextUrl	<int>	License plate list data separator Value cannot be empty

2.6.13.4.5. License plate record information parameter description

Table 2-6-8-4-5-1

parameter	data	Description
action	<string>	Operation Type query search
startTime	<int>	Search start time Format (YYYYMMDDHHMMSS) Note: The minimum value cannot be less than 1971010101000000

endTime	<string>	Search end time Format (YYYYMMDDHHMMSS) Note: The minimum value cannot be less than 1971010101000000
Country	<string>	Search by country type ALLAll countries
PlateText	<string>	Search by license plate number number plate
Direction	<int>[0, 4]	Search by driving direction 0Unknown 1Undefined 2Same direction 3 Reverse 4 All
ListType	<int>[0, 3]	Search by blacklist or whitelist 0Blacklist 1 Whitelist 2 Not in the list 3 All
NextPlate	<string>	Delimited URL
PlateBegin	<string>	Return value start URL
PlateEnd	<string>	Return value end URL

2.6.14. Advanced intelligent analysis

2.6.14.1.Smoke detection (smokeParam) (IPC/NVR)

2.6.14.1.1. Acquisition of capabilities

URL	http://<ip>/cgi-bin/param.cgi?action=get&type=smoke **Param Ability &cameraID=1**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=smoke Param Ability **&cameraID=** 1
Description	Refer to URL Descriptions
Return	region=1 maxEdgeNum=8 maxRegionNum=8 dra w =1 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.14.1.2. Capability Parameter Description

URL	Parameter Description	scope	type of data
region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int

maxRegionNum	Number of regions		int
draw	Video Stream Line Drawing 0: Not supported 1: Support		int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		int
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.14.1.3. Get smoking detection parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=smoke **Param** &cameraID= **1**
Description	Refer to URL Descriptions

Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=smoke Param &cameraID=1
Return	enableFlag=1 draw=1 sensitivity=3 alarmOut=1 alarmRecord=1 alarmSMTP=1 alarmFTP=1 alarmSound=1 alarmSoundType=7 regionCount=1 regionBegin=1 pointCount=3 pointBegin=1 pointX=36.124401 pointY=43.162392 next_pointURL=2 pointX=37.559807 pointY=68.376068 next_pointURL=3 pointX=51.196171 pointY=43.589745 pointEnd=3 regionEnd=1 weekDayCount=1 weekDayBegin=1 weekDay=0 startTime=0 endTime=1800 weekDayEnd=1 (For other responses, Refer to General Response)

2.6.14.1.4. Setting up smoking detection parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=smoke **Param &** cameraID=1 & enableFlag=1&draw=1&sensitivity=5&alarmOut=1&alarmRecord=1&alarmSMTP=1&alarmFTP=1&alarmSound=1&alarmSoundType=0&regionCount=1&regionBegin=1&pointCount=3&pointBegin=1&pointX=36.124401&pointY=43.162392&next_pointURL=2&pointX=37.559807&pointY=68.376068&next_pointURL=3&pointX=51.196171&pointY=43.589745&pointEnd=3&regionEnd=1&weekDayCount=1&weekDayBegin=1&weekDa

	y=0&startTime=0&endTime=1800&weekDayEnd=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=smoke Param &cameraID=1 &enableFlag=1&draw=1&sensitivity=5&alarmOut=1&alarmRecord=1&alarmSMTP=1&alarmFTP=1&alarmSound=1&alarmSoundType=0&regionCount=1&regionBegin=1&pointCount=3&pointBegin=1&pointX=36.124401&pointY=43.162392&next_pointURL=2&pointX=37.559807&pointY=68.376068&next_pointURL=3&pointX=51.196171&pointY=43.589745&pointEnd=3&regionEnd=1&weekDayCount=1&weekDayBegin=1&weekDay=0&startTime=0&endTime=1800&weekDayEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.14.1.5. Meaning of smoking detection parameters

URL	Parameter Description	scope	type of data
enableFlag	switch 0: Off 1: On	0-1	int
sensitivity	Sensitivity		int
alarmOut	Alarm Output 0: Off 1: On		int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video		int

	0: Off 1: On		
alarmSMTP	Alarm Email 0: Off 1: On		int
alarmFTP	FTP Upload 0: Off 1: On		int
alarmSound	Sound detection alarm 0: Off 1: On		int
alarmSoundType	Audio alarm file (0-13)		int
alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
regionCount	Number of regions		int
regionBegin	Area coordinates start mark		int
pointCount	Number of points		int
pointBegin	Point coordinates start mark		int
pointX	Horizontal coordinate value		int
pointY	Vertical coordinate value		int

next_pointURL	The next point coordinate starts marking		int
pointEnd	Point coordinate end mark		int
next_regionURL	Next area parameter start mark		int
regionEnd	Area coordinate end mark		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	Day of the week (0-6)		int
startTime	Arming start time (in seconds)		int
endTime	Arming end time (in seconds)		int
next_weekDayURL	Next scheduled time URL start mark		int
weekDayEnd	End flag of the loop of defense days		int
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int

2.6.14.2. Fire point detection (smallFireDetection)

2.6.14.2.1. Acquisition of capabilities

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= smallFireParamAbility **&cameraID=1**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= smallFireParamAbility **&cameraID=1**
Description	Refer to URL Descriptions
Return	minSensitivity=1 maxSensitivity=100 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.14.2.2. Capability Parameter Description

URL	Parameter Description	scope	type of data
minSensitivity	Minimum sensitivity		int
maxSensitivity	Maximum sensitivity		int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int

alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		int
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.14.2.3. Get the fire spot detection parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= smallFireParam &cameraID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= smallFireParam &cameraID=1
Return	enableFlag=0 sensitivity=90 alarmOut=0 alarmRecord=0 alarmSMTP=0 alarmFTP=0 regionCount=1 regionBegin=1 motionDetectionAreaCount=1

	motionDetectionAreaBegin=1 topX=84 topY=125 width=174 height=75 motionDetectionAreaEnd=1 regionEnd=1 weekDayCount=0 (For other responses, Refer to General Response)

2.6.14.2.4. Setting fire detection parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**smallFireParam**&cameraID=2&enableFlag=1&sensitivity=3&alarmOut=0&alarmOut2=1&alarmRecord=1&alarmSMTP=0&alarmLED=1&alarmFTP=1&alarmSound=1&alarmSoundType=1&regionCount=1&regionBegin=1&motionDetectionAction=cover&motionDetectionAreaCount=3&motionDetectionAreaBegin=1&topX=270&topY=55&width=36&height=50&next_motionDetectionAreaURL=2&topX=24&topY=60&width=60&height=60&next_motionDetectionAreaURL=3&topX=126&topY=75&width=60&height=75&motionDetectionAreaEnd=3&regionEnd=1&weekDayCount=13&weekDayBegin=1&weekDay=0&startTime=21600&endTime=43200&next_weekDayURL=2&weekDay=0&startTime=52200&endTime=70200&next_weekDayURL=3&weekDay=1&startTime=52200&endTime=54000&next_weekDayURL=4&weekDay=2&startTime=41400&endTime=43200&next_weekDayURL=5&weekDay=2&startTime=52200&endTime=54000&next_weekDayURL=6&weekDay=3&startTime=34200&endTime=36000&next_weekDayURL=7&weekDay=3&startTime=52200&endTime=70200&next_weekDayURL=8&weekDay=4&startTime=52200&endTime=54000&next_weekDayURL=9&weekDay=5&startTime=28800&endTime=30600&next_weekDayURL=10&weekDay=5&startTime=52200&endTime=54000&next_weekDayURL=11&weekDay=6&startTime=21600&endTime=23400&next_weekDayURL=12&weekDay=6&startTime=25200&endTime=27000&next_weekDayURL=13&weekDay=6&startTime=52200&endTime=70200&weekDayEnd=13
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=**smallFireParam**&cameraID=1&enableFlag=1&sensitivity=3&alarmOut=0&alarmOut2=1&alarmRecord=1&alarmSMTP=0&alarmLED=1&alarmFTP=1&alarmSound=1&alarmSoundType=1&regionCo

	unt=1&regionBegin=1&motionDetectionAction=cover&motionDetectionAreaCount=3&motionDetectionAreaBegin=1&topX=270&topY=55&width=36&height=50&next_motionDetectionAreaURL=2&topX=24&topY=60&width=60&height=60&next_motionDetectionAreaURL=3&topX=126&topY=75&width=60&height=75&motionDetectionAreaEnd=3&regionEnd=1&weekDayCount=13&weekDayBegin=1&weekDay=0&startTime=21600&endTime=43200&next_weekDayURL=2&weekDay=0&startTime=52200&endTime=70200&next_weekDayURL=3&weekDay=1&startTime=52200&endTime=54000&next_weekDayURL=4&weekDay=2&startTime=41400&endTime=43200&next_weekDayURL=5&weekDay=2&startTime=52200&endTime=54000&next_weekDayURL=6&weekDay=3&startTime=34200&endTime=36000&next_weekDayURL=7&weekDay=3&startTime=52200&endTime=70200&next_weekDayURL=8&weekDay=4&startTime=52200&endTime=54000&next_weekDayURL=9&weekDay=5&startTime=28800&endTime=30600&next_weekDayURL=10&weekDay=5&startTime=52200&endTime=54000&next_weekDayURL=11&weekDay=6&startTime=21600&endTime=23400&next_weekDayURL=12&weekDay=6&startTime=25200&endTime=27000&next_weekDayURL=13&weekDay=6&startTime=52200&endTime=70200&weekDayEnd=13
Return	OK (For other responses, Refer to General Response)

2.6.14.2.5. Fire point detection parameters meaning

URL	Parameter Description	scope	type of data
enableFlag	switch 0: Off 1: On	0-1	int
sensitivity	Sensitivity		int
alarmOut	Alarm Output 0: Off 1: On		int
alarmOut2	Alarm 2 output 0: Off	0-1	int

	1: On		
alarmRecord	Alarm video 0: Off 1: On		int
alarmSMTP	Alarm Email 0: Off 1: On		int
alarmFTP	FTP Upload 0: Off 1: On		int
alarmSound	Sound detection alarm 0: Off 1: On		int
alarmSoundType	Audio alarm file (0-13)		int
alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
regionCount	Number of regions		int
regionBegin	Area coordinates start mark		int
motionDetectionAction	Detection area behavior (default addition if not passed) c over: overwrite		string

motionDetectionAreaCount	Number of detection areas		int
motionDetectionAreaBegin	Detection area start mark		int
topX	X coordinate		int
topY	Y coordinate		int
width	width		int
height	high		int
next_motionDetectionAreaURL	Next detection area start mark		int
motionDetectionAreaEnd	Detection area end mark		int
next_regionURL	Next area parameter start mark		int
regionEnd	Area coordinate end mark		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	Day of the week (0-6)		int
startTime	Arming start time (in seconds)		int
endTime	Arming end time (in seconds)		int
next_weekDayURL	Next scheduled time URL start mark		int
weekDayEnd	End flag of the		int

	loop of defense days		
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int

2.6.14.3.Smoke and Flame Detection (IPC/NVR)

2.6.14.3.1. Acquisition Capability (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type=**fireSmokeParamAbility&cameraID=1**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=fireSmokeParamAbility **&cameraID=1**
Description	Refer to URL Descriptions
Return	region=1 maxEdgeNum=8 maxRegionNum=8 dra w =1 presetMode=1 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.14.3.2. Capability Parameter Description

URL	Parameter Description	scope	type of data
Regin	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int
maxRegionNum	Number of regions		int
draw	Video Stream Line Drawing 0: Not supported 1: Support		int
presetMode	Mode (PTZ device) 0: Not supported 1: Support	0-1	int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm		int

	14: White light alarm		
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.14.3.3. Get fire detection parameters (IPC/NVR)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **fireSmokeParam** &cameraID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= **fireSmokeParam** &cameraID=1
Return	enableFlag=1 draw=1 sensitivity=3 alarmOut=1 alarmRecord=1 alarmSMTP=1 alarmFTP=1 alarmSound=1 alarmSoundType=7 regionCount=1 regionBegin=1 pointCount=3 pointBegin=1 pointX=36.124401 pointY=43.162392 next_pointURL=2 pointX=37.559807 pointY=68.376068 next_pointURL=3 pointX=51.196171 pointY=43.589745 pointEnd=3 regionEnd=1 weekDayCount=1 weekDayBegin=1

	weekDay=0 startTime=0 endTime=1800 weekDayEnd=1 (For other responses, Refer to General Response)

2.6.14.3.4. Setting Fire and Smoke Detection Parameters (IPC/NVR)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **fireSmokeParam** &cameraID=1 & enableFlag=1&draw=1&sensitivity=5&alarmOut=1&alarmRecord=1&alarmSMTP=1&alarmFTP=1&alarmSound=1&alarmSoundType=0&regionCount=1&regionBegin=1&pointCount=3&pointBegin=1&pointX=36.124401&pointY=43.162392&next_pointURL=2&pointX=37.559807&pointY=68.376068&next_pointURL=3&pointX=51.196171&pointY=43.589745&pointEnd=3&regionEnd=1&weekDayCount=1&weekDayBegin=1&weekDay=0&startTime=0&endTime=1800&weekDayEnd=1
Description	Refer to URL Descriptions
Example	(IPC) http://192.168.2.21/cgi-bin/param.cgi?action=set&type= fireSmokeParam&cameraID=1&enableFlag=1&draw=1&sensitivity=5&alarmOut=1&alarmRecord=1&alarmSMTP=1&alarmFTP=1&alarmSound=1&alarmSoundType=0&regionCount=1&regionBegin=1&pointCount=3&pointBegin=1&pointX=36.124401&pointY=43.162392&next_pointURL=2&pointX=37.559807&pointY=68.376068&next_pointURL=3&pointX=51.196171&pointY=43.589745&pointEnd=3&regionEnd=1&weekDayCount=1&weekDayBegin=1&weekDay=0&startTime=0&endTime=1800&weekDayEnd=1 Refer to IPC parameter table for details
Return	OK (For other responses, Refer to General Response)

2.6.14.3.5. Meaning of Fireworks Detection Parameters

IPC: Parameter list:

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 1: Normal mode 2: Preset point mode	1-2	int
presetCount	Number of preset positions (PTZ device)		i nt
resetBegin	Preset position start mark (PTZ device)		i nt
p resetID	Preset ID - 1 : Get all preset positions 0: Get or set normal mode > 0 : Get or set the specified preset position		i nt
enableFlag	switch 0: Off 1: On	0-1	int
sensitivity	Sensitivity		int
alarmOut	Alarm Output 0: Off 1: On		int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On		int
alarmSMTP	Alarm Email		int

	0: Off 1: On		
alarmFTP	FTP Upload 0: Off 1: On		int
alarmSound	Sound detection alarm 0: Off 1: On		int
alarmSoundType	Audio alarm file (0-13)		int
alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
regionCount	Number of regions		int
regionBegin	Area coordinates start mark		int
pointCount	Number of points		int
pointBegin	Point coordinates start mark		int
pointX	Horizontal coordinate value		int
pointY	Vertical coordinate value		int
next_pointURL	The next point coordinate starts marking		int
pointEnd	Point coordinate end mark		int
next_regionURL	Next area parameter start mark		int
regionEnd	Area coordinate end mark		int
weekDayCount	Number of defenses		int

weekDayBegin	Arming start indicator		int
weekDay	Day of the week (0-6)		int
startTime	Arming start time (in seconds)		int
endTime	Arming end time (in seconds)		int
next_weekDayURL	Next scheduled time URL start mark		int
weekDayEnd	End flag of the loop of defense days		int
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int
next_PresetURL	Next preset position start mark		i nt
p resetEnd	Preset end mark		i nt

2.6.15. Intelligent Analysis

2.6.15.1.Get the list of supported intelligent analysis

2.6.15.1.1. Get the parameters of the smart analysis list

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **getSupportIntelligences&cameraID=1**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= getSupportIntelligences **&cameraID=1**
Description	Refer to URL Descriptions
Return	(IPC) intelligenceAnalyseCount=11 intelligenceAnalyseBegin=1

	intelligenceAnalyse=0 next_intelligenceAnalyseURL=2 intelligenceAnalyse=1 next_intelligenceAnalyseURL=3 intelligenceAnalyse=7 next_intelligenceAnalyseURL=4 intelligenceAnalyse=8 next_intelligenceAnalyseURL=5 intelligenceAnalyse=10 next_intelligenceAnalyseURL=6 intelligenceAnalyse=14 next_intelligenceAnalyseURL=7 intelligenceAnalyse=20 next_intelligenceAnalyseURL=8 intelligenceAnalyse=21 next_intelligenceAnalyseURL=9 intelligenceAnalyse=23 next_intelligenceAnalyseURL=10 intelligenceAnalyse=29 intelligenceAnalyRefer tond=1

2.6.15.1.2. Meaning of parameters in the smart analysis list

URL	Parameter Description	scope	type of data
intelligenceAnalyseCount	Number of intelligent analyses	0-1	int
intelligenceAnalyseBegin	Smart analysis start mark		int
intelligenceAnalyse	Insight 0: Perimeter 1: Smart Motion Detection		int

	2: Safety Hat 3. Safety Vest 4: PeriIntrusDetect 5: Queue length (QueueLenDetect) 6: Heat Map 7: TripWire 8: MultiTripWire 9: Loitering 10: MultiLoitering 11: ObjectLeft 12: ObjectMoved 13: Abnormal Speed 14: Converse 15: Noparking 16: Signal Bad 17: Fence 18: Intelligent Parking (IntellVehicleDetect) 19: Video Tamper 20: Enter Area 21: Leave Area 22: Intelligence Trace 23: People Counting 24: StatisticalQuery 25: Advanced Configuration 26: Boat detection (BoatDetectTrack) 27: MultiGather 2 8 ： SmokingDetect 29 : FireSmokeDetect 3 0 ： fire spot detection (SmallFireDetect)		

next_intelligenceAnalyseURL	Next smart analysis start mark		int
intelligenceAnalyRefer tond	Smart analysis end mark		int

2.6.15.2. Perimeter

2.6.14.2.1 Acquisition capability (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **perimeterAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= perimeterAbility &cameraID=1
Description	Refer to URL description (IPC (The lite series)carries & cameraID)
Return	region=1 maxEdgeNum=8 maxRegionNum=8 uploadDetail=0 targetTypeConstrain=1 targetTypeConstrainMin=0 targetTypeConstrainMax=1 targetTypeCount=3 targetTypeBegin=1 targetType=0 next_TargetTypeURL=2 targetType=1 next_TargetTypeURL=3 targetType=2 targetTypeEnd=1 targetSizeConstrain=0 targetSizeConstrainMin=0 targetSizeConstrainMax=1 targetSizeConstrainUnit= minTargetSize=0 minTargetSizeMin=0 minTargetSizeMax=1000000 minTargetSizeUnit=cm2 maxTargetSize=0 maxTargetSizeMin=0 maxTargetSizeMax=1000000 maxTargetSizeUnit=cm2

	sensitivityCount=5 sensitivityBegin=1 sensitivity=1 next_SensitivityURL=2 sensitivity=2 next_SensitivityURL=3 sensitivity=3 next_SensitivityURL=4 sensitivity=4 next_SensitivityURL=5 sensitivity=5 sensitivityEnd=1 draw=1 presetMode=0 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.14.2.2 Capability Parameter Description (IPC)

URL	Parameter Description	scope	type of data
region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int
maxRegionNum	Number of regions		int
uploadDetail	Upload Details	0-1	int

	0: Not supported 1: Support		
targetTypeConstrain	Limit upload types 0: Not supported 1: Support	0-1	int
targetTypeConstrainMin	Limit the minimum value of upload type		int
targetTypeConstrainMax	Limit the maximum value of upload type		int
targetTypeCount	Limit the number of target types		int
targetTypeBegin	Qualified target type start identifier		int
targetType	Target Type 0: person or car 1 person 2: Car	0-2	int
next_TargetTypeURL	Next item defines the target type start mark		int
targetTypeEnd	Qualified target type end marker		int
targetSizeConstrain	Limit target size 0: Not supported 1: Support	0-1	int
targetSizeConstrainMin	Limit the minimum target size		int

targetSizeConstrainMax	Limit the maximum size of the target		int
targetSizeConstrainUnit	Limit target size units		string
minTargetSize	Minimum target size 0: Support 1: Not supported	0-1	int
minTargetSizeMin	Minimum target size		int
minTargetSizeMax	Minimum target maximum size		int
minTargetSizeUnit	Minimum target unit		string
maxTargetSize	Maximum target size 0: Not supported 1: Support	0-1	int
maxTargetSizeMin	Maximum target minimum size		int
maxTargetSizeMax	Maximum target size		int
maxTargetSizeUnit	Maximum target unit		string
sensitivityCount	Sensitivity number		int
sensitivityBegin	Sensitivity start mark		int
sensitivity	Sensitivity		int
next_SensitivityURL	Next sensitivity		int

	start mark		
sensitivityEnd	Sensitivity end mark		int
draw	Video Stream Line Drawing 0: Not supported 1: Support	0-1	int
presetMode	Mode (PTZ device) 0: Not supported 1: Support	0-1	int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		int
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.14.2.3 Get intrusion detection parameters (getPerimeterParam)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **perimeterParam** &cameraID=<cameraID>
Description	Refer to URL Descriptions
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=perimeterParam&cameraID=1
Return	enableFlag=1 uploadDetail=1 draw=1 alarmOut=0 alarmRecord=1 alarmSMTP=1 alarmFTP=1 regionCount=1 regionBegin=1 sensitivity=5 targetTypeEnable=1 targetType=0 targetSizeEnable=1 targetMaxSize=100000 targetMinSize=1000 pointCount=3 pointBegin=1 pointX=23.325359 pointY=21.367521 next_pointURL=2 … next_pointURL=3 pointX=47.488037 pointY=88.461540 pointEnd=3 regionEnd=1 weekDayCount=2 weekDayBegin=1 weekDay=0 startTime=19800 endTime=21600 next_weekDayURL=2 weekDay=4 startTime=59400

	endTime=61200 weekDayEnd=2

2.6.14.2.4 Set intrusion detection parameters (setPerimeterParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**perimeterParam** &cameraID=1[&<argument>=<value>...]
Description	(IPC Refer to URL description)
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=perimeterParam&cameraID=1&enableFlag=1&draw=0&alarmOut=1&alarmRecord=1&alarmSMTP=0&alarmFTP=1&alarmSound=1&clearArea=0&alarmSoundType=0&regionCount=2&regionBegin=1&sensitivity=3&targetTypeEnable=1&targetType=1&pointCount=3&pointBegin=1&pointX=12.440191&pointY=49.145298&next_pointURL=2&pointX=11.244020&pointY=68.803421&next_pointURL=3&pointX=31.818182&pointY=61.538460&pointEnd=3&next_regionURL=2&sensitivity=3&targetTypeEnable=1&targetType=1&pointCount=4&pointBegin=1&pointX=61.483253&pointY=42.735043&next_pointURL=2&pointX=53.588516&pointY=94.017097&next_pointURL=3&pointX=85.645935&pointY=78.205132&next_pointURL=4&pointX=86.124405&pointY=50.000000&pointEnd=4&regionEnd=1&weekDayCount=12&weekDayBegin=1&weekDay=0&startTime=18000&endTime=19800&next_weekDayURL=2&weekDay=1&startTime=48600&endTime=50400&next_weekDayURL=3&weekDay=1&startTime=54000&endTime=55800&next_weekDayURL=4&weekDay=2&startTime=21600&endTime=23400&next_weekDayURL=5&weekDay=2&startTime=63000&endTime=64800&next_weekDayURL=6&weekDay=3&startTime=43200&endTime=45000&next_weekDayURL=7&weekDay=3&startTime=68400&endTime=70200&next_weekDayURL=8&weekDay=4&startTime=23400&endTime=25200&next_weekDayURL=9&weekDay=5&startTime=28800&endTime=30600&next_weekDayURL=10&weekDay=5&startTime=36000&endTime=37800&next_weekDayURL=11&weekDay=5&startTime=73800&endTime=75600&next_weekDayURL=12&weekDay=6&startTime=32400&endTime=34200&weekDayEnd=12&targetSizeEnableV2=0&maxTargetWidth=6.000000&maxTargetHeight=6.000000&minTargetWidth=2.000000&minTargetHeight=2.000000
Retur	OK

n	(For other responses, Refer to General Response)

2.6.14.2.5 Intrusion Detection Parameters

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 1: Normal mode 2: Preset point mode	1-2	int
presetCount	Number of preset positions (PTZ device)		i nt
resetBegin	Preset position start mark (PTZ device)		i nt
p resetID	Preset ID - 1 : Get all preset positions 0: Get or set normal mode > 0 : Get or set the specified preset position		i nt
enableFlag	switch 0: Off 1: On	0-1	int
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int
uploadDetail	Upload Details 0: Off 1: On	0-1	int
clearArea	Upload Details 0: Normal setting 1: Delete area Need to turn off the switch	0-1	Int

	before deleting		
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On	0-1	int
alarmSMTP	Alarm Email 0: Off 1: On	0-1	int
alarmFTP	FTP Upload 0: Off 1: On	0-1	int
alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int
alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
areaParamAction (The lite series)	Regional loop operation behavior	cover:cover remove: remove, you need to carry the area	Regional loop operation behavior When the configuration behavior is set, if this

		ID	behavior flag is not carried, the default is to add the loop body. cover:cover remove: remove, you need to carry the area ID
sensitivity	Sensitivity		int
targetTypeEnable	Limit target type 0: Off 1: On	0-1	int
targetType	Qualified Type 0: person or car 1 person 2: Car	0-2	int
targetSizeEnable	Limited size 0: Off 1: On	0-1	int
targetMaxSize	Limit the maximum size of the target		int
targetMinSize	Limit the minimum target size		int
targetSizeEnableV2	Limit target maximum and minimum switches 0: Off 1: On	0-1	Int
maxTargetWidth	Limit the maximum width of the target		float
maxTargetHeight	Limit target maximum height		float
minTargetWidth	Limit the minimum width of the target		float
minTargetHeight	Limit the minimum target		float

	height		
regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
pointCount	Number of coordinate points		int
pointBegin	Coordinate point start mark		int
pointX	Horizontal coordinate value		float
pointY	Vertical coordinate value		float
next_pointURL	The next point coordinate starts marking		int
pointEnd	Point coordinate end mark		int
next_regionURL	Next area parameter start mark		int
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int
next_PresetURL	Next preset position start mark		i nt
p resetEnd	Preset end mark		i nt

2.6.15.3 **Single Line Crossing**

2.6.15.3.1 Acquisition capability (IPC/the lite series)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **tripWireAbility**

Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= tripWireAbility
Description	Refer to URL Descriptions
Return	region=1 maxEdgeNum=8 maxRegionNum=8 uploadDetail=0 triggerDirection=1 bidirection=1 targetTypeConstrain=1 targetTypeConstrainMin=0 targetTypeConstrainMax=1 targetTypeCount=3 targetTypeBegin=1 targetType=0 next_TargetTypeURL=2 targetType=1 next_TargetTypeURL=3 targetType=2 targetTypeEnd=1 targetSizeConstrain=0 targetSizeConstrainMin=0 targetSizeConstrainMax=1 targetSizeConstrainUnit= minTargetSize=0 minTargetSizeMin=0 minTargetSizeMax=1000000 minTargetSizeUnit=cm2 maxTargetSize=0 maxTargetSizeMin=0 maxTargetSizeMax=1000000 maxTargetSizeUnit=cm2 draw=1 presetMode=0 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10

	alarmLinkageEnd=1

2.6.15.3.2 Capability Parameter Description

URL	Parameter Description	scope	type of data
region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int
maxRegionNum	Number of regions		int
uploadDetail	Upload Details 0: Not supported 1: Support	0-1	int
triggerDirection	Trigger direction 0: Not supported 1: Support	0-1	int
bidirection	Bidirectional 0: Not supported 1: Support	0-1	int
targetTypeConstrain	Limit upload types 0: Not supported 1: Support	0-1	int
targetTypeConstrainMin	Limit the minimum value of upload type		int
targetTypeConstrainMax	Limit the maximum value		int

	of upload type		
targetTypeCount	Limit the number of target types		int
targetTypeBegin	Qualified target type start identifier		int
targetType	Target Type 0: person or car 1 person 2: Car	0-2	int
next_TargetTypeURL	Next item defines the target type start mark		int
targetTypeEnd	Qualified target type end marker		int
targetSizeConstrain	Limit target size 0: Not supported 1: Support	0-1	int
targetSizeConstrainMin	Limit the minimum target size		int
targetSizeConstrainMax	Limit the maximum size of the target		int
targetSizeConstrainUnit	Limit target size units		string
minTargetSize	Minimum target size 0: Support 1: Not supported	0-1	int
minTargetSizeMin	Minimum target size		int

minTargetSizeMax	Minimum target maximum size		int
minTargetSizeUnit	Minimum target unit		string
maxTargetSize	Maximum target size 0: Not supported 1: Support	0-1	int
maxTargetSizeMin	Maximum target minimum size		int
maxTargetSizeMax	Maximum target size		int
maxTargetSizeUnit	Maximum target unit		string
draw	Video Stream Line Drawing 0: Not supported 1: Support	0-1	int
presetMode	Mode (PTZ device) 0: Not supported 1: Support	0-1	int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email		int

	3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.15.3.3 Get TripWire Detection Parameters (getTripWireParam)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **tripWireParam** &cameraID=<cameraID>
Description	Refer to URL Descriptions
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= **tripWireParam** &cameraID=1
Return	enableFlag=0 uploadDetail=0 draw=0 alarmOut=0 alarmRecord=0 alarmSMTP=0 alarmFTP=0 alarmSound=0 alarmSoundType=0 targetTypeEnable=0 targetType=2 targetSizeEnable=0 targetMaxSize=0 targetMinSize=0 regionCount=1 regionBegin=1 lineCrossStartX=18.000000

	lineCrossStartY=63.000000 lineCrossEndX=55.000000 lineCrossEndY=37.000000 regionEnd=1 weekDayCount=1 weekDayBegin=1 weekDay=0 startTime=0 endTime=1800 weekDayEnd=1

2.6.15.3.4 Set TripWire Detection Parameters (setTripWireParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **tripWireParam** &cameraID=1[&<argument>=<value>...]
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=tripWireParam&enableFlag=1&draw=0&alarmOut=1&alarmRecord=1&alarmSMTP=0&alarmFTP=1&alarmSound=0&alarmSoundType=0&regionCount=2&regionBegin=1&targetTypeEnable=0&targetType=1&lineCrossStartX=12.000000&lineCrossStartY=54.000000&lineCrossEndX=47.000000&lineCrossEndY=89.000000&next_regionURL=2&targetTypeEnable=0&targetType=1&lineCrossStartX=88.000000&lineCrossStartY=54.000000&lineCrossEndX=44.000000&lineCrossEndY=15.000000&regionEnd=1&weekDayCount=30&weekDayBegin=1&weekDay=0&startTime=14400&endTime=16200&next_weekDayURL=2&weekDay=0&startTime=27000&endTime=30600&next_weekDayURL=3&weekDay=0&startTime=36000&endTime=48600&next_weekDayURL=4&weekDay=1&startTime=14400&endTime=16200&next_weekDayURL=5&weekDay=1&startTime=25200&endTime=27000&next_weekDayURL=6&weekDay=1&startTime=28800&endTime=30600&next_weekDayURL=7&weekDay=1&startTime=36000&endTime=37800&next_weekDayURL=8&weekDay=1&startTime=46800&endTime=48600&next_weekDayURL=9&weekDay=2&startTime=14400&endTime=16200&next_weekDayURL=10&weekDay=2&startTime=23400&endTime=25200&next_weekDayURL=11&weekDay=2&startTime=28800&endTime=30600&next_weekDayURL=12&weekDay=2&startTime=36000&endTime=37800&next_weekDayURL=13&weekDay=2&startTime=45000&endTime=48600&next_weekDayURL=14&weekDay=3&startTime=

	14400&endTime=16200&next_weekDayURL=15&weekDay=3&startTime=21600&endTime=23400&next_weekDayURL=16&weekDay=3&startTime=28800&endTime=30600&next_weekDayURL=17&weekDay=3&startTime=36000&endTime=45000&next_weekDayURL=18&weekDay=4&startTime=14400&endTime=16200&next_weekDayURL=19&weekDay=4&startTime=19800&endTime=21600&next_weekDayURL=20&weekDay=4&startTime=28800&endTime=30600&next_weekDayURL=21&weekDay=4&startTime=36000&endTime=37800&next_weekDayURL=22&weekDay=4&startTime=45000&endTime=48600&next_weekDayURL=23&weekDay=5&startTime=14400&endTime=16200&next_weekDayURL=24&weekDay=5&startTime=18000&endTime=19800&next_weekDayURL=25&weekDay=5&startTime=28800&endTime=30600&next_weekDayURL=26&weekDay=5&startTime=36000&endTime=37800&next_weekDayURL=27&weekDay=5&startTime=46800&endTime=48600&next_weekDayURL=28&weekDay=6&startTime=14400&endTime=18000&next_weekDayURL=29&weekDay=6&startTime=28800&endTime=30600&next_weekDayURL=30&weekDay=6&startTime=36000&endTime=48600&weekDayEnd=30
Return	OK (For other responses, Refer to General Response)

2.6.15.3.5 IPC (Internal Protection Parameter)

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 1: Normal mode 2: Preset point mode	1-2	int
presetCount	Number of preset positions (PTZ device)		i nt
resetBegin	Preset position start mark (PTZ device)		i nt
p resetID	Preset ID - 1 : Get all preset positions 0: Get or set normal mode > 0 : Get or set the specified preset position		i nt

enableFlag	switch 0: Off 1: On	0-1	int
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int
uploadDetail	Upload Details 0: Off 1: On	0-1	int
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On	0-1	int
alarmSMTP	Alarm Email 0: Off 1: On	0-1	int
alarmFTP	FTP Upload 0: Off 1: On	0-1	int
alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int

alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
targetTypeEnable	Limit target type 0: Off 1: On	0-1	int
targetType	Qualified Type 0: person or car 1 person 2: Car	0-2	int
targetSizeEnable	Limited size 0: Off 1: On	0-1	int
targetMaxSize	Limit the maximum size of the target		int
targetMinSize	Limit the minimum target size		int
isBidirection	Bidirectional 0: Off 1: On	0-1	int
triggerDirection	Trigger direction 1: Reverse 2: Forward	1-2	int
LineCrossStartX	The X coordinate of the starting point of the reference		float

	line on the image screen, with the left vertex as the origin		
LineCrossStart Y	Y coordinate of the starting point of the reference line on the image screen , with the left vertex as the origin		float
LineCross End X	The X coordinate of the end point of the reference line on the image screen, with the left vertex as the origin		float
LineCross EndY	The X coordinate of the focus position of the reference line on the image screen, with the left vertex as the origin		float
next_regionURL	Next area parameter start mark		int
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int
next_PresetURL	Next preset position start mark		i nt
p resetEnd	Preset end mark		i nt

2.6.15.4 **Double Virtual Fences**

2.6.15.4.1 Acquisition Capability (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **multiTripWireAbility**

Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= multiTripWireAbility
Description	Refer to URL Descriptions
Return	region=0 maxEdgeNum=8 maxRegionNum=4 uploadDetail=0 triggerDirection=1 timeInterval=0 timeIntervalMin=1 timeIntervalMax=60 timeIntervalUnit=S targetTypeConstrain=1 targetTypeConstrainMin=0 targetTypeConstrainMax=1 targetTypeCount=3 targetTypeBegin=1 targetType=0 next_TargetTypeURL=2 targetType=1 next_TargetTypeURL=3 targetType=2 targetTypeEnd=1 targetSizeConstrain=0 targetSizeConstrainMin=0 targetSizeConstrainMax=1 targetSizeConstrainUnit= minTargetSize=0 minTargetSizeMin=0 minTargetSizeMax=1000000 minTargetSizeUnit=cm2 maxTargetSize=0 maxTargetSizeMin=0 maxTargetSizeMax=1000000 maxTargetSizeUnit=cm2 draw=1 presetMode=0 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4

	next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.15.4.2 Description of capacity parameters

region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int
maxRegionNum	Number of regions		int
uploadDetail	Upload Details 0: Not supported 1: Support	0-1	int
triggerDirection	Trigger direction 0: Not supported 1: Support	0-1	int
timeInterval	Trigger time interval 0: Not supported 1: Support	0-1	int
timeIntervalMin	Minimum trigger interval		int
timeIntervalMax	Trigger maximum interval		int
timeIntervalUnit	Time interval unit		string
targetTypeConstrain	Limit upload types	0-1	int

	0: Not supported 1: Support		
targetTypeConstrainMin	Limit the minimum value of upload type		int
targetTypeConstrainMax	Limit the maximum value of upload type		int
targetTypeCount	Limit the number of target types		int
targetTypeBegin	Qualified target type start identifier		int
targetType	Target Type 0: person or car 1 person 2: Car	0-2	int
next_TargetTypeURL	Next item defines the target type start mark		int
targetTypeEnd	Qualified target type end marker		int
targetSizeConstrain	Limit target size 0: Not supported 1: Support	0-1	int
targetSizeConstrainMin	Limit the minimum target size		int
targetSizeConstrainMax	Limit the maximum size of the target		int
targetSizeConstrainUnit	Limit target size units		string

minTargetSize	Minimum target size 0: Support 1: Not supported	0-1	int
minTargetSizeMin	Minimum target size		int
minTargetSizeMax	Minimum target maximum size		int
minTargetSizeUnit	Minimum target unit		string
maxTargetSize	Maximum target size 0: Not supported 1: Support	0-1	int
maxTargetSizeMin	Maximum target minimum size		int
maxTargetSizeMax	Maximum target size		int
maxTargetSizeUnit	Maximum target unit		string
draw	Video Stream Line Drawing 0: Not supported 1: Support	0-1	int
presetMode	Mode (PTZ device) 0: Not supported 1: Support	0-1	int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int

alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		int
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.15.4.3 Get MultiTripWireAbility

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= multiTripWireParam &cameraID=<cameraID>
Description	Refer to URL Descriptions
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= multiTripWireParam &cameraID=1
Return	(IPC) enableFlag=1 draw=0 alarmOut=1 alarmRecord=1 alarmSMTP=0 alarmFTP=1

	alarmSound=0 alarmSoundType=0 regionCount=1 regionBegin=1 targetTypeEnable=0 targetType=0 triggerDirection=1 triggerDirection2=1 lineCrossStartX=38.000000 lineCrossStartY=39.000000 lineCrossEndX=37.000000 lineCrossEndY=77.000000 lineCrossStartX2=50.000000 lineCrossStartY2=39.000000 lineCrossEndX2=49.000000 lineCrossEndY2=77.000000 regionEnd=1 weekDayCount=1 weekDayBegin=1 weekDay=1 startTime=10800 endTime=12600 weekDayEnd=1

2.6.15.4.4 Set MultiTripWireParam

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **multiTripWireParam** &cameraID=1[&<argument>=<value>...]
Descri	Refer to URL Descriptions

ption	
Example	http://192.168.0.250/cgi-bin/param.cgi?action=set&type=multiTripWireParam&cameraID=1&enableFlag=1&alarmOut=1&alarmRecord=1&alarmSMTP=1&alarmFTP=1&isGetDetail=false&multiTripWireRegionParamBegin=1&targetTypeConstrain=false&targetType=1&targetSizeConstrain=false&minTargetSize=1000&maxTargetSize=0&timeInterval=5&triggerDirection1=1&triggerDirection2= 1 &regionCount=1&regionBegin=1&LineCross1=1&lineCrossStartX=27.000000&lineCrossStartY=31.000000&lineCrossEndX=52.000000&lineCrossEndY=76.000000&LineCross2=2&lineCrossStartX2=39.000000&lineCrossStartY2=31.000000&lineCrossEndX2=63.000000&lineCrossEndY2=76.000000&multiTripWireRegionParamEnd=1&regionEnd=1&weekDayBegin=1&weekDay=1&startTime1=21600&endTime1=48600&weekDayEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.15.4.5 Double warning line detection parameters

Double warning line detection parameters IPC

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 1: Normal mode 2: Preset point mode	1-2	int
presetCount	Number of preset positions (PTZ device)		i nt
resetBegin	Preset position start mark (PTZ device)		i nt
p resetID	Preset ID - 1 : Get all preset positions 0: Get or set normal mode > 0 : Get or set the specified preset position		i nt

enableFlag	switch 0: Off 1: On	0-1	int
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int
uploadDetail	Upload Details 0: Off 1: On	0-1	int
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On	0-1	int
alarmSMTP	Alarm Email 0: Off 1: On	0-1	int
alarmFTP	FTP Upload 0: Off 1: On	0-1	int
alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int

alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
targetTypeEnable	Limit target type 0: Off 1: On	0-1	int
targetType	Qualified Type 0: person or car 1 person 2: Car	0-2	int
targetSizeEnable	Limited size 0: Off 1: On	0-1	int
targetMaxSize	Limit the maximum size of the target		int
targetMinSize	Limit the minimum target size		int
timeInterval	Maximum time interval between crossing two lines (seconds)		int
triggerDirection	Tripwire 1 trigger direction 1: Reverse 2: Forward	1-2	int
triggerDirection 2	Tripwire 2 trigger direction 1: Reverse 2: Forward	1-2	int

LineCrossStartX	Tripwire 1, the X coordinate of the starting point of the reference line on the image screen, with the left vertex as the origin		float
LineCrossStart Y	Tripwire 1, the Y coordinate of the starting point of the reference line on the image screen , with the left vertex as the origin		float
LineCross End X	Tripwire 1, the X coordinate of the end point of the reference line on the image screen, with the left vertex as the origin		float
LineCross EndY	Tripwire 1, the X coordinate of the focus position of the reference line on the image screen, with the left vertex as the origin		float
LineCrossStartX 2	Tripwire 2, the X coordinate of the starting point of the reference line on the image screen, with the left vertex as the origin		float
LineCrossStart Y2	Tripwire 2, the Y coordinate of the starting point of the reference line on the image screen , with the left vertex as the origin		float
LineCross End X 2	Tripwire 2, the X coordinate of the end point of the reference line on the image screen, with the left vertex as the origin		float
LineCross EndY2	Tripwire 2, the X coordinate of the focus position of the reference line on the image screen, with the left vertex as the origin		float
next_regionURL	Next area parameter start mark		int
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int

weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int
next_PresetURL	Next preset position start mark		i nt
p resetEnd	Preset end mark		i nt

2.6.15.5 **Loitering (TBD)**

2.6.15.5.1 Get Loitering Detection Parameters (getLoiteringParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **LoiteringParam** &cameraID=<cameraID>
Description	Wandering includes common parameters for intelligent analysis and wandering line detection parameters
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=LoiteringParam&cameraID=1
Return	enableFlag=1 uploadDetail=1 draw=1 alarmOut=0 alarmRecord=1 alarmSMTP=1 alarmFTP=1 regionCount=1 regionBegin=1 targetTypeEnable=1 targetType=0 targetSizeEnable=1 targetMaxSize=100000 targetMinSize=1000 minLoiteringTime=10 pathAnalysis=1

	pointCount=3 pointBegin=1 pointX=32.177032 pointY=25.213675 next_pointURL=2 pointX=57.775120 pointY=32.905983 next_pointURL=3 pointX=32.416267 pointY=73.076920 pointEnd=3 regionEnd=1 weekDayCount=2 weekDayBegin=1 weekDay=1 startTime=23400 endTime=25200 next_weekDayURL=2 weekDay=3 startTime=48600 endTime=50400 weekDayEnd=2 (For other responses, Refer to General Response)

2.6.15.5.2 Set Loitering Detection Parameters (setLoiteringParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **LoiteringParam** &cameraID=1[&<argument>=<value>...]
Description	Set parameters for reference wandering detection
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type=LoiteringParam&cameraID=1&enableFlag=1&uploadDetail=1&draw=1&alarmOut=0&alarmRecord=1&alarmSMTP=1&alarmFTP=1&regionCount=1&regionBegin=1&targetTypeEnable=1&targetType=0&targetSizeEnable=1&targetMaxSize=100000&targetMinSize=1000&minLoiteringTime=10&pathAnalysis=1&pointCount=3&pointBegin=1&pointX=32.177032&pointY=25.213675&next_pointURL=2&pointX=57.775120&pointY=32.905983&next_pointURL=3&pointX=32.416267&pointY=73.076920&pointEnd=3&regionEnd=1&weekDayCount=2&weekDayBegin=1&weekDay=1&startTime=23400&endTime=25200&next_weekDayURL=2&weekDay=3&startTime=48600&endTime=50400&weekDayEnd=2

Return	OK (For other responses, Refer to General Response)

2.6.15.5.3 Loiteringing Detection Parameters

Table 2-6-9-5-3-1

parameter	data	Description
IntelligentCommonParam	< IntelligentCommonParam >	Intelligent analysis of shared parameters. For specific URL, Refer to the list of common parameters for intelligent analysis.
uploadDetail	<int>{0,1}	Whether to upload target details. 0: No (default) 1: Yes
regionCount	<int>[0,32]	Number of detection areas. When setting, this flag must be carried to indicate the number of regions. For details, Refer to the group text rules
region Begin	<int>{1}	The region loop body starts marking. When setting, this flag must be included. There is no specific requirement for the value. For details, Refer to the group text rules
LoiteringRegionParam	< LoiteringRegionParam >	Individual zone parameters. For specific parameters, please Refer to: Single wandering area parameter list
next_ region URL	<int>[2,32]	Next area identifier. Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must

		be carried. There is no specific requirement for the value. For details, Refer to the group text rules
region End	<int>[1,32]	The region loop body ends. When the configuration behavior is set, this flag must be carried, and the value is the number. For details, Refer to Group Text Rules

Single wandering region parameter list LoiteringRegionParam:

Table 2-6-9-5-3-2

parameter	data	Description
targetTypeEnable	<int>{0,1}	Whether to limit the target type. 0: No (default) 1: Yes
targetType	<int>{0,1,2}	The target qualification type. 0: person or car (default) 1 person 2: Car
targetSizeEnable	<int>{0,1}	Whether to limit the target size. 0: No (default) 1: Yes
targetMaxSize	<int>[0,1000000]	Limit the maximum target size (cm^2). 100000 (default)
targetMinSize	<int>[0, 1000000]	Limit the minimum target size (cm^2. 1000 (default)
minLoiteringTime	<int>[5,60]	Minimum hovering time (in seconds). 10 (default)
pathAnalysis	<int>{0,1}	Whether to enable wandering path analysis.

		0: No 1: Yes (default)
RegionParam	< RegionParam >	Area parameters. For detailed parameters, please Refer to: Regional Parameters

2.6.15.6 **Mutil Loitering**

2.6.15.6.1 Acquisition Capability (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **multiLoiteringAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= multiLoiteringAbility
Description	Refer to URL Descriptions
Return	region=1 maxEdgeNum=8 maxRegionNum=8 uploadDetail=0 pathAnalysis=0 pathAnalysisMin=0 pathAnalysisMax=1 pathAnalysisUnit= targetSizeConstrain=0 targetSizeConstrainMin=0 targetSizeConstrainMax=1 targetSizeConstrainUnit= minTargetSize=0 minTargetSizeMin=0 minTargetSizeMax=1000000 minTargetSizeUnit=cm2 maxTargetSize=0 maxTargetSizeMin=0 maxTargetSizeMax=1000000 maxTargetSizeUnit=cm2 minTime=1 minTimeMin=5

	minTimeMax=60 minTimeUnit=S forbiddenType=1 minimum=1 minimumMin=1 minimumMax=99999 minimumUnit= maximum=1 maximumMin=1 maximumMax=99999 maximumUnit= draw=1 presetMode=0 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.15.6.2 Capability Parameter Description

region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int
maxRegionNum	Number of regions		int
uploadDetail	Upload Details 0: Not supported 1: Support	0-1	int
pathAnalysis	Analysis Path	0-1	int

	0: Not supported 1: Support		
pathAnalysisMin	Analyze the minimum path		int
pathAnalysisMax	Analyze the maximum path		
pathAnalysisUnit	Analysis Path Units		string
targetSizeConstrain	Limit target size 0: Not supported 1: Support	0-1	int
targetSizeConstrainMin	Limit the minimum target size		int
targetSizeConstrainMax	Limit the maximum size of the target		int
targetSizeConstrainUnit	Limit target size units		string
minTargetSize	Minimum target size 0: Support 1: Not supported	0-1	int
minTargetSizeMin	Minimum target size		int
minTargetSizeMax	Minimum target maximum size		int
minTargetSizeUnit	Minimum target unit		string
maxTargetSize	Maximum target size 0: Not supported 1: Support	0-1	int
maxTargetSizeMin	Maximum target minimum size		int
maxTargetSizeMax	Maximum target size		int
maxTargetSizeUnit	Maximum target unit		string

minTime	Minimum wandering time 0: Not supported 1: Support	0-1	int
minTimeMin	Minimum hovering time		int
minTimeMax	Minimum wandering time maximum		int
minTimeUnit	Minimum wandering time unit		string
forbiddenType	Limit the number of people 0: Not supported 1: Support	0-1	int
minimum	Minimum 0: Not supported 1: Support	0-1	int
minimumMin	Minimum value		int
minimumMax	Minimum Maximum		int
minimumUnit	Minimum unit		string
maximum	Maximum 0: Not supported 1: Support		int
maximumMin	Maximum value minimum		int
maximumMax	Maximum value		int
maximumUnit	Maximum value unit		string
draw	Video Stream Line Drawing 0: Not supported 1: Support	0-1	int
presetMode	Mode (PTZ device) 0: Not supported	0-1	int

	1: Support		
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		int
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.15.6.3 Get MultiLoitering Detection Parameters (getMultiLoiteringParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=**multiLoiteringParam** &cameraID=<cameraID>
Description	Refer to URL Descriptions
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=multiLoiteringParam&cameraID=1
Return	enableFlag=1 uploadDetail=0 draw=0 alarmOut=0 alarmRecord=1 alarmSMTP=1 alarmFTP=1

	forbiddenTypeEnable=1 minNum=1 maxNum=5 targetSizeEnable=1 targetMaxSize=100000 targetMinSize=1000 minLeftTime=10 pathAnalysis=1 regionCount=1 regionBegin=1 pointCount=3 pointBegin=1 pointX=31.220097 pointY=14.102564 next_pointURL=2 pointX=86.722488 pointY=39.316238 next_pointURL=3 pointX=31.220097 pointY=78.205132 pointEnd=3 regionEnd=1 weekDayCount=2 weekDayBegin=1 weekDay=1 startTime=25200 endTime=27000 next_weekDayURL=2 weekDay=3 startTime=46800 endTime=48600 weekDayEnd=2

2.6.15.6.4 Set MultiLoiteringParam

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **multiLoiteringParam** &cameraID=1[&<argument>=<value>...]
Description	Refer to URL Descriptions

Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=multiLoiteringParam&cameraID=1&enableFlag=1&draw=1&alarmOut=0&alarmRecord=0&alarmSMTP=1&alarmFTP=0&alarmSound=1&alarmSoundType=3&regionCount=2&regionBegin=1&minLoiteringTime=25&forbiddenTypeEnable=0&minNum=1&maxNum=5&pointCount=3&pointBegin=1&pointX=18.899521&pointY=32.051281&next_pointURL=2&pointX=19.856459&pointY=71.367523&next_pointURL=3&pointX=40.430622&pointY=23.504274&pointEnd=3&next_regionURL=2&minLoiteringTime=25&forbiddenTypeEnable=0&minNum=1&maxNum=5&pointCount=3&pointBegin=1&pointX=45.454544&pointY=70.512817&next_pointURL=2&pointX=59.569378&pointY=24.786325&next_pointURL=3&pointX=82.296654&pointY=79.487183&pointEnd=3&regionEnd=1&weekDayCount=29&weekDayBegin=1&weekDay=0&startTime=21600&endTime=23400&next_weekDayURL=2&weekDay=0&startTime=32400&endTime=36000&next_weekDayURL=3&weekDay=0&startTime=45000&endTime=55800&next_weekDayURL=4&weekDay=1&startTime=21600&endTime=23400&next_weekDayURL=5&weekDay=1&startTime=30600&endTime=32400&next_weekDayURL=6&weekDay=1&startTime=34200&endTime=36000&next_weekDayURL=7&weekDay=1&startTime=45000&endTime=46800&next_weekDayURL=8&weekDay=1&startTime=54000&endTime=55800&next_weekDayURL=9&weekDay=2&startTime=21600&endTime=23400&next_weekDayURL=10&weekDay=2&startTime=28800&endTime=30600&next_weekDayURL=11&weekDay=2&startTime=34200&endTime=36000&next_weekDayURL=12&weekDay=2&startTime=45000&endTime=46800&next_weekDayURL=13&weekDay=2&startTime=54000&endTime=55800&next_weekDayURL=14&weekDay=3&startTime=21600&endTime=23400&next_weekDayURL=15&weekDay=3&startTime=27000&endTime=28800&next_weekDayURL=16&weekDay=3&startTime=34200&endTime=36000&next_weekDayURL=17&weekDay=3&startTime=45000&endTime=54000&next_weekDayURL=18&weekDay=4&startTime=21600&endTime=23400&next_weekDayURL=19&weekDay=4&startTime=25200&endTime=27000&next_weekDayURL=20&weekDay=4&startTime=34200&endTime=36000&next_weekDayURL=21&weekDay=4&startTime=45000&endTime=46800&next_weekDayURL=22&weekDay=4&startTime=54000&endTime=55800&next_weekDayURL=23&weekDay=5&startTime=21600&endTime=25200&next_weekDayURL=24&weekDay=5&startTime=34200&endTime=36000&next_weekDayURL=25&weekDay=5&startTime=45000&endTime=46800&next_weekDayURL=26&weekDay=5&startTime=54000&endTime=55800&next_weekDayURL=27&weekDay=6&startTime=21600&endTime=23400&next_weekDayURL=28&weekDay=6&startTime=34200&endTime=36000&next_weekDayURL=29&weekDay=6&startTime=45000&endTime=55800&weekDayEnd=29
Return	OK (For other responses, Refer to General Response)

2.6.15.6.5 Loiteringing Detection Parameters

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 1: Normal mode 2: Preset point mode	1-2	int

presetCount	Number of preset positions (PTZ device)		i nt
resetBegin	Preset position start mark (PTZ device)		i nt
p resetID	Preset ID - 1 : Get all preset positions 0: Get or set normal mode > 0 : Get or set the specified preset position		i nt
enableFlag	switch 0: Off 1: On	0-1	int
clearArea	Upload Details 0: Normal setting 1: Delete area	0-1	Int
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int
uploadDetail	Upload Details 0: Off 1: On	0-1	int
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video	0-1	int

	0: Off 1: On		
alarmSMTP	Alarm Email 0: Off 1: On	0-1	int
alarmFTP	FTP Upload 0: Off 1: On	0-1	int
alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int
alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
targetSizeEnable	Limited size 0: Off 1: On	0-1	int
targetMaxSize	Limit the maximum size of the target		int
targetMinSize	Limit the minimum target size		int
targetSizeEnableV2	Limit target maximum and minimum switches 0: Off 1: On	0-1	Int

maxTargetWidth	Limit the maximum width of the target		int
maxTargetHeight	Limit target maximum height		int
minTargetWidth	Limit the minimum width of the target		int
minTargetHeight	Limit the minimum target height		int
minLoiteringTime	Minimum hovering time (seconds)		int
pathAnalysis	Wandering Path Analysis 0: Off 1: On	0-1	int
forbiddenTypeEnable	Limit the number of people 0: Off 1: On	0-1	int
minNum	Minimum number of people		int
maxNum	Limit the number of people		int
regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
pointCount	Number of coordinate points		int
pointBegin	Coordinate point start mark		int
pointX	Horizontal coordinate value		float
pointY	Vertical coordinate value		float

next_pointURL	The next point coordinate starts marking		int
pointEnd	Point coordinate end mark		int
next_regionURL	Next area parameter start mark		int
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int
next_PresetURL	Next preset position start mark		i nt
p resetEnd	Preset end mark		i nt

2.6.15.7 **Object Left (To be determined)**

2.6.15.7.1 Get object left detection parameters (getObjLeftParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **objLeftParam** &cameraID=<cameraID>
Description	Contains common parameters for intelligent analysis and item legacy parameters
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=objLeftParam&cameraID=1

Return	(IPC) enableFlag=1 uploadDetail=1 draw=1 alarmOut=0 alarmRecord=1 alarmSMTP=1 alarmFTP=1 regionCount=1 regionBegin=1 targetMaxSize=10000 targetMinSize=100 minLoiteringTime=5 pointCount=4 pointBegin=1 pointX=25.478470 pointY=25.641026 next_pointURL=2 pointX=69.976074 pointY=27.777779 next_pointURL=3 pointX=52.272728 pointY=70.940170 next_pointURL=4 pointX=12.320574 pointY=45.726494 pointEnd=4 regionEnd=1 weekDayCount=2 weekDayBegin=1 weekDay=1 startTime=19800 endTime=21600 next_weekDayURL=2 weekDay=2 startTime=46800 endTime=48600 weekDayEnd=2 (For other responses, Refer to General Response)

2.6.15.7.2 Set object left detection parameters (setObjLeftParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **objLeftParam** &cameraID=1[&<argument>=<value>...]
Description	Set parameter reference item legacy
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type=objLeftParam&cameraID=1&enableFlag=1&uploadDetail=1&draw=1&alarmOut=0&alarmRecord=1&alarmSMTP=1&alarmFTP=1&regionCount=1&regionBegin=1&targetMaxSize=10000&targetMinSize=100&minLoiteringTime=5&pointCount=4&pointBegin=1&pointX=25.478470&pointY=25.641026&next_pointURL=2&pointX=69.976074&pointY=27.777779&next_pointURL=3&pointX=52.272728&pointY=70.940170&next_pointURL=4&pointX=12.320574&pointY=45.726494&pointEnd=4&regionEnd=1&weekDayCount=2&weekDayBegin=1&weekDay=1&startTime=19800&endTime=21600&next_weekDayURL=2&weekDay=2&startTime=46800&endTime=48600&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.15.7.3 Item left behind parameters

Table 2-6-9-7-3-1

parameter	data	Description
IntelligentCommonParam	< IntelligentCommonParam >	Intelligent analysis of shared parameters. For specific URL, Refer to the list of common parameters for intelligent analysis.
uploadDetail	<int>{0,1}	Whether to upload target details. 0: No (default) 1: Yes
regionCount	<int>[0,32]	Number of detection areas. When setting, this flag must be carried to indicate the number of regions. For details, Refer to the group text rules

region Begin	<int>{1}	The region loop body starts marking. When setting, this flag must be included. There is no specific requirement for the value. For details, Refer to the group text rules
ObjLeftRegionParam	< ObjLeftRegionParam >	Individual zone parameters. For specific parameters, please Refer to: Items Left Behind Area Parameter List
next_ region URL	<int>{2,32}	Next area identifier. Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value. For details, Refer to the group text rules
region End	<int>[1,32]	The region loop body ends. When the configuration behavior is set, this flag must be carried, and the value is the number. For details, Refer to Group Text Rules

Item left area parameter list ObjLeftRegionParam:

Table 2-6-9-7-3-2

parameter	data	Description
targetMaxSize	<int>[10,40000]	Maximum size of the item (cm^2). 10000 (default)
targetMinSize	<int>[10,40000]	Minimum item size (cm^2). 100 (default)
minLeftTime	<int>[5,60]	Minimum carryover time (s). 5 (default)

RegionParam	< RegionParam >	Area parameters. For detailed parameters, please Refer to: Regional Parameters

2.6.15.8 **Object Removed (TBD)**

2.6.15.8.1 Get object removal detection parameters (getObjMovedParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **objMovedParam** &cameraID=<cameraID>
Description	Contains common parameters for intelligent analysis and object removal detection parameters
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=objMovedParam&cameraID=1
Return	(IPC) enableFlag=1 uploadDetail=1 draw=1 alarmOut=0 alarmRecord=1 alarmSMTP=1 alarmFTP=1 regionCount=1 regionBegin=1 targetMaxSize=10000 targetMinSize=100 minMovedTime=5 pointCount=3 pointBegin=1 pointX=35.047848 pointY=15.811966 next_pointURL=2 pointX=78.588516 pointY=49.572651 next_pointURL=3 pointX=14.952153 pointY=76.068375 pointEnd=3 regionEnd=1 weekDayCount=2

	weekDayBegin=1 weekDay=0 startTime=25200 endTime=27000 next_weekDayURL=2 weekDay=0 startTime=55800 endTime=57600 weekDayEnd=2 (For other responses, Refer to General Response)

2.6.15.8.2 Set object removal detection parameters (setObjMovedParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **objMovedParam** &cameraID=1[&<argument>=<value>...]
Description	Set parameters as per object removal detection
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type=objMovedParam&cameraID=1&enableFlag=1&uploadDetail=1&alarmOut=1&alarmRecord=1&alarmSMTP=1&alarmFTP=1&draw=1&regionCount=1&regionBegin=1&targetMaxSize=500&targetMinSize=50&minMovedTime=10&pointCount=4&pointBegin=1&pointX=4.4&pointY=10.10&next_pointURL=2&pointX=4.4&pointY=50.50&next_pointURL=3&pointX=25.25&pointY=50.50&next_pointURL=4&pointX=25.25&pointY=10.10&pointEnd=4&regionEnd=1&weekDayCount=2&weekDayBegin=1&weekDay=0&startTime=60&endTime=86400&next_weekDayURL=2&weekDay=1&startTime=360&endTime=12800&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.15.8.3 Object removal detection parameters

Table 2-6-9-8-3-1

parameter	data	Description
IntelligentCommonParam	< IntelligentCommonParam >	Intelligent analysis of shared parameters. For specific URL, Refer to the list of common parameters for intelligent analysis.
uploadDetail	<int>{0,1}	Whether to upload target details. 0: No (default) 1: Yes
regionCount	<int>[0,32]	Number of detection areas. When setting, this flag must be carried to indicate the number of regions. For details, Refer to the group text rules
region Begin	<int>{1}	The region loop body starts marking. When setting, this flag must be included. There is no specific requirement for the value. For details, Refer to the group text rules
ObjMovedRegionParam	< ObjMovedRegionParam >	Individual zone parameters. For specific parameters, please Refer to: Item removal area parameter list
next_ region URL	<int>[2,32]	Next area identifier. Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value. For details, Refer to the group text rules
region End	<int>[1,32]	The region loop body ends.

		When the configuration behavior is set, this flag must be carried, and the value is the number. For details, Refer to Group Text Rules

Object removal area parameter list ObjMovedRegionParam:

Table 2-6-9-8-3-2

parameter	type of data	Remark
targetMaxSize	<int>[10,40000]	Maximum size of the item (cm^2). 10000 (default)
targetMinSize	<int>[10,40000]	Minimum item size (cm^2). 100 (default)
minMovedTime	<int>[5,60]	Minimum time to remove (s). 5 (default)
RegionParam	< RegionParam >	Area parameters. For detailed parameters, please Refer to: Regional Parameters

2.6.15.9 **Abnormal Speed (TBD)**

2.6.15.9.1 Get Abnormal Speed Detection Parameters (getAbnormalSpeedParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=**abnormalSpeedParam** &cameraID=<cameraID>
Description	Contains common parameters for intelligent analysis and abnormal speed detection parameters
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=abnormalSpeedParam&cameraID =1
Return	(IPC) enableFlag=1 uploadDetail=1 draw=1 alarmOut=0 alarmRecord=1

	alarmSMTP=1 alarmFTP=1 regionCount=1 regionBegin=1 targetTypeEnable=1 targetType=1 targetSizeEnable=1 targetMaxSize=100000 targetMinSize=1000 minSpeed=0 maxSpeed=10 pointCount=3 pointBegin=1 pointX=17.822966 pointY=23.504274 next_pointURL=2 pointX=82.655502 pointY=23.504274 next_pointURL=3 pointX=41.746410 pointY=92.735046 pointEnd=3 regionEnd=1 weekDayCount=2 weekDayBegin=1 weekDay=2 startTime=21600 endTime=23400 next_weekDayURL=2 weekDay=2 startTime=63000 endTime=64800 weekDayEnd=2 (For other responses, Refer to General Response)

2.6.15.9.2 Set abnormal speed detection parameters (setAbnormalSpeedParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **abnormalSpeedParam** &cameraID=1[&<argument>=<value>...]
De	Set parameters to refer to abnormal speed detection

scription	
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type=abnormalSpeedParam&cameraID=1&enableFlag=1&uploadDetail=1&draw=1&alarmOut=0&alarmRecord=1&alarmSMTP=1&alarmFTP=1&regionCount=1&regionBegin=1&targetTypeEnable=1&targetType=1&targetSizeEnable=1&targetMaxSize=100000&targetMinSize=1000&minSpeed=0&maxSpeed=10&pointCount=3&pointBegin=1&pointX=17.822966&pointY=23.504274&next_pointURL=2&pointX=82.655502&pointY=23.504274&next_pointURL=3&pointX=41.746410&pointY=92.735046&pointEnd=3&regionEnd=1&weekDayCount=2&weekDayBegin=1&weekDay=2&startTime=21600&endTime=23400&next_weekDayURL=2&weekDay=2&startTime=63000&endTime=64800&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.15.9.3 Abnormal speed detection parameters

Table 2-6-9-9-3-1

parameter	data	Description
IntelligentCommonParam	< IntelligentCommonParam >	Intelligent analysis of shared parameters. For details on the specific URL, Refer to: List of common parameters for intelligent analysis
uploadDetail	<int>{0,1}	Whether to upload target details. 0: No (default) 1: Yes
regionCount	<int>[0,32]	Number of detection areas. When setting, this flag must be carried to indicate the number of regions. For details, Refer to the group text rules
region Begin	<int>{1}	The region loop body starts marking. When setting, this flag must be included. There is no specific requirement for the

		value. For details, Refer to the group text rules
AbnormalSpeed RegionParam	< AbnormalSpeed RegionParam >	Individual zone parameters. For specific parameters, please Refer to: Abnormal speed area parameter list
next_ region URL	<int>[2,32]	Next area identifier. Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value. For details, Refer to the group text rules
region End	<int>[1,32]	The region loop body ends. When the configuration behavior is set, this flag must be carried, and the value is the number. For details, Refer to Group Text Rules

AbnormalSpeedRegionParam:

Table 2-6-9-9-3-2

parameter	data	Description
targetTypeEnable	<int>{0,1}	Whether to limit the target type. 0: No (default) 1: Yes
targetType	<int>{0,1,2}	The target qualification type. 0: person or car (default) 1 person 2: Car
targetSizeEnable	<int>{0,1}	Whether to limit the target size. 0: No (default)

		1: Yes
targetMaxSize	<int>[0,1000000]	Limit the maximum target size (cm^2). 100000 (default)
targetMinSize	<int>[0, 1000000]	Limit the minimum target size (cm^2). 1000 (default)
minSpeed	<int>[0,1000]	Minimum movement speed (m/s). 0 (default)
maxSpeed	<int>[0,1000]	Maximum movement speed (m/s). 10(default)
RegionParam	< RegionParam >	Area parameters. For detailed parameters, please Refer to: Regional Parameters

2.6.15.10 **Converse**

2.6.15.10.1 Acquisition Capability (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **converseAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= converseAbility
Description	Refer to URL Descriptions
Return	region=1 maxEdgeNum=8 maxRegionNum=8 uploadDetail=0 targetTypeConstrain=1 targetTypeConstrainMin=0 targetTypeConstrainMax=1 targetTypeCount=3 targetTypeBegin=1 targetType=0 next_TargetTypeURL=2 targetType=1 next_TargetTypeURL=3 targetType=2 targetTypeEnd=1

	targetSizeConstrain=0 targetSizeConstrainMin=0 targetSizeConstrainMax=1 targetSizeConstrainUnit= minTargetSize=1 minTargetSizeMin=0 minTargetSizeMax=1000000 minTargetSizeUnit=cm2 maxTargetSize=1 maxTargetSizeMin=0 maxTargetSizeMax=1000000 maxTargetSizeUnit=cm2 converseAngle=1 converseAngleMin=0.000000 converseAngleMax=360.000000 converseAngleUnit=degree draw=1 presetMode=0 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.15.10.2 Description of capacity parameters

URL	Parameter Description	scope	type of data
region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int

maxRegionNum	Number of regions		int
uploadDetail	Upload Details 0: Not supported 1: Support	0-1	int
targetTypeConstrain	Limit upload types 0: Not supported 1: Support	0-1	int
targetTypeConstrainMin	Limit the minimum value of upload type		int
targetTypeConstrainMax	Limit the maximum value of upload type		int
targetTypeCount	Limit the number of target types		int
targetTypeBegin	Qualified target type start identifier		int
targetType	Target Type 0: person or car 1 person 2: Car	0-2	int
next_TargetTypeURL	Next item defines the target type start mark		int
targetTypeEnd	Qualified target type end marker		int
targetSizeConstrain	Limit target size 0: Not supported 1: Support	0-1	int

targetSizeConstrainMin	Limit the minimum target size		int
targetSizeConstrainMax	Limit the maximum size of the target		int
targetSizeConstrainUnit	Limit target size units		string
minTargetSize	Minimum target size 0: Support 1: Not supported	0-1	int
minTargetSizeMin	Minimum target size		int
minTargetSizeMax	Minimum target maximum size		int
minTargetSizeUnit	Minimum target unit		string
maxTargetSize	Maximum target size 0: Not supported 1: Support	0-1	int
maxTargetSizeMin	Maximum target minimum size		int
maxTargetSizeMax	Maximum target size		int
maxTargetSizeUnit	Maximum target unit		string
converseAngle	Retrograde Angle 0: Not supported 1: Support	0-1	int

converseAngleMin	Minimum retrograde angle		float
converseAngleMax	Maximum retrograde angle		float
converseAngleUnit	Retrograde angle unit		string
draw	Video Stream Line Drawing 0: Not supported 1: Support	0-1	int
presetMode	Mode (PTZ device) 0: Not supported 1: Support	0-1	int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		int
next_AlarmLinkageURL	Next linkage alarm start mark		int

alarmLinkageEnd	Linkage alarm end mark		int

2.6.15.10.3 Get Converse Detection Parameters (getConverseParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **converseParam** &cameraID =<cameraID>
Description	Refer to URL Descriptions
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=converseParam&cameraID=1
Return	(IPC) enableFlag=1 uploadDetail=1 draw=1 alarmOut=0 alarmRecord=1 alarmSMTP=1 alarmFTP=1 regionCount=1 regionBegin=1 targetTypeEnable=1 targetType=0 targetSizeEnable=1 targetMaxSize=100000 targetMinSize=1000 converseAngle=359.999939 pointCount=3 pointBegin=1 pointX=34.090908 pointY=25.213675 next_pointURL=2 pointX=16.387560 pointY=64.102562 next_pointURL=3 pointX=75.478470 pointY=21.367521 pointEnd=3 regionEnd=1 weekDayCount=2

	weekDayBegin=1 weekDay=2 startTime=18000 endTime=19800 next_weekDayURL=2 weekDay=2 startTime=41400 endTime=43200 weekDayEnd=2

2.6.15.10.4 Set Converse Detection Parameters (setConverseParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **converseParam** &cameraID=1[&<argument>=<value>...]
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=converseParam&cameraID=1&enableFlag=1&draw=0&alarmOut=1&alarmRecord=1&alarmSMTP=0&alarmFTP=1&alarmSound=0&alarmSoundType=0&regionCount=3&regionBegin=1&targetTypeEnable=0&targetType=1&targetMaxSize=100000&targetMinSize=1000&ConverseAngle=0.000000&pointCount=4&pointBegin=1&pointX=11.722488&pointY=37.179485&next_pointURL=2&pointX=12.200957&pointY=78.205132&next_pointURL=3&pointX=34.210526&pointY=73.931625&next_pointURL=4&pointX=32.057415&pointY=39.743591&pointEnd=4&next_regionURL=2&targetTypeEnable=0&targetType=1&targetMaxSize=100000&targetMinSize=1000&ConverseAngle=0.000000&pointCount=4&pointBegin=1&pointX=57.655502&pointY=29.059830&next_pointURL=2&pointX=97.368423&pointY=33.760685&next_pointURL=3&pointX=87.320572&pointY=88.888885&next_pointURL=4&pointX=56.459332&pointY=77.777779&pointEnd=4&next_regionURL=3&targetTypeEnable=0&targetType=1&targetMaxSize=100000&targetMinSize=1000&ConverseAngle=0.000000&pointCount=3&pointBegin=1&pointX=40.669857&pointY=16.239317&next_pointURL=2&pointX=43.301434&pointY=40.598289&next_pointURL=3&pointX=53.110046&pointY=6.837607&pointEnd=3&regionEnd=1&weekDayCount=14&weekDayBegin=1&weekDay=0&startTime=25200&endTime=43200&next_weekDayURL=2&weekDay=0&startTime=50400&endTime=68400&next_weekDayURL=3&weekDay=1&startTime=41400&endTime=43200&next_weekDayURL=4&weekDay=1&startTime=66600&endTime=68400&next_weekDayURL=5&weekDay=2&startTime=41400&endTime=43200&next_weekDayURL=6&weekDay=2&startTime=64800&endTime=66600&next_weekDayURL=7&weekDay=3&startTime=25200&endTime=43200&next_weekDayURL=8&weekDay=3&startTime=59400&endTime=64800&next_weekDayURL=9&weekDay=4&startTime=25200&endTime=27000&next_weekDayURL=10&weekDay=4&startTime=54000&endTime=59400&next_weekDayURL=11&weekDay=5&startTime=25200&endTime=27000&next_weekDayURL=12&weekDay=5&startTime=50400&endTime=54000&next_weekDayURL=13&weekDay=6&startTime=25200&endTime=43200&next_weekDayURL=14&weekDay=6&startTime=50400&endTime=68400&weekDayEn

	d=14
Return	OK (For other responses, Refer to General Response)

2.6.15.10.5 Retrograde detection parameters

IPC

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 1: Normal mode 2: Preset point mode	1-2	int
presetCount	Number of preset positions (PTZ device)		i nt
resetBegin	Preset position start mark (PTZ device)		i nt
p resetID	Preset ID - 1 : Get all preset positions 0: Get or set normal mode > 0 : Get or set the specified preset position		i nt
enableFlag	switch 0: Off 1: On	0-1	int
clearArea	Upload Details 0: Normal setting 1: Delete area	0-1	Int

draw	Video Stream Line Drawing 0: Off 1: On	0-1	int
uploadDetail	Upload Details 0: Off 1: On	0-1	int
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On	0-1	int
alarmSMTP	Alarm Email 0: Off 1: On	0-1	int
alarmFTP	FTP Upload 0: Off 1: On	0-1	int
alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int
alarmLED	LED Alarm 0: Off	0-1	int

	1: On		
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
pointCount	Number of coordinate points		int
pointBegin	Coordinate point start mark		int
pointX	Horizontal coordinate value		float
pointY	Vertical coordinate value		float
next_pointURL	The next point coordinate starts marking		int
pointEnd	Point coordinate end mark		int
next_regionURL	Next area parameter start mark		int
targetTypeEnable	Limit target type 0: Off 1: On	0-1	int
targetType	Qualified Type 0: person or car 1 person 2: Car	0-2	int
targetSizeEnable	Limited size	0-1	int

	0: Off 1: On		
targetMaxSize	Limit the maximum size of the target		int
targetMinSize	Limit the minimum target size		int
targetSizeEnableV2	Limit target maximum and minimum switches 0: Off 1: On	0-1	Int
maxTargetWidth	Limit the maximum width of the target		int
maxTargetHeight	Limit target maximum height		int
minTargetWidth	Limit the minimum width of the target		int
minTargetHeight	Limit the minimum target height		int
ConverseAngle	Retrograde Angle		float
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time		int

	start mark		
weekDayEnd	Arming end mark		int
next_PresetURL	Next preset position start mark		i nt
p resetEnd	Preset end mark		i nt

2.6.15.11 **Illegal Parking (pending)**

2.6.15.11.1 Get illegal parking detection parameters (getNoParkingParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **noParkingParam** &cameraID=<cameraID>
Description	Contains common parameters for intelligent analysis and illegal parking detection parameters
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=noParkingParam&cameraID=1
Return	(NVR) enableFlag=1 uploadDetail=1 draw=1 alarmOut=0 alarmRecord=1 alarmSMTP=1 alarmFTP=1 regionCount=1 regionBegin=1 targetTypeEnable=1 targetType=0 targetSizeEnable=1 targetMaxSize=100000 targetMinSize=1000 converseAngle=359.999939 pointCount=3 pointBegin=1 pointX=34.090908 pointY=25.213675 next_pointURL=2

	pointX=16.387560 pointY=64.102562 next_pointURL=3 pointX=75.478470 pointY=21.367521 pointEnd=3 regionEnd=1 weekDayCount=2 weekDayBegin=1 weekDay=2 startTime=18000 endTime=19800 next_weekDayURL=2 weekDay=2 startTime=41400 endTime=43200 weekDayEnd=2 (For other responses, Refer to General Response)

2.6.15.11.2 Set illegal parking detection parameters (setNoParkingParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **noParkingParam** &cameraID=1[&<argument>=<value>...]
Description	Set parameters as per Illegal Parking Detection
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type=noParkingParam&cameraID=1&enableFlag=1&uploadDetail=1&draw=1&alarmOut=0&alarmRecord=1&alarmSMTP=1&alarmFTP=1&regionCount=1&regionBegin=1&targetMaxSize=1000000&targetMinSize=1000&minLeftTime=5&pointCount=3&pointBegin=1&pointX=23.086124&pointY=26.068377&next_pointURL=2&pointX=79.784691&pointY=28.205128&next_pointURL=3&pointX=36.483253&pointY=73.076920&pointEnd=3&regionEnd=1&weekDayCount=2&weekDayBegin=1&weekDay=1&startTime=12600&endTime=14400&next_weekDayURL=2&weekDay=2&startTime=39600&endTime=41400&weekDayEnd=2

Return	OK (For other responses, Refer to General Response)

2.6.15.11.3 Illegal parking parameters

Table 2-6-9-11-3-1

parameter	type of data	Remark
IntelligentCommonParam	< IntelligentCommonParam >	Intelligent analysis of shared parameters. For specific URL, Refer to: List of common parameters for intelligent analysis
uploadDetail	<int>{0,1}	Whether to upload target details. 0: No (default) 1: Yes
regionCount	<int>[0,32]	Number of detection areas. When setting, this flag must be carried to indicate the number of regions. For details, Refer to the group text rules
region Begin	<int>{1}	The region loop body starts marking. When setting, this flag must be included. There is no specific requirement for the value. For details, Refer to the group text rules
NoParkingRegionParam	< NoParkingRegionParam >	Individual zone parameters. For specific parameters, please Refer to: Illegal parking area parameter list
next_ region URL	<int>[2,32]	Next area identifier. Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific

		requirement for the value. For details, Refer to the group text rules
region End	<int>[1,32]	The region loop body ends. When the configuration behavior is set, this flag must be carried, and the value is the number. For details, Refer to Group Text Rules

Illegal parking area parameter list NoParkingRegionParam:

Table 2-6-9-11-3-2

parameter	type of data	Remark
targetMaxSize	<int>[0,1000000]	Maximum size of the vehicle (cm^2). 100000 (default)
targetMinSize	<int>[0,1000000]	Minimum vehicle size (cm^2). 1000 (default)
minLeftTime	<int>[5,60]	Minimum vehicle dwell time (s). 5 (default)
RegionParam	< RegionParam >	Area parameters. For detailed parameters, please Refer to: Regional Parameters

2.6.15.12 **Signal Bad (pending) (IPC)**

2.6.15.12.1 Get video signal anomaly detection parameters (getSignalBadParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **signalBadParam** &cameraID=<cameraID>
Description	Contains intelligent analysis of common parameters and signal anomaly parameters
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=signalBadParam&cameraID=1

Return	enableFlag=1 alarmOut=0 alarmRecord=1 alarmSMTP=1 alarmFTP=1 weekDayCount=2 weekDayBegin=1 weekDay=0 startTime=25200 endTime=27000 next_weekDayURL=2 weekDay=3 startTime=45000 endTime=46800 weekDayEnd=2 (For other responses, Refer to General Response)

2.6.15.12.2 Set video signal anomaly detection parameters (setSignalBadParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **signalBadParam** &cameraID=1[&<argument>=<value>...]
Description	Setting parameter reference signal abnormality
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type=signalBadParam&cameraID=1&enableFlag=1&alarmOut=0&alarmRecord=1&alarmSMTP=1&alarmFTP=1&weekDayCount=2&weekDayBegin=1&weekDay=0&startTime=25200&endTime=27000&next_weekDayURL=2&weekDay=3&startTime=45000&endTime=46800&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.15.12.3 Signal abnormality parameters

Table 2-6-9-12-3-1

parameter	type of data	Remark

IntelligentCommonParam	< IntelligentCommonParam >	Intelligent analysis of shared parameters. For specific URL, Refer to: List of common parameters for intelligent analysis
uploadDetail	<int>{0,1}	Whether to upload target details. 0: No (default) 1: Yes

2.6.15.13 **People Counting (ipc excluding the lite series/NVR)**

2.6.15.13.1 Acquisition Capability (IPC)

URL	**http** ://<ip>/cgi-bin/param.cgi?action=get&type=statisticAbility
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=statisticAbility
Description	Refer to URL Descriptions
Return	presetMode=0 regionTypeCount=1 regionTypeBegin=1 regionType=1 regionTypeEnd=1 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.15.13.2 Capability Parameter Description (IPC)

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 0: Not supported 1: Support	0-1	int
regionTypeCount	Number of area types		int
regionTypeBegin	Area type start identifier		int
regionType	Area Type 1: Line 2: Rectangle		int
next_regionTypeURL	Next area type start mark		int
regionTypeEnd	End of area type		int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm		int

	14: White light alarm		
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.15.13.3 Get people counting parameters (getStisticsParam)

URL	http:// <servername> **/cgi-bin/param.cgi?action=get&type=getStatisticsCfg&cameraID= <cameraID>**
Description	Refer to URL Descriptions
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=getStatisticsCfg&cameraID=1
Return	enableFlag=1 alarmOut=0 alarmRecord=0 alarmSMTP=1 alarmFTP=0 alarmSound=1 alarmSoundType=4 OSDEnable=0 ClearStatisticsInterval=6 CustomClearTime=05:12:00 RegionType=1 CorrectionEnable=1 CorrectionValue=35 AlarmEnable=0 AlarmThreshold=1008 lineCrossStartX=79.779999 lineCrossStartY=7.260000 lineCrossEndX=81.699997 lineCrossEndY=51.709999 weekDayCount=4 weekDayBegin=1 weekDay=0 startTime=7200 endTime=30600

	next_weekDayURL=2 weekDay=0 startTime=61200 endTime=75600 next_weekDayURL=3 weekDay=6 startTime=18000 endTime=54000 next_weekDayURL=4 weekDay=6 startTime=81000 endTime=86400 weekDayEnd=4 (For other responses, Refer to General Response)

2.6.15.13.4 Set people counting parameters (setStisticsParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **setStatisticsCfg &** cameraID=<cameraID> [&<argument>=<value>...]
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=setStatisticsCfg&cameraID=1&enableFlag=1&alarmOut=0&alarmRecord=0&alarmSMTP=1&alarmFTP=0&alarmSound=1&alarmSoundType=4&OSDEnable=0&ClearStatisticsInterval=6&CustomClearTime=05:12:00&RegionType=1&CorrectionEnable=1&CorrectionValue=35&AlarmEnable=0&AlarmThreshold=1008&lineCrossStartX=79.779999&lineCrossStartY=7.260000&lineCrossEndX=81.699997&lineCrossEndY=51.709999&weekDayCount=4&weekDayBegin=1&weekDay=0&startTime=7200&endTime=30600&next_weekDayURL=2&weekDay=0&startTime=61200&endTime=75600&next_weekDayURL=3&weekDay=6&startTime=18000&endTime=54000&next_weekDayURL=4&weekDay=6&startTime=81000&endTime=86400&weekDayEnd=4
Return	OK (For other responses, Refer to General Response)

2.6.15.13.5 People counting parameters

(IPC)

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 1: Normal mode 2: Preset point mode	1-2	int
presetCount	Number of preset positions (PTZ device)		i nt
resetBegin	Preset position start mark (PTZ device)		i nt
p resetID	Preset ID - 1 : Get all preset positions 0: Get or set normal mode > 0 : Get or set the specified preset position		i nt
enableFlag	switch 0: Off 1: On	0-1	int
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On	0-1	int
alarmSMTP	Alarm Email 0: Off	0-1	int

	1: On		
alarmFTP	FTP Upload 0: Off 1: On	0-1	int
alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int
alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
OSDEnable	Enable OSD 0: Off 1: On		int
ClearStatisticsInterval	People counting clear interval 1:10 minutes 2: Half an hour 3: 1 hour 4: 12 hours 5: One day 6: Custom time (HH:mm)		int
CustomClearTime	Custom clearing time (ClearStatisticsInterval = 6 is effective)		string
RegionType	Area Type 1: Line	1-2	int

	2: Rectangle		
CorrectionEnable	Configuring Calibration Values 0: Off 1: On	0-1	int
CorrectionValue	Statistical calibration values		int
AlarmEnable	Overcrowding alarm 0: Off 1: On	0-1	int
AlarmThreshold	Alarm threshold		int
A2BOSDInfo	OSD Information		string
regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
LineCrossStartX	Starting point X coordinate (RegionType=1 efficient)		float
LineCrossStart Y	Starting point Y coordinate (RegionType=1 efficient)		float
LineCross End X	End point X coordinate (RegionType=1 efficient)		float
LineCross EndY	End point Y coordinate (RegionType=1 efficient)		float
pointCount	Number of coordinate points (RegionType= 2 efficient)		int
pointBegin	Coordinate point start mark (RegionType= 2		int

	efficient)		
pointX	Horizontal coordinate value (RegionType= 2 efficient)		float
pointY	Vertical coordinate value (RegionType= 2 efficient)		float
next_pointURL	The next point coordinate starts marking (RegionType= 2 efficient)		int
pointEnd	Point coordinate end mark (RegionType= 2 efficient)		int
next_regionURL	Next area parameter start mark		int
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int
next_PresetURL	Next preset position start mark		i nt
p resetEnd	Preset end mark		i nt

People counting parameters (NVR)

parameter	type of data	Remark
IntelligentCommonParam	< IntelligentCommonParam >	Intelligent analysis of shared parameters. For specific URL, Refer to: List of common parameters for intelligent analysis
enableFlag	<int>{0,1}	People counting function switch. 0: Off 1: On
OSDEnable	<int>{0,1}	Whether to display personnel statistics on the image screen 0: No 1: Yes
ClearStatisticsInterval	<int>{1,5}	The interval for clearing the people statistics data. 1: 10 minutes 2: 30 minutes 3: 1 hour 4: 12 hours 5: 24 hours
CorrectionEnable	<int>{0,1}	Whether to configure calibration value 0: No 1: Yes
CorrectionValue	<int>{ -10000 , 999999 }	Calibration value only affects the data displayed on the OSD, not the actual parameters
Detection area description	A(LineCrossStartX , LineCrossStart Y) B(LineCross End X , LineCross End Y)	A->B: outbound direction A->B: Inbound direction
LineCrossStartX	< float >{0,100}	The X coordinate of the starting point of the reference line on the image screen, with the left vertex as the origin
LineCrossStart Y	< float >{0,100}	The Y coordinate of the starting point of the reference line on the image screen, with the left vertex as the origin

LineCross End X	< float >{0,100}	The X coordinate of the end point of the reference line on the image screen, with the left vertex as the origin
LineCross EndY	< float >{0,100}	The Y coordinate of the end point of the reference line on the image screen, with the left vertex as the origin
AlarmEnable	<int>{0,1}	Whether to enable overcrowding alarm 0: No 1: Yes
AlarmThreshold	<int>{ -10000 , 999999 }	Overcrowding alarm threshold
weekDayBegin	<int>	Scheduled time start sign
weekDay	<int>{0,6}	which day 0-6,0 for Sunday
startTime [1 …]	<int>{0,86400}	Start time
endTime [1 …]	<int>{0,86400}	End time point. There can be multiple time periods in a day, such as startTime 1, endTime 1, startTime 2, endTime 2 .... The time value must be a multiple of 1800, and the two time periods cannot be repeated.
next_weekDayURL	<int>{2,7}	Next scheduled time URL Starts from 1. If the value is 1, it means the following parameter is the second one.
weekDayEnd	<int>{1,7}	The planned time ends. Fill in the number of days for deployment.

2.6.15.13.6 Get the result of the headcount statistics (getStisticsInfo) (IPC excluding the lite series)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=getStatistics **Info & cameraID** =<cameraID> [&<argument>=<value>...]
Description	Returns the result of the people counting. For parameters, Refer to the parameters of the people counting result .
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=statisticsInfo&cameraID=1&QueryType=2&QueryTimeYear=2020&QueryTimeMon=5&QueryTimeDay=13
Return	StatisticsNumber=2 StatisticsTime=2020-05-14 00:00:00 EnterNumber=47 OutNumber=53 StatisticsTime=2020-05-15 00:00:00 EnterNumber=337 OutNumber=543

2.6.15.13.7 Parameters of people counting results (IPC excluding the lite series)

Table 2-6-9-13-5

parameter	type of data	Remark
QueryType	<int>{1,4}	Query Type 1: Query by day. You need to enter the specific day. The Returned statistics are for each hour of the day, up to 24 records. 2. To query by month, you need to enter the specific month, and the Returned statistics are for each day of the month, up to 31 records. 3. To query by year, you need to enter a specific year, and the Returned statistics are for each month of that year, up to 12 records. 4. Real-time query, input the current time,

		and Return the statistical records of each hour from the device startup time to the current time point on that day, up to 24 records
QueryTimeYear	<int>{2000,3000}	Year of query
QueryTimeMon	<int>{1,12}	Query month
QueryTimeDay	<int>{1,31}	Query days
StatisticsNumber	<int>{0,50000}	Number of people counting records
StatisticsTime	<string>	Statistics Time Example: 2020-05-14 0 8 :0 5 :0 9
EnterNumber	<int>	Number of people entering
OutNumber	<int>	Number of people going out

2.6.15.14 **Enter Area Detection (IPC excluding the lite series/NVR)**

2.6.15.14.1 Acquisition Capability (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **enterAreaAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= enterAreaAbility
Description	Refer to URL Descriptions
Return	region=1 maxEdgeNum=8 maxRegionNum=8 uploadDetail=0 targetTypeConstrain=1 targetTypeConstrainMin=0 targetTypeConstrainMax=1 targetTypeCount=3 targetTypeBegin=1 targetType=0 next_TargetTypeURL=2 targetType=1 next_TargetTypeURL=3

	targetType=2 targetTypeEnd=1 targetSizeConstrain=0 targetSizeConstrainMin=0 targetSizeConstrainMax=1 targetSizeConstrainUnit= minTargetSize=0 minTargetSizeMin=0 minTargetSizeMax=1000000 minTargetSizeUnit=cm2 maxTargetSize=0 maxTargetSizeMin=0 maxTargetSizeMax=1000000 maxTargetSizeUnit=cm2 sensitivityCount=5 sensitivityBegin=1 sensitivity=1 next_SensitivityURL=2 sensitivity=2 next_SensitivityURL=3 sensitivity=3 next_SensitivityURL=4 sensitivity=4 next_SensitivityURL=5 sensitivity=5 sensitivityEnd=1 draw=1 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.15.14.2 Capability Parameter Description

URL	Parameter Description	scope	type of data
region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int
maxRegionNum	Number of regions		int
uploadDetail	Upload Details 0: Not supported 1: Support	0-1	int
targetTypeConstrain	Limit upload types 0: Not supported 1: Support	0-1	int
targetTypeConstrainMin	Limit the minimum value of upload type		int
targetTypeConstrainMax	Limit the maximum value of upload type		int
targetTypeCount	Limit the number of target types		int
targetTypeBegin	Qualified target type start identifier		int
targetType	Target Type 0: person or car 1 person	0-2	int

	2: Car		
next_TargetTypeURL	Next item defines the target type start mark		int
targetTypeEnd	Qualified target type end marker		int
targetSizeConstrain	Limit target size 0: Not supported 1: Support	0-1	int
targetSizeConstrainMin	Limit the minimum target size		int
targetSizeConstrainMax	Limit the maximum size of the target		int
targetSizeConstrainUnit	Limit target size units		string
minTargetSize	Minimum target size 0: Support 1: Not supported	0-1	int
minTargetSizeMin	Minimum target size		int
minTargetSizeMax	Minimum target maximum size		int
minTargetSizeUnit	Minimum target unit		string
maxTargetSize	Maximum target size 0: Not supported 1: Support	0-1	int
maxTargetSizeMin	Maximum target		int

	minimum size		
maxTargetSizeMax	Maximum target size		int
maxTargetSizeUnit	Maximum target unit		string
sensitivityCount	Sensitivity number		int
sensitivityBegin	Sensitivity start mark		int
sensitivity	Sensitivity		int
next_SensitivityURL	Next sensitivity start mark		int
sensitivityEnd	Sensitivity end mark		int
draw	Video Stream Line Drawing 0: Not supported 1: Support	0-1	int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm		int

	11: LED alarm 14: White light alarm		
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.15.14.3 Get the parameters for entering the area

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **enterAreaParam** &cameraID=<cameraID> (NVR must carry the channel number)
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=enterAreaParam&cameraID=2
Return	enableFlag=1 draw=1 sensitivity=3 alarmOut=1 alarmRecord=1 alarmSMTP=1 alarmFTP=1 alarmSound=1 alarmSoundType=7 regionCount=1 regionBegin=1 pointCount=3 pointBegin=1 pointX=36.124401 pointY=43.162392 next_pointURL=2 pointX=37.559807 pointY=68.376068 next_pointURL=3 pointX=51.196171 pointY=43.589745 pointEnd=3

	regionEnd=1 weekDayCount=1 weekDayBegin=1 weekDay=0 startTime=0 endTime=1800 weekDayEnd=1

2.6.15.14.4 Set entry area parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=enterAreaParam **&** cameraID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=enterAreaParam& enableFlag=1&uploadDetail=0&draw=1&sensitivity=5&alarmOut=1&alarmRecord=1&alarmSMTP=1&alarmFTP=1&alarmSound=1&alarmSoundType=0&regionCount=1&regionBegin=1&targetTypeEnable=1&targetType=0&targetSizeEnable=0&targetMaxSize=100000&targetMinSize=1000&pointCount=3&pointBegin=1&pointX=36.961723&pointY=66.239319&next_pointURL=2&pointX=36.483253&pointY=86.324783&next_pointURL=3&pointX=50.358852&pointY=86.324783&pointEnd=3&regionEnd=1&weekDayCount=2&weekDayBegin=1&weekDay=0&startTime=0&endTime=1800&next_weekDayURL=2&weekDay=1&startTime=1800&endTime=3600&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.15.14.5 Meaning of entry area parameters

(IPC)

URL	Parameter Description	scope	type of data
enableFlag	switch 0: Off 1: On	0-1	int
draw	Video Stream Line Drawing	0-1	int

	0: Off 1: On		
clearArea（IPC）	Upload Details 0: Normal setting 1: Delete area	0-1	Int
uploadDetail	Upload Details 0: Off 1: On	0-1	int
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On	0-1	int
alarmSMTP	Alarm Email 0: Off 1: On	0-1	int
alarmFTP	FTP Upload 0: Off 1: On	0-1	int
alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int
alarmLED	LED Alarm 0: Off	0-1	int

	1: On		
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
sensitivity	Sensitivity		int
targetTypeEnable	Limit target type 0: Off 1: On	0-1	int
targetType	Qualified Type 0: person or car 1 person 2: Car	0-2	int
targetSizeEnable	Limited size 0: Off 1: On	0-1	int
targetMaxSize	Limit the maximum size of the target		int
targetMinSize	Limit the minimum target size		int
targetSizeEnableV2	Limit target maximum and minimum switches 0: Off 1: On	0-1	Int
maxTargetWidth	Limit the maximum width of the target		int
maxTargetHeight	Limit target maximum height		int
minTargetWidth	Limit the minimum width of the target		int
minTargetHeight	Limit the minimum target height		int

regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
pointCount	Number of coordinate points		int
pointBegin	Coordinate point start mark		int
pointX	Horizontal coordinate value		float
pointY	Vertical coordinate value		float
next_pointURL	The next point coordinate starts marking		int
pointEnd	Point coordinate end mark		int
next_regionURL	Next area parameter start mark		int
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int

2.6.15.15 **Leave Area Detection (IPC excluding the lite series/NVR)**

2.6.15.15.1 Acquisition Capability (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **leaveAreaAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= leaveAreaAbility
Description	Refer to URL Descriptions

Return	region=1 maxEdgeNum=8 maxRegionNum=8 uploadDetail=0 targetTypeConstrain=1 targetTypeConstrainMin=0 targetTypeConstrainMax=1 targetTypeCount=3 targetTypeBegin=1 targetType=0 next_TargetTypeURL=2 targetType=1 next_TargetTypeURL=3 targetType=2 targetTypeEnd=1 targetSizeConstrain=0 targetSizeConstrainMin=0 targetSizeConstrainMax=1 targetSizeConstrainUnit= minTargetSize=0 minTargetSizeMin=0 minTargetSizeMax=1000000 minTargetSizeUnit=cm2 maxTargetSize=0 maxTargetSizeMin=0 maxTargetSizeMax=1000000 maxTargetSizeUnit=cm2 sensitivityCount=5 sensitivityBegin=1 sensitivity=1 next_SensitivityURL=2 sensitivity=2 next_SensitivityURL=3 sensitivity=3 next_SensitivityURL=4 sensitivity=4 next_SensitivityURL=5 sensitivity=5 sensitivityEnd=1 draw=1 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2

	next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.15.15.2 Capability Parameter Description

URL	Parameter Description	scope	type of data
region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int
maxRegionNum	Number of regions		int
uploadDetail	Upload Details 0: Not supported 1: Support	0-1	int
targetTypeConstrain	Limit upload types 0: Not supported 1: Support	0-1	int
targetTypeConstrainMin	Limit the minimum value of upload type		int
targetTypeConstrainMax	Limit the maximum value of upload type		int
targetTypeCount	Limit the number of target types		int

targetTypeBegin	Qualified target type start identifier		int
targetType	Target Type 0: person or car 1 person 2: Car	0-2	int
next_TargetTypeURL	Next item defines the target type start mark		int
targetTypeEnd	Qualified target type end marker		int
targetSizeConstrain	Limit target size 0: Not supported 1: Support	0-1	int
targetSizeConstrainMin	Limit the minimum target size		int
targetSizeConstrainMax	Limit the maximum size of the target		int
targetSizeConstrainUnit	Limit target size units		string
minTargetSize	Minimum target size 0: Support 1: Not supported	0-1	int
minTargetSizeMin	Minimum target size		int
minTargetSizeMax	Minimum target maximum size		int
minTargetSizeUnit	Minimum target		string

	unit		
maxTargetSize	Maximum target size 0: Not supported 1: Support	0-1	int
maxTargetSizeMin	Maximum target minimum size		int
maxTargetSizeMax	Maximum target size		int
maxTargetSizeUnit	Maximum target unit		string
sensitivityCount	Sensitivity number		int
sensitivityBegin	Sensitivity start mark		int
sensitivity	Sensitivity		int
next_SensitivityURL	Next sensitivity start mark		int
sensitivityEnd	Sensitivity end mark		int
draw	Video Stream Line Drawing 0: Not supported 1: Support	0-1	int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type		int

	1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.15.15.3 Get the parameters of the leaving area

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **leaveAreaParam**
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= leaveAreaParam
Return	enableFlag=1 draw=1 sensitivity=3 alarmOut=1 alarmRecord=1 alarmSMTP=1 alarmFTP=1 alarmSound=1 alarmSoundType=7 regionCount=1 regionBegin=1 pointCount=3 pointBegin=1 pointX=36.124401 pointY=43.162392

	next_pointURL=2 pointX=37.559807 pointY=68.376068 next_pointURL=3 pointX=51.196171 pointY=43.589745 pointEnd=3 regionEnd=1 weekDayCount=1 weekDayBegin=1 weekDay=0 startTime=0 endTime=1800 weekDayEnd=1

2.6.15.15.4 Set the parameters for leaving the area

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= leaveAreaParam
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type= leaveAreaParam& enableFlag=1&uploadDetail=0&draw=1&sensitivity=5&alarmOut=1&alarmRecord=1&alarmSMTP=1&alarmFTP=1&alarmSound=1&alarmSoundType=0&regionCount=1&regionBegin=1&targetTypeEnable=1&targetType=0&targetSizeEnable=0&targetMaxSize=100000&targetMinSize=1000&pointCount=3&pointBegin=1&pointX=63.755981&pointY=86.324783&next_pointURL=2&pointX=59.449760&pointY=70.940170&next_pointURL=3&pointX=76.196175&pointY=70.085472&pointEnd=3&regionEnd=1&weekDayCount=2&weekDayBegin=1&weekDay=1&startTime=1800&endTime=3600&next_weekDayURL=2&weekDay=2&startTime=3600&endTime=5400&weekDayEnd=2
Return	OK (For other responses, Refer to General Response)

2.6.15.15.5 Leave area parameter meaning

IPC

URL	Parameter Description	scope	type of data
enableFlag	switch 0: Off 1: On	0-1	int
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int
clearArea	Upload Details 0: Normal setting 1: Delete area	0-1	Int
uploadDetail	Upload Details 0: Off 1: On	0-1	int
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On	0-1	int
alarmSMTP	Alarm Email 0: Off 1: On	0-1	int
alarmFTP	FTP Upload 0: Off 1: On	0-1	int

alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int
alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
sensitivity	Sensitivity		int
targetTypeEnable	Limit target type 0: Off 1: On	0-1	int
targetType	Qualified Type 0: person or car 1 person 2: Car	0-2	int
targetSizeEnable	Limited size 0: Off 1: On	0-1	int
targetMaxSize	Limit the maximum size of the target		int
targetMinSize	Limit the minimum target size		int
targetSizeEnableV2	Limit target maximum and minimum switches	0-1	Int

	0: Off 1: On		
maxTargetWidth	Limit the maximum width of the target		int
maxTargetHeight	Limit target maximum height		int
minTargetWidth	Limit the minimum width of the target		int
minTargetHeight	Limit the minimum target height		int
pointCount	Number of coordinate points		int
pointBegin	Coordinate point start mark		int
pointX	Horizontal coordinate value		float
pointY	Vertical coordinate value		float
next_pointURL	The next point coordinate starts marking		int
pointEnd	Point coordinate end mark		int
next_regionURL	Next area parameter start mark		int
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int

2.6.15.16 **smart motion detection ~~(IPC)~~**

2.6.15.16.1 Acquisition of capabilities

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **smartMotionAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= smartMotionAbility
Description	Refer to URL Descriptions
Return	libId=1 (the lite series) smartMotionAlarmAbilityEnable=1 (the lite series) regionEnable=1 (the lite series) edgeNum=8 (the lite series) region=1 maxEdgeNum=8 maxRegionNum=8 uploadDetail=0 targetTypeConstrain=1 targetTypeConstrainMin=0 targetTypeConstrainMax=1 targetTypeCount=3 targetTypeBegin=1 targetType=0 next_TargetTypeURL=2 targetType=1 next_TargetTypeURL=3 targetType=2 targetTypeEnd=1 targetSizeConstrain=0 targetSizeConstrainMin=0 targetSizeConstrainMax=1 targetSizeConstrainUnit= minTargetSize=0 minTargetSizeMin=0 minTargetSizeMax=1000000 minTargetSizeUnit=cm2 maxTargetSize=0 maxTargetSizeMin=0 maxTargetSizeMax=1000000 maxTargetSizeUnit=cm2 sensitivityCount=5

	sensitivityBegin=1 sensitivity=1 next_SensitivityURL=2 sensitivity=2 next_SensitivityURL=3 sensitivity=3 next_SensitivityURL=4 sensitivity=4 next_SensitivityURL=5 sensitivity=5 sensitivityEnd=1 draw=1 presetMode=0 alarmOutCount=1 alarmLinkageCount=4 alarmLinkageBegin=1 actionType=2 next_AlarmLinkageURL=2 actionType=4 next_AlarmLinkageURL=3 actionType=7 next_AlarmLinkageURL=4 actionType=10 alarmLinkageEnd=1

2.6.15.16.2 Capability Parameter Description

URL	Parameter Description	scope	type of data
region	Area drawing 0: Not supported 1: Support	0-1	int
maxEdgeNum	Number of lines		int
maxRegionNum	Number of regions		int

uploadDetail	Upload Details 0: Not supported 1: Support	0-1	int
targetTypeConstrain	Limit upload types 0: Not supported 1: Support	0-1	int
targetTypeConstrainMin	Limit the minimum value of upload type		int
targetTypeConstrainMax	Limit the maximum value of upload type		int
targetTypeCount	Limit the number of target types		int
targetTypeBegin	Qualified target type start identifier		int
targetType	Target Type 0: person or car 1 person 2: Car	0-2	int
next_TargetTypeURL	Next item defines the target type start mark		int
targetTypeEnd	Qualified target type end marker		int
targetSizeConstrain	Limit target size 0: Not supported 1: Support	0-1	int
targetSizeConstrainMin	Limit the minimum target		int

	size		
targetSizeConstrainMax	Limit the maximum size of the target		int
targetSizeConstrainUnit	Limit target size units		string
minTargetSize	Minimum target size 0: Support 1: Not supported	0-1	int
minTargetSizeMin	Minimum target size		int
minTargetSizeMax	Minimum target maximum size		int
minTargetSizeUnit	Minimum target unit		string
maxTargetSize	Maximum target size 0: Not supported 1: Support	0-1	int
maxTargetSizeMin	Maximum target minimum size		int
maxTargetSizeMax	Maximum target size		int
maxTargetSizeUnit	Maximum target unit		string
sensitivityCount	Sensitivity number		int
sensitivityBegin	Sensitivity start mark		int
sensitivity	Sensitivity		int

next_SensitivityURL	Next sensitivity start mark		int
sensitivityEnd	Sensitivity end mark		int
draw	Video Stream Line Drawing 0: Not supported 1: Support	0-1	int
alarmOutCount	Number of alarm outputs		int
alarmLinkageCount	Number of linkage alarms		int
alarmLinkageBegin	Linkage alarm start mark		int
actionType	alarm type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio alarm 11: LED alarm 14: White light alarm		int
next_AlarmLinkageURL	Next linkage alarm start mark		int
alarmLinkageEnd	Linkage alarm end mark		int

2.6.15.16.3 Get smart motion detection parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **smartMotionParam**
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=smartMotionParam
Return	enableFlag=1 draw=1 sensitivity=3 alarmOut=1 alarmRecord=1 alarmSMTP=1 alarmFTP=1 alarmSound=1 alarmSoundType=7 regionCount=1 regionBegin=1 pointCount=3 pointBegin=1 pointX=36.124401 pointY=43.162392 next_pointURL=2 pointX=37.559807 pointY=68.376068 next_pointURL=3 pointX=51.196171 pointY=43.589745 pointEnd=3 regionEnd=1 weekDayCount=1 weekDayBegin=1 weekDay=0 startTime=0 endTime=1800 weekDayEnd=1

2.6.15.16.4 Set smart motion detection parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **smartMotionParam**

Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=smartMotionParam&cameraID=1&enableFlag=1&draw=0&alarmOut=0&alarmRecord=1&alarmSMTP=0&alarmFTP=1&alarmSound=0&alarmSoundType=0&regionCount=2&regionBegin=1&sensitivity=4&targetTypeEnable=1&targetType=0&pointCount=4&pointBegin=1&pointX=14.114833&pointY=36.752136&next_pointURL=2&pointX=12.918660&pointY=79.059830&next_pointURL=3&pointX=44.258373&pointY=76.923080&next_pointURL=4&pointX=50.956940&pointY=34.188034&pointEnd=4&next_regionURL=2&sensitivity=4&targetTypeEnable=1&targetType=0&pointCount=4&pointBegin=1&pointX=69.617226&pointY=20.512821&next_pointURL=2&pointX=93.779907&pointY=17.521368&next_pointURL=3&pointX=87.320572&pointY=70.940170&next_pointURL=4&pointX=61.722488&pointY=71.367523&pointEnd=4&regionEnd=1&weekDayCount=6&weekDayBegin=1&weekDay=0&startTime=21600&endTime=41400&next_weekDayURL=2&weekDay=0&startTime=82800&endTime=86400&next_weekDayURL=3&weekDay=1&startTime=66600&endTime=81000&next_weekDayURL=4&weekDay=3&startTime=9000&endTime=32400&next_weekDayURL=5&weekDay=4&startTime=55800&endTime=68400&next_weekDayURL=6&weekDay=5&startTime=37800&endTime=52200&weekDayEnd=6
Return	OK (For other responses, Refer to General Response)

2.6.15.16.5 smart motion detection parameter meaning

URL	Parameter Description	scope	type of data
presetMode	Mode (PTZ device) 1: Normal mode 2: Preset point mode	1-2	int
presetCount	Number of preset positions (PTZ device)		i nt
resetBegin	Preset position start mark (PTZ device)		i nt
p resetID	Preset ID - 1 : Get all preset positions 0: Get or set normal		i nt

	mode > 0 : Get or set the specified preset position		
clearArea	Upload Details 0: Normal setting 1: Delete area	0-1	Int
enableFlag	switch 0: Off 1: On	0-1	int
draw	Video Stream Line Drawing 0: Off 1: On	0-1	int
uploadDetail	Upload Details 0: Off 1: On	0-1	int
alarmOut	Alarm Output 0: Off 1: On	0-1	int
alarmOut2	Alarm 2 output 0: Off 1: On	0-1	int
alarmRecord	Alarm video 0: Off 1: On	0-1	int
alarmSMTP	Alarm Email 0: Off 1: On	0-1	int
alarmFTP	FTP Upload	0-1	int

	0: Off 1: On		
alarmSound	Sound detection alarm 0: Off 1: On	0-1	int
alarmSoundType	Audio alarm file	0-13	int
alarmLED	LED Alarm 0: Off 1: On	0-1	int
alarmWhiteLED	White light alarm 0: Off 1: On	0-1	int
regionCount	Number of regions		int
regionBegin	Area parameter start mark		int
sensitivity	Sensitivity		int
targetTypeEnable	Limit target type 0: Off 1: On	0-1	int
targetType	Qualified Type 0: person or car 1 person 2: Car	0-2	int
targetSizeEnable	Limited size 0: Off 1: On	0-1	int
targetMaxSize	Limit the maximum size of the target		int
targetMinSize	Limit the minimum		int

	target size		
targetSizeEnableV2	Limit target maximum and minimum switches 0: Off 1: On	0-1	Int
maxTargetWidth	Limit the maximum width of the target		int
maxTargetHeight	Limit target maximum height		int
minTargetWidth	Limit the minimum width of the target		int
minTargetHeight	Limit the minimum target height		int
pointCount	Number of coordinate points		int
pointBegin	Coordinate point start mark		int
pointX	Horizontal coordinate value		float
pointY	Vertical coordinate value		float
next_pointURL	The next point coordinate starts marking		int
pointEnd	Point coordinate end mark		int
next_regionURL	Next area parameter start mark		int
regionEnd	End of area parameters		int
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int

weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int
next_PresetURL	Next preset position start mark		i nt
p resetEnd	Preset end mark		i nt

2.6.15.17 **Advanced (IPC)**

2.6.15.17.1 Acquisition of capabilities

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **advanceAbility**
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= **advanceAbility** &cameraID=1
Description	Refer to URL Descriptions
Return	sceneEnable=1 heightEnable=0 angleEnable=0 FOVEnable=0 pixelToRealSizeEnable=1 realSizeEnable=1 lineDirectionEnable=1 lineEnable=1 cameraShake=0 highNoise=0 lowContrast=0 periodMotion=0 periodMotionTime=0 periodMotionTimeMin=1

	periodMotionTimeMax=60

2.6.15.17.2 Capability Parameter Description

URL	Parameter Description	scope	type of data
SceneEnable	Scenes 0: Not supported 1: Support	0-1	int
heightEnable	Installation height 0: Not supported 1: Support	0-1	int
angleEnable	installation angle 0: Not supported 1: Support	0-1	int
FOVEnable	URL of Refer to 0: Not supported 1: Support	0-1	int
pixelToRealSizeEnable	Pixel to actual size 0: Not supported 1: Support	0-1	int
realSizeEnable	Actual size 0: Not supported 1: Support	0-1	int
lineDirectionEnable	Segment Direction 0: Not supported 1: Support	0-1	int
lineEnable	Draw a line segment 0: Not supported	0-1	int

	1: Support		
cameraShake	Camera Shake 0: Not supported 1: Support	0-1	int
hightNoise	High noise 0: Not supported 1: Support	0-1	int
lowContrast	Low contrast 0: Not supported 1: Support	0-1	int
periodMotion	Cycle motion background 0: Not supported 1: Support	0-1	int
periodMotionTime	Periodic motion background time 0: Not supported 1: Support	0-1	int
periodMotionTimeMin	Minimum periodic motion time		int
periodMotionTimeMax	Maximum cycle time		int
filterEnable	Filter Target 0: Not supported 1: Support	0-1	int
filterTimeMin	Minimum filtering time		int
filterTimeMax	Maximum filtering time		int

2.6.15.17.3 Get advanced parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **advanceParam** &cameraID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= **advanceParam** &cameraID=1
Return	scene=1 alarmInterval=88 pixelToRealCount=0

2.6.15.17.4 Setting Advanced Parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **advanceParam** &cameraID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=advanceParam&cameraID=1&scene=1&alarmInterval=88
Return	OK (For other responses, Refer to General Response)

2.6.15.17.5 Advanced parameter meaning

URL	Parameter Description	scope	type of data
scene	Scenes 0: Indoor	0-1	int

	1: Outdoor		
height	Installation height		i nt
angle	installation angle		i nt
FOV	URL of Refer to		i nt
cameraShake	Camera Shake 0: Off 1: On	0-1	int
highNoise	High noise environment 0: Off 1: On	0-1	int
lowContrast	Low contrast 0: Off 1: On	0-1	int
periodMotion	Periodic motion background time		int
alarmInTerminal	Alarm interval		int
filterEnable	Filter Target 0: Off 1: On	0-1	int
filterTime	Filter time		int
pixelToRealCount	Pixel to actual number		int
pixelToRealBegin	Pixel to actual start mark		int
realSize	The actual length of the object		int
lineDirection	Segment Direction 0: Horizontal 1: Vertical	0-1	int
lineCrossStartX	Start X		float
lineCrossStartY	Start Y		float

lineCrossEndX	End X		float
lineCrossEndY	End Y		float
next_pixelToRealURL	The next pixel turns into the actual start mark		int
pixelToRealEnd	Pixel to actual end mark		int

2.6.15.18 **Heat map (IPC Excluding the lite series)**

2.6.15.18.1 Get the heat map parameters (getPerimeterParam)

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= HeatMapParam
Description	Refer to URL Descriptions
Example	http://192.168.2.161/cgi-bin/param.cgi?action=get&type=HeatMapParam
Return	Enable=1 HeatMapSaveMode=1 HeatMapAreaBase=AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

	AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABERERAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAEREREAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAREREQAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAABERERAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAEREREAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA A=

2.6.15.18.2 Set the heat map detection parameters (setPerimeterParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **type=HeatMapParam&Enable=1&HeatMapSaveMode=2& HeatMapAreaBase = < ... >** [&<argument>=<value>...]
Description	Refer to URL Descriptions

Example	http://192.168.2.161/cgi-bin/param.cgi?action=set&type=HeatMapParam&Enable=1&HeatMapAreaBase=AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABERERAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAAEREREAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAREREQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAABERERAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA EREREAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA AAA ...
Return	OK (For other responses, Refer to General Response)

2.6.15.18.3 Heatmap Configuration Parameters

URL	Parameter Description	scope	type of data

Enable	Whether to enable	1-2	int
HeatMapSaveMode	model: 1 hour 2 days		i nt
HeatMapAreaBase	The corresponding base code of the image in the area		Strring

2.6.15.19 Fence (NVR)

2.6.15.19.1 Get Geo-Fence Detection Parameters (getFenceParam)

URL	http://192.168.2.193/cgi-bin/alarm.cgi?action=get&type= **fenceParam** &cameraID=<cameraID>
Description	The Fence includes intelligent analysis common parameters and Fence detection parameters
Example	http://192.168.2.193/cgi-bin/alarm.cgi?action=get&type=fenceParam&cameraID=1
Return	cameraID=2 enableFlag=0 sensitivity=2 draw=1 targetTypeEnable=1 targetType=1 triggerChannel=ch1 weekDayBegin=1 weekDay=0 startTime=0 endTime=86400 next_weekDayURL=2 weekDay=1 startTime=0 endTime=86400 next_weekDayURL=3 weekDay=2 startTime=0 endTime=86400 next_weekDayURL=4 weekDay=3 startTime=0

	endTime=86400 next_weekDayURL=5 weekDay=4 startTime=0 endTime=86400 next_weekDayURL=6 weekDay=5 startTime=0 endTime=86400 next_weekDayURL=7 weekDay=6 startTime=0 endTime=86400 weekDayEnd=7 AlarmLinkageBegin=1 ActionID=1 ActionType=6 next_AlarmLinkageURL=2 ActionID=1 ActionType=7 next_AlarmLinkageURL=3 ActionID=1 ActionType=1 relayTime=0 relayPort1=0 relayPort2=0 AlarmLinkageEnd=3 regionCount=3 regionBegin=1 pointCount=3 pointBegin=1 pointX=1 pointY=2 next_pointURL=2 pointX=2 pointY=3 next_pointURL=3 pointX=3 pointY=4 pointEnd=3 next_regionURL=2 pointCount=3 pointBegin=1 pointX=4

	pointY=5 next_pointURL=2 pointX=5 pointY=6 next_pointURL=3 pointX=6 pointY=7 pointEnd=3 next_regionURL=3 pointCount=3 pointBegin=1 pointX=7 pointY=8 next_pointURL=2 pointX=8 pointY=9 next_pointURL=3 pointX=9 pointY=10 pointEnd=3 regionEnd=3 (For other responses, Refer to General Response)

2.6.15.19.2 Setting the Fence detection parameters (setFenceParam)

URL	http://192.168.2.193/cgi-bin/alarm.cgi?action=set&type= **fenceParam** &cameraID=1[&<argument>=<value>...]
Description	Set the parameters according to the Fence detection parameters
Example	http://192.168.2.193/cgi-bin/alarm.cgi?action=set&type=fenceParam&cameraID=2&enableFlag=0&targetTypeEnable=1&targetType=1&sensitivity=2&triggerChannel=ch1&weekDayBegin=1&weekDay=0&startTime=0&endTime=86400&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&next_weekDayURL=3&weekDay=2&startTime=0&endTime=86400&next_weekDayURL=4&weekDay=3&startTime=0&endTime=86400&next_weekDayURL=5&weekDay=4&startTime=0&endTime=86400&next_weekDayURL=6&weekDay=5&startTime=0&endTime=86400&next_weekDayURL=7&weekDay=6&startTime=0&endTime=86400&weekDayEnd=7&AlarmLinkageBegin=1&ActionID=1&ActionType=6&next_AlarmLinkageURL=2&ActionID=1&ActionType=7&next_AlarmLinka

	geURL=3&ActionID=1&ActionType=1&AlarmLinkageEnd=3&regionCount=3&regionBegin=1&pointCount=3&pointBegin=1&pointX=1&pointY=2&next_pointURL=2&pointX=2&pointY=3&next_pointURL=3&pointX=3&pointY=4&pointEnd=3&next_regionURL=2&pointCount=3&pointBegin=1&pointX=4&pointY=5&next_pointURL=2&pointX=5&pointY=6&next_pointURL=3&pointX=6&pointY=7&pointEnd=3&next_regionURL=3&pointCount=3&pointBegin=1&pointX=7&pointY=8&next_pointURL=2&pointX=8&pointY=9&next_pointURL=3&pointX=9&pointY=10&pointEnd=3&regionEnd=3&areaParamAction=cover
Return	OK (For other responses, Refer to General Response)

2.6.15.19.3 Fence Detection Parameters

Table 2-6-6-10-3-1

parameter	data	Description
IntelligentCommonParam	< IntelligentCommonParam >	Intelligent analysis of shared parameters. For specific URL, Refer to the list of common parameters for intelligent analysis.
regionCount	<int>[0,32]	Number of detection areas. When setting, this flag must be carried to indicate the number of regions. For details, Refer to the group text rules
region Begin	<int>{1}	The region loop body starts marking. When setting, this flag must be included. There is no specific requirement for the value. For details, Refer to the group text rules
FenceRegionParam	< FenceReg i onParam >	Individual zone parameters. For specific parameters, please Refer to: Single Fence area parameter list
next_ region URL	<int>[2,32]	Next area identifier.

		Start from 2. If the value is 2, it means that the following parameter is the second item. When the configuration behavior is set and the number of loop bodies is greater than 1, this flag must be carried. There is no specific requirement for the value. For details, Refer to the group text rules
region End	<int>[1,32]	The region loop body ends. When the configuration behavior is set, this flag must be carried, and the value is the number. For details, Refer to Group Text Rules

Single Fence area parameter list FenceRegionParam:

Table 2-6-6-16-3-2

parameter	data	Description
targetTypeEnable	<int>{0,1}	Whether to limit the target type. 0: No (default) 1: Yes
targetType	<int>{0,1,2}	The target qualification type. 0: person or car (default) 1 person 2: Car
sensitivity	<int>[1,5]	Sensitivity The value range depends on the device capability.
RegionParam	< RegionParam >	Area parameters. For detailed parameters, please Refer to: Regional Parameters

2.6.17 Fisheye

This section is only applicable to Fisheye devices, including obtaining Fisheye capabilities, obtaining Fisheye video layout modes, and Fisheye correction, installation and configuration functions.

2.6.17.1 **Get Fisheye capability (getFisheyeAbility)**

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **FisheyeAbility**
Description	Refer to the Fisheye parameter table for parameters
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= FisheyeAbility
Return	enableFlag = < enableFlag > mountTypeCount=< mountTypeCount > mountTypeBegin mountType = < FisheyeMountType > next_mountTypeURL=n …… mountType = < FisheyeMountType(n+1) > mountTypeEnd videoModeCount=< videoModeCount> videoModeBegin videoMode = < videoMode > dewarpModeCount=< dewarpModeCount> dewarpModeBegin dewarpMode = < dewarpMode > next_dewarpModeURL=n …… dewarpMode = < dewarpMode(n+1) > dewarpModeEnd next_videoModeURL=n … videoMode = < videoMode(n+1) > dewarpModeCount=< dewarpModeCount> dewarpModeBegin dewarpMode = <dewarpMode> next_dewarpModeURL=n … dewarpMode = < dewarpMode(n+1) > dewarpModeEnd videoModeEnd

	(For other responses, Refer to General Response)

2.6.17.2 **Get Fisheye correction parameters (getDewarpParam)**

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **dewarpParam** &cameraID=<cameraID>
Description	Refer to the Fisheye parameter table for parameters
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=dewarpParam&cameraID=<cameraID>
Return	cameraID = <cameraID> dewarpMode = <dewarpMode> videoMode = < videoMode > (For other responses, Refer to General Response)

2.6.17.3 **Set Fisheye correction parameters (setDewarpParam)**

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **dewarpParam** &cameraID=<cameraID> &dewarpMode=< dewarpMode>&videoMode=<videoMode>
Description	Refer to the Fisheye parameter table for parameters cameraID : device ID (device number) dewarpMode: correction mode videoMode: Fisheye video mode
Example	http://192.168.17.189/cgi-bin/param.cgi?action=set&type=dewarpParam&cameraID=<cameraID>&dewarpMode=< dewarpMode>&videoMode=<videoMode>
Return	OK (For other responses, Refer to General Response)

2.6.17.4 **Get the Fisheye installation mode (getMountparam)**

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **mountParam**
Description	Refer to the Fisheye parameter table for parameters Returns a text string parameter description: mountType : installation mode
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= mountParam
Return	mountType = <mountType> (For other responses, Refer to General Response)

2.6.17.5 **Set Fisheye installation mode (setMountparam)**

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **mountParam** &mountType=< mountType >
Description	Refer to the Fisheye parameter table for parameters
Example	http://<servername>/cgi-bin/param.cgi?action=set&type=mountParam&mountType=< mountType >
Return	OK (For other responses, Refer to General Response)

2.6.17.6 **Get the current Fisheye video layout (getVideoLayout)**

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **videoLayout** &cameraID=1
Description	For parameters, Refer to the Fisheye parameter table . This command only supports obtaining video layout parameters in single-channel mode.
Example	http://<servername>/cgi-bin/param.cgi?action=get&type= videoLayout&cameraID=1

Return	DewarpMode = <dewarpMode> VideoRectCount = n VideoRectBegin = 1 VideoNum = <VideoNum> StartX = < StartX > StartY = < StartY > Height = < Height > Width = <Width> next_VideoRectURL = 2 VideoNum = <VideoNum> StartX = < StartX > StartY = < StartY > Height = < Height > Width = <Width> next_VideoRectURL = <next_VideoRectURL> .... VideoRectEnd = n (For other responses, Refer to General Response)

2.6.17.7 **Fisheye parameter configuration**

Table 2-6-10-7-1

parameter	**data**	**Description**
CameraId	<int>{1}	Channel number.

		The default value of Fisheye IPC is 1;
enableFlag	<int>{0,1}	Whether to support Fisheye identification. 0: The device does not support Fisheye. Note: When the URL for obtaining Fisheye capability is 0, the response does not assemble other URL. 1: The device supports Fisheye. Note: When the URL for obtaining Fisheye capability is 1, the response assembles other capability URL.
mountTypeCount	<int>{n}	Number of installation options. Installation method list size
mountTypeBegin	<int>{1}	Installation mode start sign.
mountType	<int>[0,2]	Installation method. 0: Wall Mount 1: Ceiling 2: Desktop
next_mountTypeURL	<int>{2}	The next installation method starts. Start from 2. If the value is 2, it means the following parameter is the second one.
mountTypeEnd	<int>{n}	Installation mode end mark
videoModeCount	<int>{n}	Number of video modes
videoModeBegin	<int>{1}	Video mode start flag
videoMode	<int>{0,1}	Fisheye video mode. 0: Single channel mode 1: Multi-channel mode (5 channels: 1 Fisheye + 1 panoramic + 3 PTZ modes) Note: When switching video modes, the device will reboot
dewarpModeCount	<int>{n}	Number of correction modes

dewarpModeBegin	<int>{1}	Correction mode start flag
dewarpMode	<int>{0,2,4,5,6,8,9,10,11,12,13}	Correction mode. 0: Fisheye mode 2: Panorama mode 4:1 Fisheye + 3PTZ mode 5:1 Fisheye + 5PTZ mode 6:1 Fisheye + 7PTZ mode 8: 4PTZ mode 9: 1O 4PTZ mode 10: 180-degree panoramic Refer to 11: 1 Fisheye + 1 panoramic + 3PTZ 12: 2 Fisheye + 3PTZ 13: One Fisheye + 4PTZ
next_ dewarpModeURL	<int>{2}	Next correction mode start mark. Start from 2. If the value is 2, it means the following parameter is the second one.
dewarpModeEnd	<int>{n}	Correction mode end mark.
next_videoModeURL	<int>{2}	Next video mode start mark. Start from 2. If the value is 2, it means the following parameter is the second one.
videoModeEnd	<int>{n}	Video mode end flag
VideoRectCount	<int>{n}	The number of videos for the layout. Number of lenses per channel
VideoRectBegin	<int>{1}	Video layout start sign. Indicates the layout of the first shot
VideoNum	<int>{1}	Shot number. 0 is always Fisheye or panoramic video,

		others are ptz
StartX	<double>	The video starting point X coordinate. Percentage (0~1) x100, precision is 2 decimal places
StartY	<double>	The Y coordinate of the video starting point. Percentage (0~1) x100, precision is 2 decimal places
Height	<double>	Video height. Percentage (0~1) x100, precision is 2 decimal places
Width	<double>	Video width. Percentage (0~1) x100, precision is 2 decimal places
next_VideoRectURL	<int>{2}	Next video layout start sign. Starting from 2, if the value is 2, it means that the following is the layout of the second lens
VideoRectEnd	<int>{n}	Video layout end marker. Indicates the end of the list of lens layouts

2.6.18 Infrared thermal imaging (Thermal)

2.6.18.1 **Thermal imaging capability**

2.6.18.1.1 Get Thermal Ability (getThermalAbility)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=**thermalAbility&cameraID=1**
Description	Parameter URL Description

Example	http://192.168.0.127/cgi-bin/param.cgi?action=get&type=thermalAbility **&cameraID=1**
Return	IsThermal=true maxAreaNum=20 maxPointNum=20 maxLineNum=20 polygonType=2 maxPolygonNum=20 maxmaskingNum=0 sensorResolutionWidth=640 sensorResolutionHeight=512 measureType=0 measureRangeCount=1 measureRangeBegin=1 measureRangeMax=150.000000 measureRangeOriMax=0.000000 measureRangeOriMin=0.000000 measureRangeEnd=1 drcModeCount=2 drcModeBegin=1 drcMode=1 drcModeEnd=1 sensorType=6 supportColorPalette=0 supportFaceAlgo=28 alarmRuleCount=3 alarmRuleBegin=1 alarmRule=1 next_alarmRuleURL=2 alarmRule=2 next_alarmRuleURL=3 alarmRule=3 alarmRuleEnd=1 mixStreamModeCount=1 mixStreamModeBegin=1 mixStreamMode=0 mixStreamModeEnd=1 mixRectCount=0 rawUploadIntervalCount=5 rawUploadIntervalBegin=1 rawUploadInterval=1 next_rawUploadIntervalURL=2 rawUploadInterval=2

	next_rawUploadIntervalURL=3 rawUploadInterval=3 next_rawUploadIntervalURL=4 rawUploadInterval=4 next_rawUploadIntervalURL=5 rawUploadInterval=5 rawUploadIntervalEnd=1 blackBodyCorrectMode=0 ledSupportMode=0 ATKSupportMode=0 preventOverheatMode=1 audioActionMode=1 OSDDisableMode=0 visiOSDDisableMode=0 tempConsumeMode=1 ignoreObjectCount=4 ignoreObjectBegin=1 ignoreObject=0 next_ignoreObjectURL=2 ignoreObject=1 next_ignoreObjectURL=3 ignoreObject=2 next_ignoreObjectURL=4 ignoreObject=3 next_ignoreObjectURL=5 ignoreObject=1026575698 ignoreObjectEnd=1

2.6.18.1.2 Thermal imaging capability parameters

URL	Parameter Description	scope	type of data
IsThermal	Thermal imaging equipment false: not supported true: support		string
sensorResolutionWidth	Detector resolution width		int
sensorResolutionHeight	Detector resolution height		

measureType	Temperature measurement type 0: Regional temperature measurement 1: Face temperature measurement	0-1	int
measureRangeCount	Temperature measurement range quantity		int
measureRangeBegin	Temperature measurement range start mark		int
measureRangeMax	Maximum temperature range		int
measureRangeMin	Minimum temperature range		int
measureRangeOriMax	Maximum original temperature measurement range		int
measureRangeOriMin	Minimum original temperature measurement range		int
next_measureRangeURL	Next temperature measurement range start mark		int
measureRangeEnd	Temperature measurement range end mark		int
drcModeCount	Number of dimming modes		int
drcModeBegin	Dimming mode start indicator		int
drcMode	Dimming Mode		int
next_drcModeURL	Next dimming mode start mark		int
drcModeEnd	Dimming mode end mark		int
sensorType	Detector Type -1: Undefined 0:GST417M 1: GST817M 2:LA6110 3: GST212M 4:RTD3172C		int

	5: Tiny1B 6:GST612M		
supportColorPalette	Color Palette 0: Not supported 1: Support	0-1	int
supportFaceAlgo	Face Algorithm 0: Not supported 1: Support		int
alarmRuleCount	Number of alarm rules		int
alarmRuleBegin	Alarm rule start flag		int
alarmRule	Alarm rules 0: Off 1: Automatic mode 2: High temperature greater than 3: High temperature less than 4: Low temperature greater than 5: Low temperature less than		int
next_alarmRuleURL	The next alarm rule starts marking		int
alarmRuleEnd	Alarm rule end flag		int
mixStreamModeCount	Number of fusion flow modes		int
mixStreamModeBegin	Fusion flow mode start flag		int
mixStreamMode	Fusion Stream Mode		int
next_mixStreamModeURL	Next fusion flow mode start mark		int
mixStreamModeEnd	End mark of fusion flow mode		int
mixRectCount	Number of fused sub-rectangles		int
mixRectBegin	Fusion sub-rectangle start mark		int
mixRect	Fusion sub-rectangle		int

next_mixRectURL	Next fusion flow rectangle start mark		int
mixRectEnd	End mark of fused sub-rectangle		int
rawUploadIntervalCount	Number of raw data upload intervals		int
rawUploadIntervalBegin	Raw data upload interval start mark		int
rawUploadInterval	Raw data upload interval		int
next_rawUploadIntervalURL	The next raw data upload interval starts.		int
rawUploadIntervalEnd	Original data upload interval end mark		int
blackBodyCorrectMode	Black Correction Mode 0: Not supported 1: Support	0-1	int
ledSupportMode	Led white light mode 0: Not supported 1: Fill light 2: Fill light (adjustable brightness)	0-2	int
ATKSupportMode	ATK Mode 0: Not supported 1: Support	0-1	int
preventOverheatMode	Anti-burn 0: Not supported 1: Support	0-1	int
audioActionMode	Sound linkage mode 0: Not supported 1: Support	0-1	int
OSDDisableMode	Thermal imaging OSD printing 0: Not supported 1: Support	0-1	int
visiOSDDisableMode	Visible light OSD printing 0: Not supported	0-1	int

	1: Support		
tempConsumeMode	Temperature consumption pattern 0: Not supported 1: Support	0-1	int
ignoreObjectCount	Filter target quantity		int
ignoreObjectBegin	Filter target start mark		int
ignoreObject	Filter Target 0: None 1: Humanoid 2: Vehicles 3: People or cars	0-3	int
next_ignoreObjectURL	Next filter target start mark		int
ignoreObjectEnd	Filter target end mark		int

2.6.18.2 **Measurement Mode (MeasureMode)**

2.6.18.2.1 Get the measurement mode (get thermalMeasureMode)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **thermalMeasureMode**
Description	Refer to Thermal Imaging Parameters Configuration
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=thermalMeasureMode
Return	measureMode =1 measureID =1

2.6.18.2.2 Set the measurement mode (setThermalMeasureMode)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=

	thermalMeasureMode &measureMode<measureMode>&measureID=<measureModeID>
Description	Setting the measurement mode
Example	http://192.168.32.151/cgi-bin/param.cgi?action=set&type=thermalMeasureMode&measureMode=1&measureID=1
Return	OK (For other responses, Refer to General Response)

2.6.18.3 **Temperature measurement parameters**

2.6.18.3.1 Get thermal imaging temperature measurement parameters (getThermalImagerConfigureParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=thermalImagerConfigureParam &cameraID=1
Description	Get thermal imaging temperature measurement parameters, Refer to temperature measurement parameters
Example	http://192.168.0.127/cgi-bin/param.cgi?action=get&type=thermalImagerConfigureParam&cameraID=1
Return	IsOpenTemperatureMeasure=true TemperatureUnit=1 lengthUnit=0 EnvironmentTemperature=26.000000 CavityTemoperature=97.769997 Physicsinfo=31.000000 areaIdDisplayMode=1 tempConsumeMode=2 DisplayMode=3 OSDFontBorderEnable=true CustomOSDColorEnable=true OSDFontColor_R=0 OSDFontColor_G=0 OSDFontColor_B=255

	FontSizeMode=3 AreaFeatureTemprShowMode=2 ThermalMeasureMode=0 IsDisplayAlarmArea=true AlarmInterval=100 AlarmDelay=10 TemperatureMax=302 TemperatureMin=-40 PreventOverheatMode=2 AutoMasking=12 DrcMode=2 DrcModeTemperatureMax=45 DrcModeTemperatureMin=20 LargeEnable=true LargeTemperature=40.000000 LargeColor_R=255 LargeColor_G=0 LargeColor_B=0 RangeEnable=true RangeMinTemperature=34.000000 RangeMaxTemperature=37.000000 RangeColor_R=255 RangeColor_G=255 RangeColor_B=255 SmallEnable=true SmallTemperature=31.000000 SmallColor_R=255 SmallColor_G=0 SmallColor_B=255 RawUploadInterval=5 MixStreamMode=0

2.6.18.3.2 Set thermal imaging temperature measurement parameters (setThermalImagerConfigureParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= thermalImagerConfigureParam &cameraID=1 [&<argument>=<value>...]
Description	Set the thermal imaging temperature measurement parameters. For the parameters, Refer to Temperature Measurement Parameters.

Example	http://192.168.0.127/cgi-bin/param.cgi?action=set&type=thermalImagerConfigureParam&cameraID=1&IsOpenTemperatureMeasure=true&TemperatureUnit=1&lengthUnit=0&EnvironmentTemperature=77.000000&selfAdaptiveEnvironmentTemperature=25.000000&Physicsinfo=0.000000&areaIdDisplayMode=1&tempConsumeMode=2&DisplayMode=2&OSDFontBorderEnable=false&FontSizeMode=2&AreaFeatureTemprShowMode=5&ThermalMeasureMode=0&IsDisplayAlarmArea=true&AlarmInterval=15&AlarmDelay=5&TemperatureMax=302&TemperatureMin=-40&PreventOverheatMode=2&AutoMasking=55&DrcMode=2&DrcModeTemperatureMax=36.060001&DrcModeTemperatureMin=33.000000&RawUploadInterval=2&MixStreamMode=0
Return	OK (For other responses, Refer to General Response)

2.6.18.3.3 Temperature measurement parameters

Table 2-6-12-4-1

parameter	data	Description
IsOpenTemperatureMeasure	<bool>	Temperature measurement parameter configuration switch
TemperatureUnit	<int>	Temperature Units 0: Celsius 1: Fahrenheit
lengthUnit	<int>	Length Unit 0: Meter 1: Feet
EnvironmentTemperature	<float>	Ambient temperature
CavityTemoperature	<float>	Temperature inside the equipment cavity
Physicsinfo	<float>	Correction factor

areaIdDisplayMode	<int>	Area ID display mode 0: Region ID 1: Region name
tempConsumeMode	<int>	Temperature consumption pattern 0: Off 1: Temperature + Jpeg 2: Temperature value
DisplayMode	<int>	Zone temperature display mode 0: Hide the area and temperature prompts 1: Bottom left 2: Bottom right 3: Top right 4: Display area only 5: Follow Area
OSDFontBorderEnable	<bool>	Whether to display font border
CustomOSDColorEnable	<bool>	Whether to display font color
OSDFontColor_R	<int>	Color RGB code
OSDFontColor_G	<int>	Color RGB code
OSDFontColor_B	<int>	Color RGB code
FontSizeMode	<int>	font size. 1: Small 2: Medium 3: Large
AreaFeatureTemprShowMode	<int>	Area temperature measurement type 0: Only display the highest temperature 2: Display the highest and lowest temperatures 5: Display the highest temperature, lowest temperature and average

		temperature
ThermalMeasureMode	<int>	Thermal imaging measurement mode: 0: Normal temperature measurement mode 1: Preset temperature measurement mode (supported by products with PTZ) Default is normal mode
IsDisplayAlarmArea	<bool>	Whether to display the alarm area
AlarmInterval	<int>	Alarm interval Value range: 1-1800 seconds
AlarmDelay	<int>	Alarm delay Value range: 0-10
TemperatureMax	<int>	Temperature measurement range, maximum temperature (302)
TemperatureMin	<int>	Temperature measurement range, minimum temperature (-40)
PreventOverheatMode	<int>	Anti-burn mode 1: Close 2: Automatic 3: Manual
ControlCover	<int>	Control flap in manual mode 1: Close 2. Let go
AutoMasking	<int>	Blocking time in automatic mode Value range: 5-60
DrcMode	<int>	Dimming Mode 1: Automatic 2: Manual
DrcModeTemperatureMax	<float>	Maximum temperature range in manual dimming mode

DrcModeTemperatureMin	<float>	Minimum temperature range in manual dimming mode
LargeEnable	<bool>	When the temperature is greater than a certain value, the image switch is highlighted
LargeTemperature	<float>	Temperature value greater than
LargeColor_R	<int>	Color rgb code
LargeColor_G	<int>	Color rgb code
LargeColor_B	<int>	Color rgb code
RangeEnable	<bool>	The temperature is in a certain range and the image switch is highlighted
RangeMinTemperature	<float>	Minimum value of interval range
RangeMaxTemperature	<float>	Maximum value of interval range
RangeColor_R	<int>	Color rgb code
RangeColor_G	<int>	Color rgb code
RangeColor_B	<int>	Color rgb code
SmallEnable	<bool>	When the temperature is less than a certain value, the image switch is highlighted
SmallTemperature	<float>	Temperature value less than
SmallColor_R	<int>	Color rgb code
SmallColor_ G	<int>	Color rgb code
SmallColor_ B	<int>	Color rgb code
RawUploadInterval	<int>	Upload raw data interval Unit: Frames/second
MixStreamMode	<int>	Fusion stream mode, currently cannot be set, only the default value is 0

2.6.18.4 **Ambient temperature**

2.6.18.4.1 Get ambient temperature parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **environmentTemperature** &cameraID=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=environmentTemperature &cameraID=1
Return	environmentTemperature=27.00 selfAdaptiveEnvironmentTemperature=28.62

2.6.18.4.2 Setting the ambient temperature parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **environmentTemperature** &cameraID=1&environmentTemperature=27.00
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=environmentTemperature&cameraID=1&environmentTemperature=27.00
Return	OK (For other responses, Refer to General Response)

2.6.18.4.3 ambient temperature parameters

URL	Parameter Description	scope	type of data
environmentTemperature	Ambient temperature		float

selfAdaptiveEnvironmentTemperature	Adaptive temperature (get effective)		float

2.6.18.5 **Temperature measurement area**

2.6.18.5.1 Get the temperature measurement area parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **temperAlarmParam** &cameraID=1&measureID=0&areaID=1
Description	Refer to the URL description . If areaID is not included , all areas will be obtained.
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=temperAlarmParam&cameraID=1&measureID=0&areaID=1
Return	temperAlarmParamCount=1 temperAlarmParamStart=1 areaFlag=true areaId=2 areaName=Area22 areaShapeType=4 alarmType=2 warningValue=48.000000 alarmValue=51.020000 alarmMaxValue=64.040001 timeDuration=1 emissivity=0.920000 targetSpace=5.000000 reflectTempEnable=0 reflectTempValue=54.540001 ignoreObjectMode=2 alarmFlag=1 maskEnable=1 groupId=4 SNPointCoordinateCount=4 SNPointCoordinateStart=1 PointX=10.431034 PointY=39.571430 SNPointCoordinateNext=2 PointX=10.603448

	PointY=75.000000 SNPointCoordinateNext=3 PointX=41.637932 PointY=73.000000 SNPointCoordinateNext=4 PointX=52.500000 PointY=42.714287 SNPointCoordinateEnd=1 temperAlarmParamEnd=1

2.6.18.5.2 Set the temperature measurement area parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**temperAlarmParam**&cameraID=1&measureID=0&temperAlarmParamCount=2&temperAlarmParamStart=1&areaFlag=true&areaId=1&areaName=Area12&areaShapeType=4&alarmType=2&warningValue=48.000000&alarmValue=51.020000&alarmMaxValue=64.040001&timeDuration=1&emissivity=0.920000&targetSpace=5.000000&reflectTempEnable=0&reflectTempValue=54.540001&ignoreObjectMode=2&alarmFlag=1&maskEnable=1&groupId=4&SNPointCoordinateCount=4&SNPointCoordinateStart=1&PointX=10.431034&PointY=39.571430&SNPointCoordinateNext=2&PointX=10.603448&PointY=75.000000&SNPointCoordinateNext=3&PointX=41.637932&PointY=73.000000&SNPointCoordinateNext=4&PointX=42.500000&PointY=32.714287&SNPointCoordinateEnd=1&next_temperAlarmParamURL=2&areaFlag=true&areaId=2&areaName=Area22&areaShapeType=4&alarmType=2&warningValue=48.000000&alarmValue=51.020000&alarmMaxValue=64.040001&timeDuration=1&emissivity=0.920000&targetSpace=5.000000&reflectTempEnable=0&reflectTempValue=54.540001&ignoreObjectMode=2&alarmFlag=1&maskEnable=1&groupId=4&SNPointCoordinateCount=4&SNPointCoordinateStart=1&PointX=10.431034&PointY=39.571430&SNPointCoordinateNext=2&PointX=10.603448&PointY=75.000000&SNPointCoordinateNext=3&PointX=41.637932&PointY=73.000000&SNPointCoordinateNext=4&PointX=52.500000&PointY=42.714287&SNPointCoordinateEnd=1&temperAlarmParamEnd=1
Description	Refer to URL Descriptions
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=temperAlarmParam&cameraID=1&measureID=0&temperAlarmParamCount=2&temperAlarmParamStart=1&areaFlag=true&areaId=1&areaName=Area12&areaShapeType=4&alarmType=2&warningValue=48.000000&alarmValue=5

e	1.020000&alarmMaxValue=64.040001&timeDuration=1&emissivity=0.920000&targetSpace=5.000000&reflectTempEnable=0&reflectTempValue=54.540001&ignoreObjectMode=2&alarmFlag=1&maskEnable=1&groupId=4&SNPointCoordinateCount=4&SNPointCoordinateStart=1&PointX=10.431034&PointY=39.571430&SNPointCoordinateNext=2&PointX=10.603448&PointY=75.000000&SNPointCoordinateNext=3&PointX=41.637932&PointY=73.000000&SNPointCoordinateNext=4&PointX=42.500000&PointY=32.714287&SNPointCoordinateEnd=1&next_temperAlarmParamURL=2&areaFlag=true&areaId=2&areaName=Area22&areaShapeType=4&alarmType=2&warningValue=48.000000&alarmValue=51.020000&alarmMaxValue=64.040001&timeDuration=1&emissivity=0.920000&targetSpace=5.000000&reflectTempEnable=0&reflectTempValue=54.540001&ignoreObjectMode=2&alarmFlag=1&maskEnable=1&groupId=4&SNPointCoordinateCount=4&SNPointCoordinateStart=1&PointX=10.431034&PointY=39.571430&SNPointCoordinateNext=2&PointX=10.603448&PointY=75.000000&SNPointCoordinateNext=3&PointX=41.637932&PointY=73.000000&SNPointCoordinateNext=4&PointX=52.500000&PointY=42.714287&SNPointCoordinateEnd=1&temperAlarmParamEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.18.5.3 Temperature measurement area parameter meaning

URL	Parameter Description	scope	type of data	Remark
temperAlarmParamCount	Number of temperature measurement areas		float	
temperAlarmParamStart	Temperature measurement area start mark		int	
areaFlag	Temperature measurement area switch false : off true: on		string	
areaId	Area No.		int	

areaName	Region Name		int	
areaShapeType	type 1 o'clock 2: Line 3: Rectangle 4: Polygon	1-4	int	
alarmType	alarm type 0: Temperature difference alarm 1: Threshold alarm 2: Interval alarm 3: Temperature rise alarm	0-3	int	
warningValue	Warning value		int	**alarmType=0 or 1 or 3 is valid**
alarmValue	Alarm value		int	
alarmMaxValue	Maximum alarm value		int	**alarmType=2 is valid**
timeDuration	Duration (seconds)	1-10	int	**alarmType=3 is valid**
emissivity	Emissivity		int	
targetSpace	Distance (m)		int	
reflectTempEnable	Reflective temperature switch 0: Off 1: On	0-1	int	

reflectTempValue	Reflected temperature		int	
ignoreObjectMode	Filter heat source target 0: None 1: Humanoid 2: Vehicles 3: People or cars	0-3	int	
alarmFlag	Alarm switch 0: Off 1: On	0-1	int	
maskEnable	masking switch 0: Off 1: On	0-1	int	
groupId	Group ID	0-6	int	
SNPointCoordinateCount	Number of regions		int	
SNPointCoordinateStart	Area start mark		int	
PointX	X coordinate		float	
PointY	Y coordinate		float	
SNPointCoordinateNext	Next area start mark		int	
SNPointCoordinateEnd	End of area marker		int	
next_temperAlarmParamURL	Next temperature measurement area starts marking		int	

temperAlarmParamEnd	Temperature measurement area end mark		int	

2.6.18.6 **Area temperature**

2.6.18.6.1 Get area characteristic temperature (getAreaTemperature)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=areaTemperature&cameraID=1&areaID=0
Description	1. If the areaID parameter is not carried, all area parameters are obtained later. 2. Characteristic temperature includes maximum temperature, minimum temperature, average temperature
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=areaTemperature&cameraID=1&areaID=0
Return	areaTemperatureBegin=1 areaID=0 temperatureUnit=0 maxTemperatureX=703 maxTemperatureY=575 maxTemperature=0.000000 minTemperatureX=703 minTemperatureY=575 minTemperature=0.000000 aveTemperature=0.000000 areaTemperatureEnd (For other responses, Refer to General Response)

2.6.18.6.2 Get the temperature of any point in the full screen area (getAnyPointTemperature)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=anyPointTemperature&cameraID=1 &PointX=<PointX>&PointY=<PointY>
Description	Get the temperature of any point in the full screen

Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type=anyPointTemperature &cameraID=1 &PointX=20&PointY=10
Return	temperatureUnit = 1 pointTemperature =36.00 (For other responses, Refer to General Response)

2.6.18.6.3 Get the temperature of multiple points in the thermal imaging area (getpointTemperature)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=pointTemperature &cameraID=1 & pointTemperatureBegin =1&PointX=<pointX>&PointY=<pointY>& pointTemperatureEnd =2&PointX=<pointX>&PointY=<pointY>&horizontal Num =<horizontal Num >&verticalNum=<verticalNum>
Description	Get the temperature of any point in the full screen. For parameters, Refer to Thermal Imaging Parameter Configuration
Example	http://192.168.32.121/cgi-bin/param.cgi? action=get&type = pointTemperature & cameraID=1 & biginPointX = 20& biginPointY = 10& endPointX= 89 & endPointY = 90 & horizontalNum = 10 & verticalNum = 10
Return	pointTemperatureBegin =1 PointX=20.00 PointY=10.00 temperatureValue =20.00 temperatureUnit =0 pointTemperatureNext =2 PointX=10.00 PointY=20.00 temperatureValue =19.90 temperatureUnit =0 pointTemperatureEnd =2

2.6.18.7 **Alarm linkage**

2.6.18.7.1 Get the thermal imaging temperature alarm deployment linkage parameters (getAlarmDeploymentParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=alarmDeploymentParam &cameraID=1
Description	Refer to URL Descriptions
Example	http://192.168.0.127/cgi-bin/param.cgi?action=get&type=alarmDeploymentParam&cameraID=1
Return	temperAlarmDeploymentParamCount=7 temperAlarmDeploymentParamStart=1 sourceType=31 AlarmLinkageCount=3 AlarmLinkageBegin=1 ActionID=1 ActionType=1 next_AlarmLinkageURL=2 ActionID=1 ActionType=2 next_AlarmLinkageURL=3 ActionID=3 ActionType=10 AlarmLinkageEnd=3 RecordActionParamCount=0 alarmOutActionCount=0 weekDayCount=1 weekDayBegin=1 weekDay=4 startTime1=5400 endTime1=18000 weekDayEnd=1 next_temperAlarmDeploymentParamURL=2 sourceType=32 AlarmLinkageCount=0 RecordActionParamCount=0 alarmOutActionCount=0 weekDayCount=0 next_temperAlarmDeploymentParamURL=3 sourceType=33

	AlarmLinkageCount=2 AlarmLinkageBegin=1 ActionID=1 ActionType=4 next_AlarmLinkageURL=2 ActionID=1 ActionType=7 AlarmLinkageEnd=2 RecordActionParamCount=0 alarmOutActionCount=0 weekDayCount=1 weekDayBegin=1 weekDay=3 startTime1=14400 endTime1=43200 weekDayEnd=1 next_temperAlarmDeploymentParamURL=4 sourceType=34 AlarmLinkageCount=0 RecordActionParamCount=0 alarmOutActionCount=2 alarmOutActionCount=2 alarmOutActionBegin=1 alarmOutID=1 alarmOutFlag=1 next_alarmOutActionURL=2 alarmOutID=2 alarmOutFlag=1 alarmOutActionEnd=1 weekDayCount=0 next_temperAlarmDeploymentParamURL=5 sourceType=35 AlarmLinkageCount=0 RecordActionParamCount=0 alarmOutActionCount=2 alarmOutActionCount=2 alarmOutActionBegin=1 alarmOutID=1 alarmOutFlag=1 next_alarmOutActionURL=2 alarmOutID=2 alarmOutFlag=1 alarmOutActionEnd=1 weekDayCount=0

	next_temperAlarmDeploymentParamURL=6 sourceType=49 AlarmLinkageCount=0 RecordActionParamCount=0 alarmOutActionCount=2 alarmOutActionCount=2 alarmOutActionBegin=1 alarmOutID=1 alarmOutFlag=1 next_alarmOutActionURL=2 alarmOutID=2 alarmOutFlag=1 alarmOutActionEnd=1 weekDayCount=0 next_temperAlarmDeploymentParamURL=7 sourceType=48 AlarmLinkageCount=0 RecordActionParamCount=0 alarmOutActionCount=2 alarmOutActionCount=2 alarmOutActionBegin=1 alarmOutID=1 alarmOutFlag=1 next_alarmOutActionURL=2 alarmOutID=2 alarmOutFlag=1 alarmOutActionEnd=1 weekDayCount=0 temperAlarmDeploymentParamEnd=1

2.6.18.7.2 Set the thermal imaging temperature alarm deployment linkage (setAlarmDeploymentParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= alarmDeploymentParam[&<argument>=<value>...]
Description	Refer to URL Descriptions
Example	http://192.168.0.127/cgi-bin/param.cgi?action=set&type=alarmDeploymentParam &camearaID=1 &temperAlarmDeploymentParamCount=7&temperAlarmDeploymentParamSta

	rt=1&sourceType=31 &AlarmLinkageCount=3&AlarmLinkageBegin=1&ActionID=1&ActionType=1&next_AlarmLinkageURL=2&ActionID=1&ActionType=2 &next_AlarmLinkageURL=3&ActionID=3&ActionType=10&AlarmLinkageEnd=3&RecordActionParamCount=0&alarmOutActionCount=0&weekDayCount=1&weekDayBegin=1&weekDay=4&startTime1=5400&endTime1=18000&weekDayEnd=1&next_temperAlarmDeploymentParamURL=2&sourceType=32&AlarmLinkageCount=0 &RecordActionParamCount=0&alarmOutActionCount=0&weekDayCount=0&next_temperAlarmDeploymentParamURL=3&sourceType=33&AlarmLinkageCount=2&AlarmLinkageBegin=1&ActionID=1&ActionType=4&next_AlarmLinkageURL=2&ActionID=1&ActionType=7&AlarmLinkageEnd=2&RecordActionParamCount=0 &alarmOutActionCount=0&weekDayCount=1&weekDayBegin=1&weekDay=3&startTime1=14400&endTime1=43200&weekDayEnd=1&next_temperAlarmDeploymentParamURL=4&sourceType=34&AlarmLinkageCount=0&RecordActionParamCount=0&alarmOutActionCount=2&alarmOutActionCount=2&alarmOutActionBegin=1&alarmOutID=1&alarmOutFlag=1&next_alarmOutActionURL=2&alarmOutID=2&alarmOutFlag=1&alarmOutActionEnd=1&weekDayCount=0&next_temperAlarmDeploymentParamURL=5&sourceType=35&AlarmLinkageCount=0&RecordActionParamCount=0&alarmOutActionCount=2&alarmOutActionCount=2&alarmOutActionBegin=1&alarmOutID=1&alarmOutFlag=1&next_alarmOutActionURL=2&alarmOutID=2&alarmOutFlag=1&alarmOutActionEnd=1&weekDayCount=0&next_temperAlarmDeploymentParamURL=6&sourceType=49&AlarmLinkageCount=0&RecordActionParamCount=0&alarmOutActionCount=2&alarmOutActionCount=2&alarmOutActionBegin=1&alarmOutID=1&alarmOutFlag=1&next_alarmOutActionURL=2&alarmOutID=2&alarmOutFlag=1&alarmOutActionEnd=1&weekDayCount=0&next_temperAlarmDeploymentParamURL=7&sourceType=48&AlarmLinkageCount=0&RecordActionParamCount=0&alarmOutActionCount=2&alarmOutActionCount=2&alarmOutActionBegin=1&alarmOutID=1&alarmOutFlag=1&next_alarmOutActionURL=2&alarmOutID=2&alarmOutFlag=1&alarmOutActionEnd=1&weekDayCount=0&temperAlarmDeploymentParamEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.18.7.3 Meaning of the arming linkage parameters

URL	Parameter Description	scope	type of data	Remark
temperAlarmDeploymentParamCount	Number of linkages		int	
temperAlarmDeploymentParamStart	Arming linkage start mark			
sourceType	Linkage Type 31: Threshold alarm 32: Threshold warning 33: Temperature difference alarm 34: Temperature difference warning 35: Temperature range alarm 48: Temperature rise warning 49: Temperature rise alarm			
alarmPTZActionCount	PTZ alarm quantity			
alarmPTZActionBegin	PTZ alarm start indicator			

alarmPTZAction	PTZ alarm operation behavior c over: overwrite			**set is valid**
PTZChannelID	PTZ channel ID			
PTZActionType	PTZ operation type			
PTZActionID	Operation ID			
next_PTZAcitonURL	Next PTZ alarm start mark			
alarmPTZActionEnd	PTZ alarm end mark			
AlarmLinkageCount	Number of linkages			
AlarmLinkageParam	Alarm linkage operation behavior c over: overwrite			**set is valid**
AlarmLinkageBegin	Loop body start mark			
ActionType	Action Type 1: Alarm output 2: Alarm email 3: Alarm PTZ 4: Alarm video 7: FTP upload 10: Audio			

	alarm 11: LED alarm 14: White light alarm			
ActionID	Action ID			
next_AlarmLinkageURL	Next Linkage Alarm Alarm			
AlarmLinkageEnd	Alarm linkage end flag			
weekDayCount	Number of defenses			
weekDayBegin	Arming start indicator			
weekDay	which day	0-6		
startTime	Arming start time (in seconds)			
endTime	Arming end time (in seconds)			
next_weekDayURL	Next scheduled time URL start mark			
weekDayEnd	End flag of the loop of defense days			
next_temperAlarmDeploymentParamURL	Next arming linkage start mark			
temperAlarmDeploymentParamEnd	Arming linkage end			

	mark			

2.6.18.8 **maskingArea**

2.6.18.8.1 Get the maskinging area parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **maskingArea** &camearaID=1
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=maskingArea &camearaID=1
Return	maskingEnable=1 showmaskingEnable=1 regionCount = 1 regionBegin=1 pointCount=3 pointBegin=1 pointX=17.755102 pointY=31.111111 next_pointURL=2 pointX=6.530612 pointY=47.407406 next_pointURL=3 pointX=37.346939 pointY=37.037037 pointEnd=3 regionEnd= 1 (For other responses, Refer to General Response)

2.6.18.8.2 Set maskinging area parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**maskingArea**&camearaID=1maskingEnable=1&showmaskingEnable=1&regionCount=3&regionBegin=1&pointCount=3&pointBegin=1&pointX=17.755102&pointY=31.111111&next_pointURL=2&pointX=6.530612&pointY=47.407406&next_pointURL=3&pointX=37.346939&p

	ointY=37.037037&pointEnd=3&next_regionURL=2&pointCount=3&pointBegin=1&pointX=27.959183&pointY=87.407410&next_pointURL=2&pointX=46.734695&pointY=56.296295&next_pointURL=3&pointX=53.061226&pointY=79.259262&pointEnd=3&next_regionURL=3&pointCount=3&pointBegin=1&pointX=68.571426&pointY=50.740742&next_pointURL=2&pointX=61.428570&pointY=82.222221&next_pointURL=3&pointX=82.857140&pointY=77.777779&pointEnd=3&regionEnd=3
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=maskingArea&camearaID=1&areaId=1&areaEnable=1&areaName=areaTest&areaType=0&alarmType=1&warningValue=49.00&alarmValue=51.00&duration=1.00&targetEmissivity=0.96&distance=16.0&reflectionTempEnable=1&filterTarget=3&alarmEnable=1&areaMaskEnable=1&groupId=2&pointBegin=1&pointX=50.0&pointY=60.0&pointEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.18.8.3 Meaning of maskinging area parameters

parameter	data	Description
maskingEnable	<int>	maskinging area switch 0: Off 1: On
showmaskingEnable	<int>	Show maskinged area switch 0: Off 1: On
PolygonAreaBegin	<int>	Detection area start mark
AreaPointBegin	<int>	Area coordinates start mark
pointX	<int>	Horizontal coordinate value

pointY	<int>	Vertical coordinate value
AreaPointEnd	<int>	End of area sign
nextPolygonArea	<int>	Next area
PolygonAreaEnd	<int>	The region ends with n region values n

2.6.18.9 **Led lamp control parameters**

2.6.18.9.1 Get LED light control parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=ledControlParam&cameraID=1
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type=ledControlParam&cameraID=1
Return	LedControlCount=1 LedControlBegin=1 ID=0 DisplayMode=2 Brightness=100 FlickerInterval=200 weekDayCount=7 weekDayBegin=1 weekDay=0 startTime=0 endTime=86400 next_weekDayURL=2 weekDay=1 startTime=0 endTime=86400 next_weekDayURL=3 weekDay=2 startTime=0 endTime=86400 next_weekDayURL=4 weekDay=3 startTime=0

	endTime=86400 next_weekDayURL=5 weekDay=4 startTime=0 endTime=86400 next_weekDayURL=6 weekDay=5 startTime=0 endTime=86400 next_weekDayURL=7 weekDay=6 startTime=0 endTime=86400 weekDayEnd=7 LedControlEnd=1 (For other responses, Refer to General Response)

2.6.18.9.2 Set the LED light control parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type=**ledControlParam**&cameraID=1&LedControlCount=1&LedControlBegin=1&ID=0&DisplayMode=1&Brightness=100&FlickerInterval=700&weekDayCount=7&weekDayBegin=1&weekDay=0&startTime=0&endTime=86400&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&next_weekDayURL=3&weekDay=2&startTime=0&endTime=86400&next_weekDayURL=4&weekDay=3&startTime=0&endTime=86400&next_weekDayURL=5&weekDay=4&startTime=0&endTime=86400&next_weekDayURL=6&weekDay=5&startTime=0&endTime=86400&next_weekDayURL=7&weekDay=6&startTime=0&endTime=86400&weekDayEnd=7&LedControlEnd=1
Description	Refer to parameter meaning
Description	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=ledControlParam&cameraID=1&LedControlCount=1&LedControlBegin=1&ID=0&DisplayMode=1&Brightness=100&FlickerInterval=700&weekDayCount=7&weekDayBegin=1&weekDay=0&startTime=0&endTime=86400&next_weekDayURL=2&weekDay=1&startTime=0&endTime=86400&next_weekDayURL=3&weekDay=2&startTime=0&endTime=86400&next_weekDayURL=4&weekDay=3&startTime=0&endTime=86400&next_weekDayURL=5&weekDay=4&startTime=0&end

	Time=86400&next_weekDayURL=6&weekDay=5&startTime=0&endTime=86400&next_weekDayURL=7&weekDay=6&startTime=0&endTime=86400&weekDayEnd=7&LedControlEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.18.9.3 Led light control parameters meaning

URL	Parameter Description	scope	type of data	Remark
LedControlCount	Led light control parameters quantity		int	
LedControlBegin	Led light control parameter start mark		int	
ID	Serial number		int	
DisplayMode	Display Mode 1: Open 2: Close 3: Flashing 4: Timing 8: Alarm constant		int	
Brightness	brightness	0-100	int	
FlickerInterval	Flashing interval	100-10000	int	DisplayMode=3
weekDayCount	Number of defenses		int	DisplayMode=4
weekDayBegin	Arming start indicator		int	

weekDay	which day	0-6	int	
startTime	Arming start time (seconds)		int	
endTime	Arming end time (seconds)		int	
next_weekDayURL	Next arming time start mark		int	
weekDayEnd	Arming end mark		int	

2.6.18.10 **measurement dead pixels (same as AI thermal imaging)**

2.6.18.10.1 Correct the bad point of human body temperature measurement (apply AIThermalBadPointCalibration)

URL	http://<servername>/cgi-bin/param.cgi?action=apply&type=AIThermalBadPointCalibration
Description	For parameters, Refer to AI thermal imaging bad pixel correction parameters Modify the bad point to a point where the temperature can be measured normally
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action=apply&type=AIThermalBadPointCalibration&BadPointList=50,50||80,80
Return	OK (For other responses, Refer to General Response)

2.6.18.10.2 AI thermal imaging bad pixel correction parameters

parameter	type of data	Remark

BadPointList	<string>	Bad point coordinate list: x1,y1 || x2,y2 || ... Note: x, y are both float, and the number of points corresponds to the invisible light

2.6.18.10.3 Reset human body temperature bad point (restore AIThermalBadPointCalibration)

URL	http://<servername>/cgi-bin/param.cgi?action=restore&type= AIThermalBadPointCalibration
Description	Reset the corrected points
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action= restore &type=AIThermalBadPointCalibration
Return	OK (For other responses, Refer to General Response)

2.6.18.10.4 Save human body temperature measurement bad point calibration (save AIThermalBadPointCalibration)

URL	http://<servername>/cgi-bin/param.cgi?action=save&type= AIThermalBadPointCalibration
Description	Save the corrected points
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action= save &type=AIThermalBadPointCalibration
Return	OK (For other responses, Refer to General Response)

2.6.18.11 **Temperature measurement version (Same as AI thermal imaging)**

2.6.18.11.1 Get the human body temperature measurement version information (get AIThermalVersionInfo)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AIThermalVersionInfo
Description	For parameters, Refer to AI Thermal Imaging Version Information
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action=get&type= AIThermalVersionInfo
Return	Version=20190723 Sequence=test-1

2.6.18.11.2 AI thermal imaging version information (not supported)

parameter	type of data	Remark
Version	<string>	Movement version
Sequence	<string>	Movement serial number

2.6.18.12 **Parameter configuration**

2.6.18.12.1 Thermal imaging parameter configuration

Table 2-6-11-11-1

parameter	data	Description
CameraId	<int>1	Channel number. ID: represents the channel number
IsThermalenable	<int>{0,1}	Whether to support identification. 0: The device does not support 1: The device supports

maxAreaNum	<int>{n}	Maximum number of supported measurement areas
maxPointAreaNum	<int>{n}	Maximum number of supported point measurement areas 0 means that point area temperature measurement is not supported
maxLineAreaNum	<int>{n}	Maximum number of supported line measurement areas 0 means line area temperature measurement is not supported
supportPolygonType	<int>[0,3]	Whether to support rectangular regions. 0 Not supported 1: Only supports rectangular areas 2: Only supports general polygonal areas 3: Support rectangular and general polygonal areas
maxPolygonAreaNum	<int>{n}	The maximum number of supported polygonal measurement areas. 0 means polygonal area temperature measurement is not supported
maxmaskingAreaNum	<int>{n}	The maximum number of temperature measurement areas that can be maskinged. 0 means regional temperature measurement maskinging is not supported
measureMode	<int>[0,2]	Temperature measurement mode. 0: normal mode; 1: Preset mode 2: Face temperature measurement

		mode
measureID	<int>{n}	Measurement ID
areaID	<int>[0,7]	Region ID. Region ID (0-7)
areaName	<string>	Region Name
alarmFlag	<int>{0,1}	Area alarm switch
alarmSourceType	<int>{n}	Alarm source ID. Source alarm type
alarmType	<int>{0,1}	Alarm subtype. 0: DiffAlarm 1:ThresholdAlarm
alarmValue	<int>{n}	Alarm threshold. Alarm temperature value
emissivity	<float>[0.1,0.99]	Emissivity. (0.1~0.99)
targetSpace	<float>{n}	Target distance. Default 15m
areaFlag	<bool>	Zone open flag. true: Enable false: Disable
areaShapeType	<int>[0,3]	Region boundary shape type. Point, line, rectangle, polygon, etc.
X	<float>	X coordinate
Y	<float>	Y coordinate
temperatureUnit	<int>{0,1}	Temperature unit. 0: Celsius 1: Fahrenheit

maxTemperatureX	<float>	Maximum temperature X value. x-axis position
maxTemperatureY	<float>	Maximum temperature Y value. Y-axis position
maxTemperature	<float>	Regional maximum temperature
minTemperatureX	<float>	Minimum temperature X value
minTemperatureY	<float>	Minimum temperature Y value
minTemperature	<float>	Minimum temperature in the area
aveTemperature	<float>	Average temperature of the area
pointTemperature	<float>	The temperature value at a point
weekday	<int>[0,6]	Day of the week. 0-6: Sunday to Saturday
startTime	<int>	Start time. The start time of the day, in seconds
endTime	<int>	End Time. End time of the day, in seconds
actionID	<int>	Action ID. The number that identifies the alarm source. Each alarm source ID has a different meaning. For Example, IO alarm indicates the IO number, SMTP and PTZ indicate the channel number.
actionType	<int>[1,4]	Output type. 1: I/O 2: SMTP 3: PTZ 4: RECORD

alarmOutID	<int>{1,2}	Alarm output channel. 1: Channel 1 2: Channel 2
alarmOutFlag	<int>{0,1}	Alarm output switch. 0: Off 1; Open
begin PointX	float<0.0, 99.99>	The percentage of the X coordinate of the starting point to be obtained as a percentage of the resolution width
begin PointY	float<0.0, 99.99>	The Y coordinate of the starting point to be obtained as a percentage of the resolution width
endPointX	float<0.0, 99.99>	The percentage of the X coordinate of the end point to be obtained as a percentage of the resolution width
endPointX	float<0.0, 99.99>	The Y coordinate of the end point to be obtained as a percentage of the resolution width
horizontal Num	int<1,n>	If begin PointX is equal to endPointX, horizontal Num can only be 1; If beginning PointX is not equal to endPointX, horizontal Num shall be at least 2;
verticalNum	int<1,n>	If begin PointY is equal to endPointY, verticalNum can only be 1; If beginPointY is not equal to endPointY, verticalNum is at least 2;
pointTemperatureBegin	int<1>	To get the start mark of the point
PointX	float<0.0, 99.99>	The X coordinate of the point is a percentage of the resolution width

PointY	float<0.0, 99.99>	The Y coordinate of the point as a percentage of the resolution height
temperatureValue	f loat	Temperature value of the coordinate point
temperatureUnit	int<0,1>	0: Celsius 1: Fahrenheit
pointTemperatureNext	int<2,n>	n is equal to the total number of points you need to obtain
pointTemperatureEnd	int<n>	n is equal to the total number of points you need to obtain

2.6.19 AI thermal imaging (human body thermometer)

2.6.19.1 **temperature measurement parameters**

2.6.19.1.1 Get human body temperature measurement parameter configuration (getAIThermalConfigureParam)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AIThermalConfigureParam
Description	Parameters Refer to human body temperature measurement parameters
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action=get&type=AIThermalConfigureParam
Return	FaceEnable=true ShowObjectMode=1 ShowAreaEnable=true Reliability=60 PictureQuality=60 SnapPictureMode=0 UploadInterval=5 PitchDegree=60 YawDegree=60 TiltDegree=30

	FtpUploadEnable=false FtpUploadFullRefer toEnable=false PictureOSDEnable=false FirmwareVer=V1.4.1.1 polygonAreaParamBegin=1 AreaId=1 FaceMinPixelWidth=70 FaceMaxPixelWidth=1000 AreaPointBegin=1 pointX1=0.00 pointY1=0.00 pointX2=0.00 pointY2=99.50 pointX3=99.50 pointY3=99.50 pointX4=99.50 pointY4=0.00 AreaPointEnd=1 nextPolygonAreaParam=1 AreaId=2 FaceMinPixelWidth=70 FaceMaxPixelWidth=1000 nextPolygonAreaParam=1 AreaId=3 FaceMinPixelWidth=70 FaceMaxPixelWidth=1000 nextPolygonAreaParam=1 AreaId=4 FaceMinPixelWidth=70 FaceMaxPixelWidth=1000 nextPolygonAreaParam=1 AreaId=5 FaceMinPixelWidth=70 FaceMaxPixelWidth=1000 nextPolygonAreaParam=1 AreaId=6 FaceMinPixelWidth=70 FaceMaxPixelWidth=1000 nextPolygonAreaParam=1 AreaId=7 FaceMinPixelWidth=70 FaceMaxPixelWidth=1000 nextPolygonAreaParam=1 AreaId=8

	FaceMinPixelWidth=70 FaceMaxPixelWidth=1000 nextPolygonAreaParam=1 polygonAreaParamEnd=8 IsOpenTemperatureMeasure=true TemperatureUnit=0 LengthUnit=0 EnvironmentTemperature=25.00 SelfAdaptiveEnvironmentTemp=28.77 CavityTemoperature=38.80 Physicsinfo=0.00 Distance=5.00 FaceColorEnable=false AveTemperatureCorrection=false AbnormalTemperatureFilter=false TempAreaMode=0 MeasureMode=0 NormalTemperatureMin=36.00 NormalTemperatureMax=37.30 (For other responses, Refer to General Response)

2.6.19.1.2 Human body temperature measurement parameters

parameter	data	Description
Face detection parameters		
FaceEnable	<bool>{true,false}	Whether to enable face detection
ShowObjectMode	<int>{0: off, 1: mode 1, 2: mode 2}	Overlay tracking information
ShowAreaEnable	<bool>{true,false}	Display detection area
Reliability	<int>{0-100}	Confidence
nPictureQuality	<int[1,99] //High 80, medium 60, low 30	Cutout quality
SnapPictureMode	<int>{0,1,4}	Capture mode , 0: Timed snapshot 1: Optimal 4: Optimal timing

SnapPictureNum	<int> [1,5]	Number of snapshots in Optimal and Timed Optimal modes
UploadInterval	<int> [1, 10]	Snapshot interval in timer mode
YawDegree	<int> [0,90]	Side Angle
TiltDegree	<int> [0,90]	bevel
Pitch Degree	<int> [0,90]	Elevation
FtpUploadEnable	<bool>{true,false}	FTP send cutout
FtpUploadFullReferToEnable	<bool>{true,false}	FTP send panorama
PictureOSDEnable	<bool>{true,false}	Whether to overlay OSD on the captured image
FirmwareVer	<string	Algorithm version
Face detection area		
polygonAreaParam Count	int	Number of face detection areas
polygonAreaParamBegin	int<1>	Area parameter start mark
AreaId	int<1, 8>	Area ID, up to 8 areas
FaceMinPixelWidth	<int> [30,300]	Minimum pixel for face detection
FaceMaxPixelWidth	<int> [500,2000]	Maximum pixel for face detection
AreaPointCount	int	Number of regions
AreaPointBegin	int<1>	Area coordinate parameter start mark
point X	float	X coordinate of point n constituting the detection area (up to 8 points can be set for each area)
pointY	float	The Y coordinate of point n that constitutes the detection area

		(each area can have up to 8 points)
nextAreaPointBegin	int	Next area start mark
AreaPoint End	int<1>	End mark of area coordinate parameters
nextPolygonAreaParam	int<1>	Next area parameter start mark
…	…	…
polygonAreaParamEnd	int<1>	End of area parameters
Temperature measurement parameters		
IsOpenTemperatureMeasure	<bool>{true,false}	Whether to enable temperature measurement
TemperatureUnit	<int>{0,1}	Temperature unit 0. Celsius 1. Fahrenheit
LengthUnit	<int>{0,1}	Length unit 0: meter 1: foot
EnvironmentTemperature	<float>[n]	Ambient temperature
CavityTemoperature	<float>[n]	Cavity temperature // read only
SelfAdaptiveEnvironmentTemp	<float>[n]	Adaptive ambient temperature // read only
Physicsinfo	<float>{n}	Correction factor
Distance	<int>	Installation distance
FaceColorEnable	<bool>{true,false}	Highlight the face
AveTemperatureCorrection	<bool>{true,false}	Environmental Adaptation
AbnormalTemperatureFilter	<bool>{true,false}	Abnormal temperature display
TempAreaMode	<int>{0,1}	Temperature measurement area mode 0: Mode 1 1: Mode 2

MeasureMode	<int>{0,1}	Temperature measurement mode 0: Mode 1 1: Mode 2
NormalTemperatureMin	<float>{n}	Normal temperature range minimum
NormalTemperatureMax	<float>{n}	Normal temperature range maximum
FontSize	int	font size 1: Small 2: Medium 3: Large

2.6.19.1.3 Set the human body temperature measurement parameter configuration (setAIThermalConfigureParam)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= AIThermalConfigureParam [&<argument>=<value>...]
Description	Set the temperature measurement parameters. All parameters are optional. At least one parameter must be set. For parameters, Refer to Human Body Temperature Measurement Parameters
Example	http://192.168.1.252/cgi-bin/param.cgi?action=set&type=AIThermalConfigureParam&FaceEnable=false&ShowObjectMode=1&ShowAreaEnable=true&Reliability=30&PictureQuality=60&SnapPictureMode=1&SnapPictureNum=5&PitchDegree=60&YawDegree=60&TiltDegree=30&FtpUploadEnable=true&FtpUploadFullReferToEnable=true&PictureOSDEnable=true&IsOpenTemperatureMeasure=true&TemperatureUnit=1&LengthUnit=1&EnvironmentTemperature=26&Physicsinfo=0&FaceColorEnable=true&AveTemperatureCorrection=true&AbnormalTemperatureFilter=true&TempAreaMode=0&MeasureMode=0&NormalTemperatureMin=32.00&NormalTemperatureMax=40.00&polygonAreaParamBegin=1&AreaId=1&FaceMinPixelWidth=70&FaceMaxPixelWidth=1000&AreaPointBegin=1&pointX1=0.00&pointY1=0.00&pointX2=0.00&pointY2=10.00&pointX3=10.00&pointY3=10.00&pointX4=10.00&pointY4=0.00&AreaPointEnd=1&nextPolygonAreaParam=1&AreaId=2&FaceMinPixelWidth=72&FaceMaxPixelWidth=1000&AreaPointBegin=1&pointX1=20.00&pointY1=0.00&pointX2=2

	0.00&pointY2=40.00&pointX3=40.00&pointY3=40.00&pointX4=40.00&pointY4=0.00&AreaPointEnd=1&polygonAreaParamEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.19.2 **High temperature alarm**

2.6.19.2.1 Get high temperature alarm parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AIThermal HighTemperatureAlarmLinkage
Description	For parameters, Refer to temperature alarm parameters
Example	http:// 192.168.0.156 /cgi-bin/param.cgi?action=get&type= AIThermal HighTemperatureAlarmLinkage
Return	HighTemperatureAlarmParamBegin=1 AreaId=1 AlarmEnable=true AlarmInterval=5 AlarmIO1=true AlarmIO2=false AlarmFTP=true AlarmSMTP=false AlarmRecord=true AlarmSound=true AudioActionId=3 weekDayBegin=1 weekDay=0 startTime1=0 endTime1=86400 next_weekDayURL=2 weekDay=1 startTime1=0 endTime1=86400 next_weekDayURL=3 weekDay=2 startTime1=0

	endTime1=86400 next_weekDayURL=4 weekDay=3 startTime1=0 endTime1=86400 next_weekDayURL=5 weekDay=4 startTime1=0 endTime1=86400 next_weekDayURL=6 weekDay=5 startTime1=0 endTime1=86400 next_weekDayURL=7 weekDay=6 startTime1=0 endTime1=86400 weekDayEnd=7 AreaId=2 AlarmEnable=true AlarmInterval=10 AlarmIO1=true AlarmIO2=true AlarmFTP=true AlarmSMTP=true AlarmRecord=true weekDayBegin=1 weekDay=0 startTime1=0 endTime1=86400 next_weekDayURL=2 weekDay=1 startTime1=0 endTime1=86400 next_weekDayURL=3 weekDay=2 startTime1=0 endTime1=86400 next_weekDayURL=4 weekDay=3 startTime1=0 endTime1=86400 next_weekDayURL=5 weekDay=4

	startTime1=0 endTime1=86400 next_weekDayURL=6 weekDay=5 startTime1=0 endTime1=86400 next_weekDayURL=7 weekDay=6 startTime1=0 endTime1=86400 weekDayEnd=7 AreaId=3 AlarmEnable=false AlarmInterval=1 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=4 AlarmEnable=false AlarmInterval=1 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=5 AlarmEnable=false AlarmInterval=1 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=6 AlarmEnable=false AlarmInterval=1 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=7

	AlarmEnable=false AlarmInterval=1 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=8 AlarmEnable=false AlarmInterval=1 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false HighTemperatureAlarmParamEnd=1 (For other responses, Refer to General Response)

2.6.19.2.2 Temperature alarm parameters

parameter	data	Description
HighTemperatureAlarmParamBegin	<int>[1]	High temperature alarm parameter start mark
AreaAlarmParamBegin	<int>[1]	Area parameter start mark
AreaId	<int>[1, 8]	Region ID
AlarmEnable	<bool>[true,false]	Alarm switch
AlarmInterval	<int>[1, 10]	Alarm interval
AlarmIO1	<bool>[true,false]	Alarm output 1
AlarmIO 2	<bool>[true,false]	Alarm output 2
AlarmFTP	<bool>[true,false]	Alarm upload FTP
AlarmSMTP	<bool>[true,false]	Send alarm email
AlarmRecord	<bool>[true,false]	Alarm video

AlarmSound	<bool>[true,false]	Audio alarm
AudioActionId	int<0,11>	Audio alarm ID
Time List		
weekDayBegin	int<1>	Arming time start flag
weekDay	int<0,6>	which day 0 is Sunday
startTime (1..n)	<long>[0, 86400]	Arming start time
endTime n(1..n)	<long>[0, 86400]	Arming end time
next_weekDayURL	int<1>	Next time
weekDay	int<0,6>	which day 0 is Sunday
startTime (1..n)	<long>[0, 86400]	Arming start time
endTime n(1..n)	<long>[0, 86400]	Arming end time
weekDayEnd	int<1>	Arming end flag
AreaAlarmParam End	int<1>	End of zone alarm parameters
nextAreaAlarmParam	int<1>	Next zone alarm parameters
…	…	…
AreaAlarmParam End	int<1>	End of area parameters
HighTemperatureAlarmParam End	int<1>	High temperature alarm parameters end

2.6.19.2.3 Setting high temperature alarm parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= AIThermal High TemperatureAlarmLinkage
Description	For parameters, Refer to temperature alarm parameters
Example	http://192.168.0.156/cgi-bin/param.cgi?action=set&type=AIThermalHighTemperatureAlarmLinkage&HighTemperatureAlarmParamBegin=1&AreaAlarmParamBegin=1&AreaId=1&AlarmEnable=true&AlarmInterval=5&AlarmIO1=true&AlarmIO2=false&AlarmFTP=true&AlarmSMTP=false&AlarmRecord=true&AlarmSound=true&AudioActionId=3&weekDayBegin=1&weekDay=0&startTime1=0&endTime1=86400&next_weekDayURL=2&weekDay=1&startTime1=0&endTime1=86400&next_weekDayURL=3&weekDay=2&startTime1=0&endTime1=86400&next_weekDayURL=4&weekDay=3&startTime1=0&endTime1=86400&next_weekDayURL=5&weekDay=4&startTime1=0&endTime1=86400&next_weekDayURL=6&weekDay=5&startTime1=0&endTime1=86400&next_weekDayURL=7&weekDay=6&startTime1=0&endTime1=86400&weekDayEnd=7&nextAreaAlarmParam=1&AreaId=2&AlarmEnable=true&AlarmInterval=10&AlarmIO1=true&AlarmIO2=true&AlarmFTP=true&AlarmSMTP=true&AlarmRecord=true&weekDayBegin=1&weekDay=0&startTime1=0&endTime1=86400&next_weekDayURL=2&weekDay=1&startTime1=0&endTime1=86400&next_weekDayURL=3&weekDay=2&startTime1=0&endTime1=86400&next_weekDayURL=4&weekDay=3&startTime1=0&endTime1=86400&next_weekDayURL=5&weekDay=4&startTime1=0&endTime1=86400&next_weekDayURL=6&weekDay=5&startTime1=0&endTime1=86400&next_weekDayURL=7&weekDay=6&startTime1=0&endTime1=86400&weekDayEnd=7&AreaAlarmParamEnd=1&HighTemperatureAlarmParamEnd=1
Return	OK

2.6.19.3 Normal temperature alarm

2.6.19.3.1 Get normal temperature alarm parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AIThermal Normal TemperatureAlarmLinkage
Description	For parameters, Refer to temperature alarm parameters

Example	http:// 192.168.0.156 /cgi-bin/param.cgi?action=get&type= AIThermal Normal TemperatureAlarmLinkage
Return	NormalTemperatureAlarmParamBegin=1 AreaId=1 AlarmEnable=false AlarmInterval=5 AlarmIO1=true AlarmIO2=false AlarmFTP=true AlarmSMTP=false AlarmRecord=true AlarmSound=true AudioActionId=3 weekDayBegin=1 weekDay=0 startTime1=0 endTime1=86400 next_weekDayURL=2 weekDay=1 startTime1=0 endTime1=86400 next_weekDayURL=3 weekDay=2 startTime1=0 endTime1=86400 next_weekDayURL=4 weekDay=3 startTime1=0 endTime1=86400 next_weekDayURL=5 weekDay=4 startTime1=0 endTime1=86400 next_weekDayURL=6 weekDay=5 startTime1=0 endTime1=86400 next_weekDayURL=7 weekDay=6 startTime1=0 endTime1=86400 weekDayEnd=7 AreaId=2

	AlarmEnable=true AlarmInterval=10 AlarmIO1=true AlarmIO2=true AlarmFTP=true AlarmSMTP=true AlarmRecord=true weekDayBegin=1 weekDay=0 startTime1=0 endTime1=86400 next_weekDayURL=2 weekDay=1 startTime1=0 endTime1=86400 next_weekDayURL=3 weekDay=2 startTime1=0 endTime1=86400 next_weekDayURL=4 weekDay=3 startTime1=0 endTime1=86400 next_weekDayURL=5 weekDay=4 startTime1=0 endTime1=86400 next_weekDayURL=6 weekDay=5 startTime1=0 endTime1=86400 next_weekDayURL=7 weekDay=6 startTime1=0 endTime1=86400 weekDayEnd=7 AreaId=3 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false

	AreaId=4 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=5 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=6 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=7 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=8 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false NormalTemperatureAlarmParamEnd=1 (For other responses, Refer to General Response)

2.6.19.3.2 Set normal temperature alarm parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= AIThermal Normal TemperatureAlarmLinkage
Description	For parameters, Refer to temperature alarm parameters
Example	http://192.168.0.156/cgi-bin/param.cgi?action=set&type=AIThermalNormalTemperatureAlarmLinkage&NormalTemperatureAlarmParamBegin=1&AreaAlarmParamBegin=1&AreaId=1&AlarmEnable=true&AlarmInterval=5&AlarmIO1=true&AlarmIO2=false&AlarmFTP=true&AlarmSMTP=false&AlarmRecord=true&AlarmSound=true&AudioActionId=3&weekDayBegin=1&weekDay=0&startTime1=0&endTime1=86400&next_weekDayURL=2&weekDay=1&startTime1=0&endTime1=86400&next_weekDayURL=3&weekDay=2&startTime1=0&endTime1=86400&next_weekDayURL=4&weekDay=3&startTime1=0&endTime1=86400&next_weekDayURL=5&weekDay=4&startTime1=0&endTime1=86400&next_weekDayURL=6&weekDay=5&startTime1=0&endTime1=86400&next_weekDayURL=7&weekDay=6&startTime1=0&endTime1=86400&weekDayEnd=7&nextAreaAlarmParam=1&AreaId=2&AlarmEnable=true&AlarmInterval=10&AlarmIO1=true&AlarmIO2=true&AlarmFTP=true&AlarmSMTP=true&AlarmRecord=true&weekDayBegin=1&weekDay=0&startTime1=0&endTime1=86400&next_weekDayURL=2&weekDay=1&startTime1=0&endTime1=86400&next_weekDayURL=3&weekDay=2&startTime1=0&endTime1=86400&next_weekDayURL=4&weekDay=3&startTime1=0&endTime1=86400&next_weekDayURL=5&weekDay=4&startTime1=0&endTime1=86400&next_weekDayURL=6&weekDay=5&startTime1=0&endTime1=86400&next_weekDayURL=7&weekDay=6&startTime1=0&endTime1=86400&weekDayEnd=7&AreaAlarmParamEnd=1&NormalTemperatureAlarmParamEnd=1
Return	OK

2.6.19.4 Low temperature alarm

2.6.19.4.1 Get low temperature alarm parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AIThermal Low TemperatureAlarmLinkage
Descripti	For parameters, Refer to temperature alarm parameters

on	
Example	http:// 192.168.0.156 /cgi-bin/param.cgi?action=get&type= AIThermal Low TemperatureAlarmLinkage
Return	Low TemperatureAlarmParamBegin=1 AreaId=1 AlarmEnable=false AlarmInterval=5 AlarmIO1=true AlarmIO2=false AlarmFTP=true AlarmSMTP=false AlarmRecord=true AlarmSound=true AudioActionId=3 weekDayBegin=1 weekDay=0 startTime1=0 endTime1=86400 next_weekDayURL=2 weekDay=1 startTime1=0 endTime1=86400 next_weekDayURL=3 weekDay=2 startTime1=0 endTime1=86400 next_weekDayURL=4 weekDay=3 startTime1=0 endTime1=86400 next_weekDayURL=5 weekDay=4 startTime1=0 endTime1=86400 next_weekDayURL=6 weekDay=5 startTime1=0 endTime1=86400 next_weekDayURL=7 weekDay=6 startTime1=0 endTime1=86400 weekDayEnd=7

	AreaId=2 AlarmEnable=true AlarmInterval=10 AlarmIO1=true AlarmIO2=true AlarmFTP=true AlarmSMTP=true AlarmRecord=true weekDayBegin=1 weekDay=0 startTime1=0 endTime1=86400 next_weekDayURL=2 weekDay=1 startTime1=0 endTime1=86400 next_weekDayURL=3 weekDay=2 startTime1=0 endTime1=86400 next_weekDayURL=4 weekDay=3 startTime1=0 endTime1=86400 next_weekDayURL=5 weekDay=4 startTime1=0 endTime1=86400 next_weekDayURL=6 weekDay=5 startTime1=0 endTime1=86400 next_weekDayURL=7 weekDay=6 startTime1=0 endTime1=86400 weekDayEnd=7 AreaId=3 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false

	AlarmRecord=false AreaId=4 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=5 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=6 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=7 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false AreaId=8 AlarmEnable=false AlarmInterval=10 AlarmIO1=false AlarmIO2=false AlarmFTP=false AlarmSMTP=false AlarmRecord=false Low TemperatureAlarmParamEnd=1 (For other responses, Refer to General Response)

2.6.19.4.2 Setting the low temperature alarm

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= AIThermal Low TemperatureAlarmLinkage
Description	For parameters, Refer to temperature alarm parameters
Example	http://192.168.0.156/cgi-bin/param.cgi?action=set&type=AIThermalLowTemperatureAlarmLinkage&LowTemperatureAlarmParamBegin=1&AreaAlarmParamBegin=1&AreaId=1&AlarmEnable=true&AlarmInterval=5&AlarmIO1=true&AlarmIO2=false&AlarmFTP=true&AlarmSMTP=false&AlarmRecord=true&AlarmSound=true&AudioActionId=3&weekDayBegin=1&weekDay=0&startTime1=0&endTime1=86400&next_weekDayURL=2&weekDay=1&startTime1=0&endTime1=86400&next_weekDayURL=3&weekDay=2&startTime1=0&endTime1=86400&next_weekDayURL=4&weekDay=3&startTime1=0&endTime1=86400&next_weekDayURL=5&weekDay=4&startTime1=0&endTime1=86400&next_weekDayURL=6&weekDay=5&startTime1=0&endTime1=86400&next_weekDayURL=7&weekDay=6&startTime1=0&endTime1=86400&weekDayEnd=7&nextAreaAlarmParam=1&AreaId=2&AlarmEnable=true&AlarmInterval=10&AlarmIO1=true&AlarmIO2=true&AlarmFTP=true&AlarmSMTP=true&AlarmRecord=true&weekDayBegin=1&weekDay=0&startTime1=0&endTime1=86400&next_weekDayURL=2&weekDay=1&startTime1=0&endTime1=86400&next_weekDayURL=3&weekDay=2&startTime1=0&endTime1=86400&next_weekDayURL=4&weekDay=3&startTime1=0&endTime1=86400&next_weekDayURL=5&weekDay=4&startTime1=0&endTime1=86400&next_weekDayURL=6&weekDay=5&startTime1=0&endTime1=86400&next_weekDayURL=7&weekDay=6&startTime1=0&endTime1=86400&weekDayEnd=7&AreaAlarmParamEnd=1&LowTemperatureAlarmParamEnd=1
Return	OK

2.6.19.5 Image calibration

2.6.19.5.1 Get image calibration parameters (getAIThermalMapping)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AIThermalMapping&cameraID=1
Descripti	For parameters, Refer to AI thermal imaging image calibration parameters

on	
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action=get&type=AIThermalMapping &cameraID=1
Return	SerialNumber=6 SceneDepth=5 RegionSrcBegin=1 SrcPointList=27.20,48.81||59.00,40.00||57.80,70.85 RegionSrcEnd=1 RegionDstBegin=1 DstPointList=17.00,45.08||47.00,28.81||55.00,56.95 RegionDstEnd=1 OffsetX=1.1 OffsetY=2.0

2.6.19.5.2 Set image calibration parameters (setAIThermalMapping)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= AIThermalMapping [&<argument>=<value>...]
Description	For parameters, Refer to AI thermal imaging image calibration parameters
Example	http://192.168.1.252/cgi-bin/param.cgi?action=set&type=AIThermalMapping&SerialNumber=7&SceneDepth=6&RegionSrcBegin=1&SrcPointList=27.20,48.81||59.00,40.00||57.80,70.85&RegionSrcEnd=1&RegionDstBegin=1&DstPointList=17.00,45.08||47.00,28.81||55.00,56.95&RegionDstEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.19.5.3 AI thermal imaging image calibration parameters (visible light and invisible light calibration points correspond one to one)

parameter	type of data	Remark
SerialNumber	int<1, 8>	Calibration serial number, up to 8

SceneDepth	int	Depth of URL, the distance from the image to the camera. Unit: meter
RegionSrcBegin	int<1>	The visible light region starts
SrcPointList	<string>	Visible light area point coordinate list: x1,y1 || x2,y2 || x3,y3 Note: x, y are both float, and the number of points corresponds to the invisible light, ranging from 0-100
RegionSrcEnd	int<1>	End of visible light region
RegionDstBegin	int<1>	Invisible light area start mark
DstPointList	<string>	Invisible light area point coordinate list: x1,y1 || x2,y2 ||x3,y3 Note: x, y are both float, ranging from 0 to 100
RegionDstEnd	int<1>	End of invisible light zone
OffsetX	float	Horizontal offset
OffsetY	float	Vertical Offset

2.6.19.6 **measurement dead pixels (same as infrared thermal imaging)**

2.6.19.6.1 Correct the bad point of human body temperature measurement (apply AIThermalBadPointCalibration)

URL	http://<servername>/cgi-bin/param.cgi?action=apply&type=AIThermalBadPointCalibration
Description	For parameters, Refer to AI thermal imaging bad pixel correction parameters Modify the bad point to a point where the temperature can be measured normally
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action=apply&type=AIThermalBadPointCalibration&BadPointList=50,50||80,80

Return	OK (For other responses, Refer to General Response)

2.6.19.6.2 AI thermal imaging bad pixel correction parameters

parameter	type of data	Remark
BadPointList	<string>	Bad point coordinate list: x1,y1 || x2,y2 || ... Note: x, y are both float, and the number of points corresponds to the invisible light

2.6.19.6.3 Reset human body temperature bad point (restore AIThermalBadPointCalibration)

URL	http://<servername>/cgi-bin/param.cgi?action=restore&type= AIThermalBadPointCalibration
Description	Reset the corrected points
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action= restore &type=AIThermalBadPointCalibration
Return	OK (For other responses, Refer to General Response)

2.6.19.6.4 Save human body temperature measurement bad point calibration (save AIThermalBadPointCalibration)

URL	http://<servername>/cgi-bin/param.cgi?action=save&type= AIThermalBadPointCalibration
Description	Save the corrected points

Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action= save &type=AIThermalBadPointCalibration
Return	OK (For other responses, Refer to General Response)

2.6.19.7 **Temperature calibration**

2.6.19.7.1 Get temperature calibration parameters (get AIThermalCalibration)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AI Thermal Calibration
Description	For parameters, Refer to AI thermal imaging temperature measurement calibration parameters
Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action=get&type= AIThermalCalibration
Return	Enable=false ShowObjectEnable=false BlackBobyTemperature=40.10 Emissivity=0.50 TargetSpace=5000.00 CalibrationAreaBegin=1 PointList=20,28||75,28||75,82||20,82 CalibrationAreaEnd=1

2.6.19.7.2 Set temperature calibration parameters (set AIThermalCalibration)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= AIThermalCalibration [&<argument>=<value>...]
Description	For parameters, Refer to AI thermal imaging temperature measurement calibration parameters
Example	http://1 92.168.1.22 /cgi-bin/param.cgi?action=set&type=AIThermalCalibration&Enable=true&ShowObjectEnable=false&BlackBobyTemperature=28&Emissivity=0.5&TargetSpace=20&CalibrationAreaBegin=1&PointList=1,1||40,40&CalibrationAreaEnd=1

Return	OK (For other responses, Refer to General Response)

2.6.19.7.3 AI thermal imaging temperature measurement calibration parameters

parameter	type of data	Remark
Enable	<bool>{true,false}	Whether to enable test calibration
ShowObjectEnable	<bool>{true,false}	Whether to overlay regional information
BlackBobyTemperature	<float>[n]	Target temperature
Emissivity	<Float> [0.1,0.99]	Target emissivity
TargetSpace	<int>[n]	Distance M defaults to 15m
CalibrationAreaBegin	int<1>	Temperature measurement area start mark
PointList	<string>	Temperature measurement area point coordinate list: x1,y1 || x2,y2 Note: x, y are both float Temperature measurement calibration only supports rectangles, so when setting, you only need to set the coordinates of the upper left corner and the lower right corner. The extra points will not be parsed, and only the first and second points in the list will be parsed. When obtaining, the coordinate points of the four corners of the rectangle will be Returned.
CalibrationAreaEnd	int<1>	Temperature measurement area end mark

2.6.19.8 **Metrology Test**

2.6.19.8.1 Get measurement test parameter configuration (get AIThermalMetrologyTest)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=AIThermalMetrologyTest
Description	Get the configuration parameters of the measurement test. For details, Refer to AI thermal imaging measurement test parameters.
Example	http://192.168.0.96/cgi-bin/param.cgi?action=get&type=AIThermalMetrologyTest
Return	Enable=true AreaParamBegin=1 AreaId=1 Emissivity=0.10 TargetSpace=1.00 PointList=4,8||15,21 NextAreaParam=1 AreaId=2 Emissivity=0.20 TargetSpace=2.00 PointList=67,58||81,82 NextAreaParam=1 AreaId=3 Emissivity=0.30 TargetSpace=3.00 PointList=37,64||51,84 NextAreaParam=1 AreaId=4 Emissivity=0.40 TargetSpace=4.00 PointList=22,62||26,80 NextAreaParam=1 AreaId=5 Emissivity=0.50 TargetSpace=5.00 PointList=37,64||51,84 NextAreaParam=1 AreaId=6 Emissivity=0.60 TargetSpace=6.00 PointList=37,64||51,84

	NextAreaParam=1 AreaId=7 Emissivity=0.70 TargetSpace=7.00 PointList=37,64||51,84 NextAreaParam=1 AreaId=8 Emissivity=0.80 TargetSpace=8.00 PointList=37,64||51,84 AreaParamEnd=1

2.6.19.8.2 Set the measurement test parameter configuration (set AIThermalMetrologyTest)

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= AIThermalMetrologyTest [&<argument>=<value>...]
Description	Set the configuration parameters of the measurement test. For details, Refer to AI Thermal Imaging Measurement Test Parameters
Example	http://192.168.0.96/cgi-bin/param.cgi?action=set&type=AIThermalMetrologyTest&Enable=true&AreaParamBegin=1&AreaId=1&Emissivity=0.1&TargetSpace=1.00&PointList=4,8||15,21&NextAreaParam=1&AreaId=2&Emissivity=0.2&TargetSpace=2.00&PointList=67,58||81,82&NextAreaParam=1&AreaId=3&Emissivity=0.3&TargetSpace=3.00&PointList=37,64||51,84&NextAreaParam=1&AreaId=4&Emissivity=0.4&TargetSpace=4.00&PointList=22,62||26,80&NextAreaParam=1&AreaId=5&Emissivity=0.5&TargetSpace=5.00&PointList=37,64||51,84&NextAreaParam=1&AreaId=6&Emissivity=0.6&TargetSpace=6.00&PointList=37,64||51,84&NextAreaParam=1&AreaId=7&Emissivity=0.7&TargetSpace=7.00&PointList=37,64||51,84&NextAreaParam=1&AreaId=8&Emissivity=0.8&TargetSpace=8.00&PointList=37,64||51,84&AreaParamEnd=1
Return	OK (For other responses, Refer to General Response)

2.6.19.8.3 AI thermal imaging metrology test parameter configuration

parameter	type of data	Remark
Enable	<bool>{true,false}	Whether to enable the metering test function
AreaParamBegin	int<1>	Area parameter start mark
AreaId	int<1, 8>	Region ID, up to 8 regions
Emissivity	<Float> [0.1,0.99]	Target emissivity
TargetSpace	<int>[n]	Distance M defaults to 15m
PointList	<string>	Temperature measurement area point coordinate list: x1,y1 || x2,y2 Note: x and y are both float, and the value range of the point is 0-100 The measurement test currently only supports rectangles, so when setting, you only need to set the coordinates of the upper left corner and the lower right corner. The extra points will not be analyzed, and only the first and second points in the list will be analyzed.
NextAreaParam	int<1>	Next area parameter flag
AreaParamEnd	int<1>	End of area parameters

2.6.19.9 Temperature measurement version (same as infrared thermal imaging)

2.6.19.9.1 Get the human body temperature measurement version information (get AIThermalVersionInfo)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AIThermalVersionInfo
Description	For parameters, Refer to AI Thermal Imaging Version Information

Example	http:// 192.168.1.20 /cgi-bin/param.cgi?action=get&type= AIThermalVersionInfo
Return	Version=20190723 Sequence=test-1

2.6.19.9.2 AI thermal imaging version information (not supported)

parameter	type of data	Remark
Version	<string>	Movement version
Sequence	<string>	Movement serial number

2.6.19.10 Platform configuration

2.6.19.10.1 Get the temperature measurement snapshot image upload platform configuration information (getAIThermalPic)

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= AIThermalPic
Description	For parameters, Refer to AI thermal imaging image upload address configuration information Get the configuration information related to the snapshot image upload platform
Example	http://192.168.1.24/cgi-bin/param.cgi?action=get&type=AIThermalPic
Return	Returns when the address information configuration information is empty PicStatus=close Returned when the address information configuration is not empty PicStatus=open PlatAddress=192.168.1.20 PlatformPort=80 PlatUrl=/upload_dir/ PlatUsername=admin PlatPassword=admin

2.6.19.10.2 AI thermal imaging image upload address configuration information

parameter	type of data	Remark
PicStatus	<string>	Is the image upload platform address configuration enabled?
PlatAddress	<string>	Upload server address (exists when enabled)
PlatPort	<string>	Upload server port (exists when enabled)
PlatUrl	<string>	The URL of the image upload server (exists when the function is enabled)
PlatUsername	<string>	Username of the upload server (exists if enabled)
PlatPassword	<string>	Password for the upload server (present when enabled)

2.6.19.10.3 Configure the temperature measurement snapshot image upload platform information (setAIThermalPic)

URL	http://<servername>/cgi-bin/param.cgi?action= **open** &type= AIThermalPic [&<argument>=<value>...]
Description	For parameters, Refer to AI thermal imaging image upload platform configuration parameters After the configuration is completed, when there are captured pictures, the picture data and attribute information will be uploaded to the platform in the form of **HTTP POST**
Example	http://192.168.1.24/cgi-bin/param.cgi?action=open&type=AIThermalPic&PlatAddress=192.168.1.20&PlatPort= 1234&PlatUrl=/upload_dir/ &PlatUsername=admin&PlatPassword=admin
Return	OK (For other responses, Refer to General Response)

2.6.19.10.4 AI thermal imaging image upload platform configuration parameters

parameter	type of data	Remark
PlatAddress	<string>	Upload server address
PlatPort	<string>	Upload server port
PlatUrl	<string>	Url of the image upload server Note: This URL is used for the push address in the http POST header. It can be http:// **PlatAddress : PlatPort /Url/ or directly: /Url/. If no configuration is made, the default is '/'**
PlatUsername	<string>	Username used by the upload server
PlatPassword	<string>	Password used by the upload server

2.6.19.10.5 Human body temperature measurement snapshot image upload format and parameters (POST)

Description	**When the device is configured with the snapshot image upload platform information, the image will be uploaded to the platform in the following format:**
HTTP POST Format (HTTP header + body)	POST / upload_dir/ HTTP/1.1 Host:192.168.1.106:1234 User-Agent: test Content-length: 152100 Content-type: text/plain Connection: Keep-Alive AlarmTime=1570646447 FaceInfoBegin=1 Type=0 PointX=1210 PointY=422 Height=192 Width=160 Yaw=0 Tilt=0 Temperature=35.80

	FaceInfoEnd=1 FacePictureDataLen=3442 FacePictureData=Picture data

Upload image parameters and attribute description

AlarmTime	<string>	Image capture time (s)
FaceInfoBegin	< int > [1, n]	A certain image attribute starts tag A picture may have multiple face attributes, starting with
Type	<string>	Capture thumbnail type, 0, face 1, body
PointX	<string>	X coordinate of the upper left corner of the snapshot (pixel) The full image resolution is 1920*1080
PointY	<string>	X coordinate of the upper left corner of the snapshot (pixel) The full image resolution is 1920*1080
Height	<string>	Snapshot thumbnail height (pixels) The full image resolution is 1920*1080
Width	<string>	Snapshot thumbnail width (pixels) The full image resolution is 1920*1080
Yaw	<int>	Horizontal angle of the captured target
Tilt	<int>	The vertical angle of the captured target
Temperature	<float>	Snapshot target's current temperature (floating point type)
FaceInfoNext	< int >	Next image attribute start tag

	[2, n-1]	
FaceInfoEnd	< int > [1, n]	End tag of a certain image attribute A picture may have multiple face attributes, so end here
FacePictureDataLen	<int>	Length of captured image data
FacePictureData	<Image stream>	Captured image data (directly saved as an image)

2.6.19.10.6 Delete the temperature measurement snapshot image upload platform information (setAIThermalPic)

URL	http://<servername>/cgi-bin/param.cgi?action= **close** &type= AIThermalPic
Description	After the configuration is completed, the platform configuration information will be cleared and the platform will no longer receive images and attribute information.
Example	http://192.168.1.24/cgi-bin/param.cgi?action=
Return	OK (For other responses, Refer to General Response)

2.6.20 user

Note: Use _ to replace spaces.

2.6.19.1. User Settings (IPC)

2.6.19.1.1. Get all users (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action= **getAllUser** &type= **User**
Example	http://192.168.17.189/cgi-bin/param.cgi?action= getAllUser &type=User
Description	Refer to URL Descriptions

Return	userCount=2 userBegin=1 userName=admin groupName=SuperAdmin privilegeCount=16 privilegeBegin=1 privilege=0 next_privilegeURL=2 privilege=1 next_privilegeURL=3 privilege=2 next_privilegeURL=4 privilege=3 next_privilegeURL=5 privilege=4 next_privilegeURL=6 privilege=5 next_privilegeURL=7 privilege=6 next_privilegeURL=8 privilege=7 next_privilegeURL=9 privilege=8 next_privilegeURL=10 privilege=10 next_privilegeURL=11 privilege=11 next_privilegeURL=12 privilege=12 next_privilegeURL=13 privilege=13 next_privilegeURL=14 privilege=14 next_privilegeURL=15 privilege=15 next_privilegeURL=16 privilege=16 privilegeEnd=1 next_userURL=1 userName=test groupName=Operator privilegeCount=5 privilegeBegin=1 privilege=13

	next_privilegeURL=2 privilege=12 next_privilegeURL=3 privilege=4 next_privilegeURL=4 privilege=0 next_privilegeURL=5 privilege=1 privilegeEnd=1 userEnd=1

2.6.19.1.2. Description of all user parameters

URL	Parameter Description	scope	type of data
userCount	amount of users		int
userBegin	User start ID		int
userName	username		string
groupName	group name		Strring
privilegeCount	Number of permissions		int
privilegeBegin	Permission start mark		int
privilege	Permissions 0: Real-time video 1: Video Control 2: PTZ control 3: Audio 4: Video playback 5: Backup 6: Manual recording 7: Video recording strategy 8: Disk Management 9: Alarm retrieval 10: Device Management		int

	11: Permission Management 12: Parameter configuration 13: Video maintenance 14: Log 15: Infrared thermal imaging 16: Intelligent Detection		
next_privilegeURL	Next permission start mark		int
privilegeEnd	End of permission mark		int
next_userURL	Next user starts identification		int
userEnd	User end identifier		int

2.6.19.1.3. Get all groups (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action= **getAllGroup** &type= **User**
Example	http://192.168.17.189/cgi-bin/param.cgi?action= getAllGroup &type=User
Description	Refer to URL Descriptions
Return	groupCount=3 groupBegin=1 groupName=Administrators privilegeCount=16 privilegeBegin=1 privilege=0 next_privilegeURL=2 privilege=1 next_privilegeURL=3 privilege=2 next_privilegeURL=4 privilege=3 next_privilegeURL=5

	privilege=4 next_privilegeURL=6 privilege=5 next_privilegeURL=7 privilege=6 next_privilegeURL=8 privilege=7 next_privilegeURL=9 privilege=8 next_privilegeURL=10 privilege=10 next_privilegeURL=11 privilege=11 next_privilegeURL=12 privilege=12 next_privilegeURL=13 privilege=13 next_privilegeURL=14 privilege=14 next_privilegeURL=15 privilege=15 next_privilegeURL=16 privilege=16 privilegeEnd=1 next_userURL=2 groupName=Operator privilegeCount=5 privilegeBegin=1 privilege=13 next_privilegeURL=2 privilege=12 next_privilegeURL=3 privilege=4 next_privilegeURL=4 privilege=0 next_privilegeURL=5 privilege=1 privilegeEnd=1 next_userURL=3 groupName=Media user describe=Media user privilegeCount=1 privilegeBegin=1 privilege=0

	privilegeEnd=1 groupEnd=1

2.6.19.1.4. All group parameter descriptions

URL	Parameter Description	scope	type of data
groupCount	Number of groups		int
groupBegin	Group start flag		int
groupName	group name		string
privilegeCount	Number of permissions		int
privilegeBegin	Permission start mark		int
privilege	Permissions 0: Real-time video 1: Video Control 2: PTZ control 3: Audio 4: Video playback 5: Backup 6: Manual recording 7: Video recording strategy 8: Disk Management 9: Alarm retrieval 10: Device Management 11: Permission Management 12: Parameter configuration 13: Video maintenance 14: Log 15: Infrared thermal		int

	imaging 16: Intelligent Detection		
next_privilegeURL	Next permission start mark		int
privilegeEnd	End of permission mark		int
next_groupURL	Next user starts identification		int
groupEnd	User end identifier		int

2.6.19.1.5. Get specified user permissions (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action= **getUserPrivileges** &type= **User&user =kang**
Example	http://192.168.17.189/cgi-bin/param.cgi?action= getUserPrivileges &type=User & user =kang
Description	Refer to URL Descriptions
Return	privilegeCount=16 privilegeBegin=1 privilege=0 next_privilegeURL=2 privilege=1 next_privilegeURL=3 privilege=2 next_privilegeURL=4 privilege=3 next_privilegeURL=5 privilege=4 next_privilegeURL=6 privilege=5 next_privilegeURL=7 privilege=6 next_privilegeURL=8 privilege=7 next_privilegeURL=9 privilege=8 next_privilegeURL=10

	privilege=10 next_privilegeURL=11 privilege=11 next_privilegeURL=12 privilege=12 next_privilegeURL=13 privilege=13 next_privilegeURL=14 privilege=14 next_privilegeURL=15 privilege=15 next_privilegeURL=16 privilege=16 privilegeEnd=1

2.6.19.1.6. User Permission Parameters Description

URL	Parameter Description	scope	type of data
privilegeCount	Number of groups		int
privilegeBegin	Permission start mark		int
privilege	Permissions 0: Real-time video 1: Video Control 2: PTZ control 3: Audio 4: Video playback 5: Backup 6: Manual recording 7: Video recording strategy 8: Disk Management 9: Alarm retrieval 10: Device Management 11: Permission Management		int

	12: Parameter configuration 13: Video maintenance 14: Log 15: Infrared thermal imaging 16: Intelligent Detection		
next_privilegeURL	Next permission start mark		int
privilegeEnd	End of permission mark		int

2.6.19.1.7. Get the specified group permissions (IPC)

URL	http://<ip>/cgi-bin/param.cgi?action= **getGroupPrivileges** &type= **User& group=Media_user**
Example	http://192.168.17.189/cgi-bin/param.cgi?action= getGroupPrivileges &type=User &group=Media_user
Description	Refer to URL Descriptions
Return	privilegeCount=1 privilegeBegin=1 privilege=0 privilegeEnd=1

2.6.19.1.8. Group Permission Parameter Description

URL	Parameter Description	scope	type of data
privilegeCount	Number of groups		int
privilegeBegin	Permission start mark		int
privilege	Permissions 0: Real-time video		int

	1: Video Control 2: PTZ control 3: Audio 4: Video playback 5: Backup 6: Manual recording 7: Video recording strategy 8: Disk Management 9: Alarm retrieval 10: Device Management 11: Permission Management 12: Parameter configuration 13: Video maintenance 14: Log 15: Infrared thermal imaging 16: Intelligent Detection		
next_privilegeURL	Next permission start mark		int
privilegeEnd	End of permission mark		int

2.6.19.2. User Settings (NVR/the lite series)

2.6.19.2.1. Get User

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=User
Description	For parameters, Refer to User Parameter Configuration
Example	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=User

Return	userListCount=2 userListBegin=1 userName=admin userPasswd=admin userGroup=Super admin userPrivilegeCount=8 userPrivilegeBegin=1 privilegeName=live_video next_userPrivilegeURL=2 privilegeName=alarm_manager next_userPrivilegeURL=3 privilegeName=video_manager next_userPrivilegeURL=4 privilegeName=network_manager next_userPrivilegeURL=5 privilegeName=device_manager next_userPrivilegeURL=6 privilegeName=systerm_config next_userPrivilegeURL=7 privilegeName=system_maintenance next_userPrivilegeURL=8 privilegeName=playback userPrivilegeEnd=8 next_userListURL=2 userName=lishun userPasswd=admin1234 userGroup=Media user userPrivilegeCount=3 userPrivilegeBegin=1 privilegeName=live_video next_userPrivilegeURL=2 privilegeName=video_manager next_userPrivilegeURL=3 privilegeName=playback userPrivilegeEnd=3 userListEnd=2

2.6.19.2.2. User Password (NVR)

2.6.19.2.2.1. Modify User Password (modifyUserPassword)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=modify&type=UserPassword&newpassword=<newpas

	swd>&oldpassword=<oldpasswd>
Description	For parameters, Refer to User Parameter Configuration
Example	http://192.168.2.193/cgi-bin/param.cgi?action=modify&type=UserPassword&oldpassword=admin&newpassword=adminsunell123
Return	OK (For other responses, Refer to General Response)

2.6.19.2.2. User password parameter configuration

Table 2-6-8-4

parameter	data	Description
oldpassword	<string>	The old password of the current user
newpassword	<string>	New password for the current user Note: The password cannot be pure numbers or letters, special characters are not supported, and the number of digits must be greater than 5

2.6.19.2.3. User Privilege (IPC/NVR)

2.6.19.2.3.1. Get User Privileges (getUserPrivilege)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=UserPrivilege&user=[name]
Description	For parameters, Refer to the User Permission Parameters Table.
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=get&type=UserPrivilege&user=test
Return	IPC: userGroupCount=1 userGroupBegin=1 userGroup=Administrators userPrivilegeCount=4 userPrivilegeBegin=1

	privilegeName=live_video next_userPrivilegeURL=2 privilegeName=video_manager next_userPrivilegeURL=3 privilegeName=device_manager next_userPrivilegeURL=4 privilegeName=playback userPrivilegeEnd=4 userGroupEnd=1 NVR: userGroup=Media user userPrivilegeCount=3 userPrivilegeBegin=1 privilegeName=liveVideo hasDeviceFlag=1 liveVideo-ch1=1 liveVideo-ch2=1 liveVideo-ch3=1 liveVideo-ch4=1 liveVideo-ch5=1 liveVideo-ch6=1 liveVideo-ch7=1 liveVideo-ch8=1 liveVideo-ch9=1 liveVideo-ch10=1 liveVideo-ch11=1 liveVideo-ch12=1 liveVideo-ch13=1 liveVideo-ch14=1 liveVideo-ch15=1 liveVideo-ch16=1 next_userPrivilegeURL=2 privilegeName=playback hasDeviceFlag=1 playback-ch1=1 playback-ch2=1 playback-ch3=1 playback-ch4=1 playback-ch5=1 playback-ch6=1 playback-ch7=1 playback-ch8=1 playback-ch9=1 playback-ch10=1

	playback-ch11=1 playback-ch12=1 playback-ch13=1 playback-ch14=1 playback-ch15=1 playback-ch16=1 next_userPrivilegeURL=3 privilegeName=backup hasDeviceFlag=1 backup-ch1=1 backup-ch2=1 backup-ch3=1 backup-ch4=1 backup-ch5=1 backup-ch6=1 backup-ch7=1 backup-ch8=1 backup-ch9=1 backup-ch10=1 backup-ch11=1 backup-ch12=1 backup-ch13=1 backup-ch14=1 backup-ch15=1 backup-ch16=1 userPrivilegeEnd=3 (For other responses, Refer to General Response)

2.6.19.2.3.2. Modify User Privileges (modifyUserPrivilege)

URL	http://<servername>/cgi-bin/param.cgi?action=modify&type=UserPrivilege&user=[name]
Description	For parameters, Refer to the User Permission Parameters Table.
Example	IPC: http://192.168.2.193/cgi-bin/ param .cgi?action=modify&type=UserPrivilege&user=test&liveVideo=1&videoManager=1&alarmManager=1&deviceManager=1&systermConfig=1&playback=1&networkManager=1 NVR:

	http://192.168.2.193/cgi-bin/ param .cgi?action=modify&type=UserPrivilege&user=test&liveVideo=1&liveVideo-ch1=0&liveVideo-ch15=0
Return	OK (For other responses, Refer to General Response)

2.6.19.2.3.3. Get User Privilege Ability

URL	http://192.168.2.193/cgi-bin/param.cgi?action=ability&type=UserPrivilege
Description	For parameters, Refer to the User Permission Parameters Table.
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=ability&type=UserPrivilege
Return	userGroupCount=3 userGroupBegin=1 userGroup=Administrators userPrivilegeCount=7 userPrivilegeBegin=1 privilegeName=liveVideo next_userPrivilegeURL=2 privilegeName=videoManager next_userPrivilegeURL=3 privilegeName=alarmManager next_userPrivilegeURL=4 privilegeName=networkManager next_userPrivilegeURL=5 privilegeName=deviceManager next_userPrivilegeURL=6 privilegeName=systermConfig next_userPrivilegeURL=7 privilegeName=playback userPrivilegeEnd=7 next_userGroupURL=2 userGroup=Operator userPrivilegeCount=5 userPrivilegeBegin=1 privilegeName=liveVideo next_userPrivilegeURL=2 privilegeName=videoManager next_userPrivilegeURL=3 privilegeName=networkManager next_userPrivilegeURL=4

	privilegeName=systermConfig next_userPrivilegeURL=5 privilegeName=playback userPrivilegeEnd=5 next_userGroupURL=3 userGroup=Media user userPrivilegeCount=3 userPrivilegeBegin=1 privilegeName=liveVideo next_userPrivilegeURL=2 privilegeName=videoManager next_userPrivilegeURL=3 privilegeName=playback userPrivilegeEnd=3 userGroupEnd=3 NVR: userGroupCount=3 userGroupBegin=1 userGroup=Administrators userPrivilegeCount=9 userPrivilegeBegin=1 privilegeName=liveVideo next_userPrivilegeURL=2 privilegeName=ptzControl next_userPrivilegeURL=3 privilegeName=playback next_userPrivilegeURL=4 privilegeName=channelManager next_userPrivilegeURL=5 privilegeName=deviceManager next_userPrivilegeURL=6 privilegeName=systermConfig next_userPrivilegeURL=7 privilegeName=faceRecognition next_userPrivilegeURL=8 privilegeName=thermal next_userPrivilegeURL=9 privilegeName=backup userPrivilegeEnd=9 next_userGroupURL=2 userGroup=Operator userPrivilegeCount=5 userPrivilegeBegin=1

	privilegeName=liveVideo next_userPrivilegeURL=2 privilegeName=ptzControl next_userPrivilegeURL=3 privilegeName=playback next_userPrivilegeURL=4 privilegeName=systermConfig next_userPrivilegeURL=5 privilegeName=backup userPrivilegeEnd=5 next_userGroupURL=3 userGroup=Media user userPrivilegeCount=3 userPrivilegeBegin=1 privilegeName=liveVideo next_userPrivilegeURL=2 privilegeName=playback next_userPrivilegeURL=3 privilegeName=backup userPrivilegeEnd=3 userGroupEnd=3 (For other responses, Refer to General Response)

2.6.19.2.3.4. User authority parameter table

Table 2-6-8-4

parameter	data	Description
userGroupCount	<int>[0,n]	User Group Count
userGroupBegin	<int>{1}	User Group Start
userGroup	<string>	User Group Name
userPrivilegeCount	<int>[0,n]	User Permission Count
userPrivilegeBegin	<int>{1}	User rights count starts
privilegeName	<string>	User permission name
next_userPrivileg	<int>[2,n]	Next user permission count

eURL		
userPrivilegeEnd	<int>[1,n]	End of user rights
next_userGroupURL	<int>[2,n]	Next User Group Count
userGroupEnd	<int>[1,n]	End of user group
hasDeviceFlag	<int>{0,1}	Device channel flag 0: This permission has no device channel 1: This permission has device access (note: IPC is not supported)
Permission name - ch channel number **(note: playback-ch6)**	<int>{0,1}	Corresponding device channel permission switch 0: Off 1: Open (note: IPC is not supported)

2.6.19.3. Add User (addUser)

URL	http://<servername>/cgi-bin/param.cgi?action=add&type=User&newuser=<newuser>&newpasswd=<newpasswd>[&group=<groupname>][&note=<note>]	
Description	For parameters, Refer to User Parameter Configuration	
Example	IPC http://192.168.32.120/cgi-bin/param.cgi?action=add&type=User&newuser=asdfg34&newpaswd=asdfg&group=Administrators&note=admin	NVR http://192.168.2.193/cgi-bin/param .cgi?action=add&type=User&newuser=test&newpassword=admin123&group=Administrators&note=admin&userPasswordTimeOut=1y&userPasswordExpireDate=86400
Return	OK (For other responses, Refer to General Response)	

2.6.19.4. Modify User (modifyUser)

URL	http://<servername>/cgi-bin/param.cgi?action=modify&type=User&user=<username>&newpasswd=<newpasswd>[&group=<groupname>][&note=<note>]	
Description	For parameters, Refer to User Parameter Configuration	
Example	IPC: http://192.168.32.120/cgi-bin/param.cgi?action=modify&type=User&user=asdfg&newpasswd=12345&group=Administrators&note=admin	NVR: http://192.168.2.193/cgi-bin/param .cgi?action=modify&type=User&user=test&newpassword=a12345&group=Administrators&note=admin&userPasswordTimeOut=3d&userPasswordExpireDate=86400000
Return	OK (For other responses, Refer to General Response)	

2.6.19.5. Delete User (IPC/NVR)

URL	http://<ip>/cgi-bin/param.cgi?userName=<username>&password=<password> &action=delete&type=User&user=asdfg3 &action=delete&type=User&user=asdfg34 4
Example	http://192.168.0.121/cgi-bin/param.cgi?action=delete&type=User&us &action=delete&type=User&user=asdfg34
Description	Refer to URL Descriptions
Return	OK (For other responses, Refer to General Response)

2.6.19.6. User parameter configuration

Table 2-6-12-3

parameter	data	Description
user	<string>	User name of the operation target
newuser	<string>	Username of the new user
newpasswd	<string>	User password for the new user
group	<string>	Permission group. When the current user has super permissions, the group name must be included.
note	<string>	User Tags
UserListCount (NVR)	<int>	Have several users
PrivilegeName (NVR)	<string>	Permission Type
UserPasswordTimeOut (NVR)	<string>{0d,1d,2d,3d,1w,2w,3w,1m,2m,3m,6m,1y}	Password change frequency (in lowercase d/m/y) (note: IPC is not supported)
UsePasswordExpireDate (NVR)	<unsigned int>	Password expiration date (expressed as a timestamp of seconds from 1970 to the expiration date, 0 means turning this feature off) (note: IPC is not supported)

2.6.19.7. Privacy settings (NVR)

2.6.19.7.1. Get Privacy Settings Parameters (getPrivacy)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=privacy
Description	For parameters, Refer to the Privacy Settings Parameters Table.
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=get&type=privacy
Return	doubleAuthEnable =1 (For other responses, Refer to General Response)

2.6.19.7.2. Set Privacy Settings Parameters (setPrivacy)

URL	http://<servername>/cgi-bin/param.cgi?action=modify&type=privacy
Description	For parameters, Refer to the Privacy Settings Parameters Table.
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=modify&type=privacy&=1
Return	OK (For other responses, Refer to General Response)

2.6.19.7.3. Privacy Settings Parameters Table

Table 2-6-8-4

parameter	data	Description
doubleAuthEnable	<int>{0,1}	Dual authentication switch 0: Off 1: Open

2.6.19.8. Application Verification (appVerification) (NVR)

2.6.19.8.1. Get application verification parameters (getAppVerification)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=appVerification
Description	For parameters, Refer to the Application Verification Parameters Table.
Example	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=appVerification
Return	enableFlag=1 appListCount=2 appListBegin=1 number=1234 state=0 remark=test1 next_AppListURL=2 number=5678 state=0

	remark=test2 appListEnd=2 (For other responses, Refer to General Response)

2.6.19.8.2. Set application verification parameters (setAppVerification)

URL	http://<servername>/cgi-bin/param.cgi?action=modify&type=appVerification
Description	For parameters, Refer to the Application Verification Parameters Table.
Example	Add to: http://192.168.2.193/cgi-bin/param.cgi?action=set&type=appVerification&appVerificationAction=add&appListCount=2&appListBegin=1&number=1234&remark=test1&next_AppListURL=2&number=5678&remark=test2&appListEnd=2 Revise: http://192.168.2.193/cgi-bin/param .cgi?action=set&type=appVerification&appVerificationAction=cover&appListCount=2&appListBegin=1&number=1234&remark=test123&next_AppListURL=2&number=5678&remark=test2233&appListEnd=2 Delete: http://192.168.2.193/cgi-bin/param.cgi?action=set&type=appVerification&appVerificationAction=remove&appListCount=1&appListBegin=1&number=1234&appListEnd=1 Clear: http://192.168.2.193/cgi-bin/params .cgi?action=set&type=appVerification&&appListCount=2&appVerificationAction=clean
Return	OK (For other responses, Refer to General Response)

2.6.19.8.3. Application Verification Parameter Table

Table 2-6-8-4

parameter	data	Description

enableFlag	<int>{0,1}	Enable the whitelist switch 0: Off 1: Open
appListCount	<int>[0,n]	Whitelist count
appListBegin	<int>{1}	Whitelist count starts
number	string	security code (note: can only be pure numbers)
state	int{0,1,2}	Status (note: cannot be modified) 0: Activate 1: Offline 2: Go online
remark	<string>	Remark
next_AppListURL	<int>[2,n]	Whitelist next count
appListEnd	<int>[1,n]	Whitelist count ends

2.6.19.9.Security Email (NVR)

2.6.19.9.1. Get Security Email Parameters (getSecurityEmail)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=securityEmail
Description	For parameters, Refer to the secure mailbox parameter table.
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=get&type=securityEmail
Return	securityEmailEnable=1 securityEmail=169.254.1.1@goolge.comsunell@qq.com (For other responses, Refer to General Response)

设置了格式：字体：（默认）Times New Roman

2.6.19.9.2. Set Security Email Parameters (setSecurityEmail)

URL	http://<servername>/cgi-bin/param.cgi?action=modify&type=securityEmail
Description	For parameters, Refer to the secure mailbox parameter table.
Example	http://192.168.2.193/cgi-bin/param.cgi?action=set&type=securityEmail&securityEmail=169.254.1.1@goolge.comsunell@qq.com
Return	OK (For other responses, Refer to General Response)

设置了格式：字体：（默认）Times New Roman

2.6.19.9.3. Secure Mailbox Parameter Table

Table 2-6-8-4

parameter	data	Description
securityEmailEnable	<int>{0,1}	Is secure mailbox supported? 0: Not supported 1: Support
securityEmail	<string>	email address

2.6.19.10. Security Question (NVR)

2.6.19.10.1.Get security question parameters (getSecurityQuestion)

URL	http://192.168.2.193/cgi-bin/ param .cgi?action=get&type=securityQuestion
Description	For parameters, Refer to the Safety Issues Parameters Table.
Example	http://192.168.2.193/cgi-bin/ param .cgi?action=get&type=securityQuestion
Return	securityQuestionEnable=1 securityQuestion1=1 securityQuestion2=2 securityQuestion3=3 (For other responses, Refer to General Response)

2.6.19.10.2.Set security question parameters (setSecurityQuestion)

URL	http://<servername>/cgi-bin/param.cgi?action=modify&type=securityQuestion
Description	For parameters, Refer to the Safety Issues Parameters Table.
Example	http://192.168.2.193/cgi-bin/param.cgi?action=set&type=securityQuestion&securityQuestion1=1&securityAnswer1=1&securityQuestion2=2&securityAnswer2=2&securityQuestion3=3&securityAnswer3=3
Return	OK (For other responses, Refer to General Response)

2.6.19.10.3.Safety Question Parameter Table

Table 2-6-8-4

parameter	data	Description
securityQuestionEnable	<int>{0,1}	Support security questions 0: Not supported 1: Support
securityQuestion[1-3]	<int>[1,8]	Security Question Number 1: What is the brand and model of your favorite car? 2. Your favorite team 3. Your favorite city 4. Your favorite animal 5. The company name of your first job 6: The name of the first boy/girl you like 7. The worst security question you've ever Refer ton 8. The funniest/worst design you've ever

		Refer ton (Note: There cannot be any duplication among the three questions)
securityAnswer[1-3]	string	Answers to security questions

2.6.21 Device logs

2.6.21.1 **Obtaining device system logs (systemL ogInfo) (IPC)**

URL	http : //<servername> /cgi-bin/param.cgi?action=get&type=systemLogInfo
Description	Refer to the input parameter table (logType parameter is IPC-specific)
Example	http://192.168.32.197/cgi-bin/param.cgi?action=get&type=systemLogInfo&startTime=20191226000000&endTime=20191226000010&logType=-1
Return	SystemLogInfoCount=1 SystemLogInfoBegin=1 deviceId= deviceIp= channelId=0 userName=admin majorType=4 minorType=6 time=2019-12-26 17:51:23 logData=StartVideoStream oldParamInfo= newParamInfo= SystemLogInfoEnd=1 (For other responses, Refer to General Response)

2.6.21.1.1 Input parameter table

parameter	data	Description
Start Time	<string>	The recording start time. Format (YYYYMMDDHHMMSS) Note: The minimum value cannot be less than 19710101010000
endTime	< string >	The end time of the recording. Format (YYYYMMDDHHMMSS) Note: The minimum value cannot be less than 19710101010000
log Type	<int>	When the parameter is -1, all log types are queried by default. When querying system logs, this parameter refers to the subtype

2.6.21.1.2 System log output parameter table

parameter	data	Description
deviceId	<string>	Device ID
deviceIp	<string>	Device IP
channelId	<int>	Channel Number
userName	<string>	username
majorType	<int>	Main Type
minorType	<int>	Subtype
time	<string>	Log time
logData	<string>	Log information
oldParamInfo	<string>	Old parameter information
newParamInfo	<string>	New parameter information

2.6.21.2 **Get device alarm log (alarmLogInfo) (IPC)**

URL	http : // <servername>/cgi-bin/param.cgi?action=get&type=alarmLogInfo
Description	Refer to Input Parameters Table
Example	http://192.168.32.197/cgi-bin/param.cgi?action=get&type=alarmLogInfo&startTime=20191226000000&endTime=20191226000010&logType=-1
Return	AlarmLogInfoCount=1 AlarmLogInfoBegin=1 deviceId=BB0120 deviceIp= deviceType=0 sourceType=1 sourceId=1 majorType=1 minorType=1 description= alarmStartTime=2019-12-13 1:59:19 alarmEndTime=2019-12-13 2:10:19 AlarmLogInfoEnd=1 (For other responses, Refer to General Response)

2.6.21.2.1 Input parameter table

parameter	data	Description
Start Time	<string>	The recording start time. Format (YYYYMMDDHHMMSS) Note: The minimum value cannot be less than 19710101010000
endTime	< string >	The end time of the recording. Format (YYYYMMDDHHMMSS)

		Note: The minimum value cannot be less than 19710101010000
log Type	<int>	When the parameter is -1, all log types are queried by default. When querying the alarm log, this parameter refers to the main type

2.6.21.2.2 Alarm log output parameter table

parameter	data	Description
deviceId	<string>	Device ID
deviceIp	<string>	Device IP
deviceType	<int>	Equipment type
sourceType	<int>	Alarm source type
sourceId	<int>	Alarm source ID
majorType	<int>	Alarm main type
minorType	<int>	Alarm subtype
description	<string>	describe
alarmStartTime	<string>	Alarm start time
alarmEndTime	<string>	Alarm end time

2.6.20.3.NVR log acquisition (NVR)

2.6.20.3.1. Get systemLog parameters (systemLog)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type= systemLog
Description	Refer to SystemLog Parameters Table
Example	http://192.168.2.162/cgi-bin/param.cgi?action=get&type=systemLog&logType= 1

	&logStartTime=21/12/2023 08:48:49&logEndTime=22/12/2023 09:48:49
Return	logType = 1 logStartTime=21/12/2023 08:48:49 logEndTime=22/12/2023 09:48:49 logData= Log Time:21/12/2023 09:12:29, loginfo: 001c27657657 Log Time:21/12/2023 09:21:32, loginfo: 001c27657657

2.6.20.3.2. Get eventLog

设置了格式：字体：（中文）宋体

URL	http://192.168.2.193/cgi-bin/param.cgi?action=get&type=eventLog
Description	Refer to systemLog parameter table
Example	http://192.168.2.162/cgi-bin/param.cgi?action=get&type=eventLog&logType=1&logStartTime=2023/12/22 08:48:49&logEndTime=2023/12/22 09:48:49
Return	logType=1 logStartTime=2023/12/22 08:48:49 logEndTime=2023/12/22 09:48:49 logData= Log Time: 2023/12/22 09:12:29, loginfo: 001c27657657 Log Time: 2023/12/22 09:21:32, loginfo: 001c27657657

设置了格式：字体：（中文）宋体

~~2.6.20.3.2.~~2.6.20.3.3. Meaning of systemLog **parameters**

SystemLog **Parameters Table**

Table 2-6-5-2-3-1

parameter	data	Description

logType	<int>[1,2,3,4]	Log Type 1. Operation log 2. Abnormal log 3. Alarm log 4. System log
logStartTime	<string>	Query start time
logEndTime	<string>	Query end time

2.6.22 Multi-target parameters (IPC excluding the lite series)

2.6.22.1 **Acquisition of capabilities**

URL	http://<ip>/cgi-bin/param.cgi?action=get&type= **AIMultiObjectDetectAbility** &cameraID=1
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type= **AIMultiObjectDetectAbility** &cameraID=1
Description	Refer to URL Descriptions
Return	faceEnable=1 upBodyEnable=0 fullBodyEnable=1 plateEnable=0 vehicleEnable=1 boatEnable=0 showObjectEnable=1 showAreaEnable=1 confidenceEnable=1 pictureQualityEnable=1 ftpUploadEnable=1 ftpUploadFullRefer toEnable=1 faceMinPixelWidthEnable=1 faceMaxPixelWidthEnable=0 upBodyMinPixelWidthEnable=0 upBodyMaxPixelWidthEnable=0 humanMinPixelWidthEnable=1 humanMaxPixelWidthEnable=0 plateMinPixelWidthEnable=0 plateMaxPixelWidthEnable=0 vehicleMinPixelWidthEnable=1 vehicleMaxPixelWidthEnable=0 polygonAreaEnable=1

	scheduleTimeParamEnable=1 pitchDegreesEnable=0 yawDegreesEnable=0 tiltDegreesEnable=0 snapPictureModeEnable=1 snapPictureModeCount=2 snapPictureModeBegin=1 snapPictureMode=0 next_snapPictureModeURL=2 snapPictureMode=1 snapPictureModeEnd=1 AIObjectAttributeOutEnable=0 faceExposureEnable=0 filterEnable=0 displayTraceCount=4 displayTraceBegin=1 displayTraceInfo=0 next_displayTraceURL=2 displayTraceInfo=1 next_displayTraceURL=3 displayTraceInfo=2 next_displayTraceURL=4 displayTraceInfo=6 displayTraceEnd=1

2.6.22.2 **Capability parameter meaning**

URL	Parameter Description	scope	type of data
faceEnable	Face Detection 0: Not supported 1: Support	0-1	int
upBodyEnable	Upper body detection 0: Not supported 1: Support	0-1	int
fullBodyEnable	Full body test 0: Not supported 1: Support	0-1	int

plateEnable	License Plate Detection 0: Not supported 1: Support	0-1	int
vehicleEnable	Vehicle Detection 0: Not supported 1: Support	0-1	int
boatEnable	Ship detection 0: Not supported 1: Support	0-1	int
showObjectEnable	Display faces, bodies, and head-and-shoulder frames 0: Not supported 1: Support	0-1	int
showAreaEnable	Display detection area 0: Not supported 1: Support	0-1	int
confidenceEnable	Confidence 0: Not supported 1: Support	0-1	int
pictureQualityEnable	Cutout quality 0: Not supported 1: Support	0-1	int
ftpUploadEnable	FTP send cutout 0: Not supported 1: Support	0-1	int
ftpUploadFullReferToEnable	FTP send panorama 0: Not supported 1: Support	0-1	int
faceMinPixelWidthEnabl	Minimum pixel for face	0-1	int

e	detection 0: Not supported 1: Support		
faceMaxPixelWidthEnable	Maximum pixel for face detection 0: Not supported 1: Support	0-1	int
upBodyMinPixelWidthEnable	Minimum pixel for half-body detection 0: Not supported 1: Support	0-1	int
upBodyMaxPixelWidthEnable	Maximum pixel for half-body detection 0: Not supported 1: Support	0-1	int
humanMinPixelWidthEnable	Minimum pixel for human detection 0: Not supported 1: Support	0-1	int
humanMaxPixelWidthEnable	Maximum pixel for human detection 0: Not supported 1: Support	0-1	int
plateMinPixelWidthEnable	Minimum pixel for license plate detection 0: Not supported 1: Support	0-1	int
plateMaxPixelWidthEnable	Maximum pixel for license plate detection 0: Not supported 1: Support	0-1	int

vehicleMinPixelWidthEnable	Minimum pixel for vehicle detection 0: Not supported 1: Support	0-1	int
vehicleMaxPixelWidthEnable	Vehicle detection maximum pixel 0: Not supported 1: Support	0-1	int
polygonAreaEnable	Detection area 0: Not supported 1: Support	0-1	int
scheduleTimeParamEnable	Arming time 0: Not supported 1: Support	0-1	int
pitchDegreesEnable	Pitch angle 0: Not supported 1: Support	0-1	int
yawDegreesEnable	Yaw angle 0: Not supported 1: Support	0-1	int
tiltDegreesEnable	Tilt angle 0: Not supported 1: Support	0-1	int
snapPictureModeEnable	Snapshot mode 0: Not supported 1: Support	0-1	int
snapPictureModeCount	Number of capture modes		int
snapPictureModeBegin	Capture mode start mark		
snapPictureMode	Snapshot mode	0-1	int

	0: Timing 1: Optimal		
next_snapPictureModeURL	Next snapshot mode start mark	0-1	int
snapPictureModeEnable	Capture mode end mark	0-1	int
AIObjectAttributeOutEnable	AI multi-target attribute output 0: Not supported 1: Support	0-1	int
faceExposureEnable	Face exposure 0: Not supported 1: Support	0-1	int
filterEnable	Filter stationary objects 0: Not supported 1: Support	0-1	int
displayTraceCount	Number of superimposed tracking information		int
displayTraceBegin	Overlay tracking information start mark		int
displayTraceInfo	tracking information 0: Off 1: Mode 1 2: Mode 2 6: Mosaic		int
next_displayTraceURL	Next tracking information indicator		int
displayTraceEnable	Overlay tracking information end mark		int

2.6.22.3 **Get AIMultiObjectDetectParam (IPC/NVR)**

URL	http://<servername>/cgi-bin/param.cgi?action= get&type= AIMultiObjectDetectParam
Description	Refer to Input Parameters Table
Example	http://192.168.0.54/cgi-bin/param.cgi?action=get&type=AIMultiObjectDetectParam

Return	FaceEnable=true //Face switch
	FullBodyEnable=true //Human body switch
	VehicleEnable=true //Vehicle switch
	ShowObjectMode=1 //Display mode
	ShowAreaEnable=true //Show area switch
	Reliability=10 //Confidence
	PictureQuality=60 //Picture quality
	SnapPictureMode=1 //Snap picture mode
	FaceMinPixelWidth=30 //Minimum pixel width for face
	UploadInterval =1 (NVR) //Snapshot interval in timing mode
	HumanMinPixelWidth=30 (IPC) //Minimum pixel width for human body
	FullBodyMinPixelWidth //(NVR) // Minimum pixel for human body detection
	VehicleMinPixelWidth=30 //Minimum pixel width of the vehicle
	SnapPictureMode=1 (IPC) //Snap picture mode
	FtpUploadEnable=false //FTP upload switch
	FtpUploadFullRefer toEnable=false //Full Refer to FTP upload switch
	PictureOSDEnable=false //Not used yet
	FirmwareVer=v1.0.0_20210708 (IPC) //Algorithm library version
	FilterStaticEnable = true (IPC)
	PolygonAreaBegin=1 //Detection area
	AreaId=1
	AreaPointBegin=1
	pointX1=0.00

	pointY1=0.00
	pointX2=0.00
	pointY2=100.00
	pointX3=100.00
	pointY3=100.00
	pointX4=100.00
	pointY4=0.00
	AreaPointEnd=1
	nextPolygonArea=1
	PolygonAreaEnd=1
	weekDayBegin=1 //Time layout
	weekDay=0
	startTime1=0
	endTime1=86400
	next_weekDayURL=2
	weekDay=1
	startTime1=0
	endTime1=86400
	next_weekDayURL=3
	weekDay=2
	startTime1=0
	endTime1=86400
	next_weekDayURL=4
	weekDay=3
	startTime1=0
	endTime1=86400
	next_weekDayURL=5
	weekDay=4
	startTime1=0
	endTime1=86400
	next_weekDayURL=6
	weekDay=5

	startTime1=0 endTime1=86400 next_weekDayURL=7 weekDay=6 startTime1=0 endTime1=86400 weekDayEnd=7 (For other responses, Refer to General Response)

2.6.22.4 **Set multi-target parameters set AIMultiObjectDetectParam**

URL	http://<servername>/cgi-bin/param.cgi?action= **set** &type= AIMultiObjectDetectParam [&<argument>=<value>...]
Description	Setting multi-target parameters
Example	http://192.168.0.54/cgi-bin/param.cgi?action=set&type=AIMultiObjectDetectParam&FaceEnable=true&FullBodyEnable=true&VehicleEnable=true&ShowObjectMode=1&ShowAreaEnable=true&Reliability=10&PictureQuality=100&SnapPictureMode=1&FaceMinPixelWidth=30&HumanMinPixelWidth=30&VehicleMinPixelWidth=30&SnapPictureMode=1&FtpUploadEnable=false&FtpUploadFullReferToEnable=false&PictureOSDEnable=false&FirmwareVer=v1.0.0_20210708&PolygonAreaBegin=1&AreaId=1&AreaPointBegin=1&pointX1=0.00&pointY1=0.00&pointX2=0.00&pointY2=100.00&pointX3=100.00&pointY3=100.00&pointX4=100.00&pointY4=0.00&AreaPointEnd=1&PolygonAreaEnd=1&weekDayBegin=1&weekDay=0&startTime1=0&endTime1=86400&next_weekDayURL=2&weekDay=1&startTime1=0&endTime1=86400&next_weekDayURL=3&weekDay=2&startTime1=0&endTime1=86400&next_weekDayURL=4&weekDay=3&startTime1=0&endTime1=86400&next_weekDayURL=5&weekDay=4&startTime1=0&endTime1=86400&next_weekDayURL=6&weekDay=5&startTime1=0&endTime1=86400&next_weekDayURL=7&weekDay=6&startTime1=0&endTime1=86400&weekDayEnd=7&FilterStaticEnable=false
Return	OK (For other responses, Refer to General Response)

2.6.22.5 **Multi-objective parameter table**

parameter	data	Description
FaceEnable	<string>	Face switch: true to turn on. false to turn off
UpBodyEnable	<string>	Upper body switch: true is on. false is off
FullBodyEnable	<string>	Human switch: true is on. false is off
PlateEnable	<string>	License plate switch: true is on. false is off
VehicleEnable	<string>	Vehicle switch: true is on. false is off
ShowObjectMode	<int>	Display mode, 0 none, 1 mode 1, 2 mode 2
ShowAreaEnable	< string >	Display area switch
Reliability	<int>	Confidence: 0 - 100
PictureQuality	<int>	Image quality 0 - 100
SnapPictureMode	< int >	Image capture mode 1: timed, 2: optimal
FaceMinPixelWidth	<int>	Minimum pixel for face detection (30-300)
FaceMaxPixelWidth	<int>	Maximum pixel for face detection (300-800)
HumanMinPixelWidth	<int>	Minimum pixel for human detection (30-300)
HumanMaxPixelWidth	<int>	Maximum pixel for human detection (300-800)
VehicleMinPixelWidth	<int>	Vehicle detection minimum pixels (30-300)
VehicleMaxPixelWidth	<int>	Vehicle detection maximum pixels (300-800)

PlateMinPixelWidth	<int>	Minimum pixel for license plate detection (30-300)
PlateMaxPixelWidth	<int>	Maximum pixel size for license plate detection (300-800)
FtpUploadEnable	<string>	FTP upload switch : true to turn on. false to turn off
FtpUploadFullReferToEnable	<string>	Full image FTP upload switch : true to enable. false to disable
PictureOSDEnable	<string>	Not used yet
FirmwareVer	<string>	Algorithm version (IPC)
FilterStaticEnable	<string>	Filter stationary targets (IPC) false: Off true: On
FullBodyMinPixelWidth (NVR)	int<30,300>	Minimum pixel for human detection
UploadInterval (NVR)	<int> [1, 10]	Snapshot interval in timer mode
FacePitch	<int>	Face pitch angle (0-90)
Face Yaw	<int>	Face yaw angle (0-90)
Face Tilt	<int>	Face tilt angle (0-90)
FaceExposureEnable	<int>	Face exposure switch : true to turn on. false to turn off
ReferBrightness	<int>	Reference brightness
ContinueTime	<int>	Exposure duration
PolygonArea Count	<int>	Number of detection areas
PolygonAreaBegin	<int>	Detection area start mark
AreaId	<int>	Region ID
pointCount	<int>	Number of area coordinates

pointBegin	< int >	Area coordinates start mark
pointX	<float>	Horizontal coordinate value
pointY	<float>	Vertical coordinate value
next_pointURL	<int>	Next area coordinate start mark
pointEnd	< int >	End of area sign
nextPolygonArea	< int >	Next area
PolygonAreaEnd	< int >	The region ends with n region values n
weekDay	< int >	Week 0 - 6
startTime	< int >	The start time of the day 0-86400
endTime	< int >	End of day layout time 0-86400
next_weekDayURL	< int >	the next day
weekDayEnd	< int >	At the end of the week, the value of n regions is n

2.6.23CGI Alarm Center Parameters (IPC)

2.6.23.1 **Alarm center test (IPC)**

URL	http://<servername>/cgi-bin/param.cgi?action=get&type= **CGIAlarmTest**
Description	
Example	http://192.168.32.151/cgi-bin/param.cgi?action=get&type= CGIAlarmTest
Return	OK (For other responses, Refer to General Response)

2.6.23.2 **Get Alarm Center (IPC)**

URL	http://<servername>/cgi-bin/ alarm .cgi?action= get&type=alarmCenterService	
Description	Refer to Input Parameters Table	
Example	http://192.168.2.91/cgi-bin/alarm.cgi?action=get&type=alarmCenterService	
Return	(IPC) CGIAlarmFlag=true CGIName= CGIType=1 CGIUrlStart=http://192.168.0.117:50234/MajorAlarmType&MinorAlarmType&SourceName&DeviceID&DeviceIP&AlarmTime&Description CGIUrlEnd=http://169.254.10.50:8081/api~~/sunell~~/upload_event/MajorAlarmType&MinorAlarmType&LicenseNumber&SerialNumber&Country&AlarmTime CGIUserName1=admin CGIPassword1=admin CGIProxyFlag=true CGIAddress=169.254.10.50 CGIPort=8081 CGIIVSType = -1	(the lite series) cgiAlarmEnable=1 alarmType=1 alarmCenterName=alarmCenterName protocolType=1 urlStart=alarmCenterUrlStart urlEnd=alarmCenterUrlEnd proxyEnable=1 alarmCenterServerIP=192.168.0.193 alarmCenterServerPort=9080 platformAccount=alarmCenterAccount platformPassword=alarmCenterPassword

2.6.23.3 **Set alarm center parameters (IPC)**

URL	http://<servername>/cgi-bin/alarm.cgi?action=**set**&type=alarmCenterService&CGIAlarmFlag=<CGIAlarmFlag>&CGIName=<CGIName>&CGIType=<CGIType>&CGIUrlStart=<CGIUrlStart>&CGIUrlEnd=<CGIUrlEnd>CGIUserName1=<CGIUserName1>&CGIPasswd1=<CGIPasswd1>&CGIProxyFlag=true&CGIAddress=<CGIAddress>CGIPort=<CGIPort>&CGIIVSType=<CGIIVSType>
Description	Setting multi-target parameters

Example	(IPC) http://192.168.0.121/cgi-bin/alarm.cgi?action=set&type=alarmCenterService&CGIAlarmFlag=true&CGIName=alarm&CGIType=1&CGIUrlStart=aHR0cDovLzE5Mi4xNjguMC4xMTc6NTAyMzQvTWFqb3JBbGFybVR5cGUmTWlub3JBbGFybVR5cGUmU291cmNlTmFtZSZEZXZpY2VJRCZEZXZpY2VJUCZBbGFybVRpbWUmRGVzY3JpcHRpb24=&CGIUrlEnd=aHR0cDovLzE5Mi4xNjguMC4xMTc6NTAyMzQvTWFqb3JBbGFybVR5cGUmTWlub3JBbGFybVR5cGUmU291cmNlTmFtZSZEZXZpY2VJRCZEZXZpY2VJUCZBbGFybVRpbWUmRGVzY3JpcHRpb24=	(the lite series) http://192.168.2.193/cgi-bin/network.cgi?action=set&type=alarmCenterService&cgiAlarmEnable=1&alarmType=1&alarmCenterName=alarmCenterName&protocolType=1&urlStart=alarmCenterUrlStart&urlEnd=alarmCenterUrlEnd&proxyEnable=1&alarmCenterServerIP=192.168.0.193&alarmCenterServerPort=9080&platformAccount=alarmCenterAccount&platformPassword=alarmCenterPassword
Return	OK (For other responses, Refer to General Response)	

2.6.20.4. Alarm Center User Manual

2.6.20.4.1. The alarm center is described as follows

1. CGI Alarm Service Center Configuration Page Description

The CGI alarm message pushed by the device will be assembled in the format following the IP address of the start and end URLs , and the assembled string will be sent to the CGI alarm server via the HTTP protocol.

（1） URL start: indicates the alarm start point to send the URL, the format is as follows:

(A) The URL format of face recognition reporting information is as follows :

http://192.168.35.74:80/ (This URL is not actually used. If this URL is not set, clicking Apply will fail .)

(B) The URL format of common alarm information without face recognition is defined as follows:

http://192.168.35.74:80/MajorAlarmType&MinorAlarmType&SourceName&DeviceID&DeviceIP&AlarmTime&Description

Among them, 192.168.35.74 is the sending address IP, and 80 is the sending address port.

(2) URL End Alarm End Point sends a URL. The format is the same as the Start URL a

nd will not be repeated here. The Start URL and End URL can be the same.

(3) Username: device username; Password: device password

(4) The proxy server device is a CGI alarm server (a server that receives facial informati on) to implement alarm forwarding, where the address is the forwarding address IP (for E xample: 192.168.35.74); the port is the forwarding port (for Example: 80) .

(5) Platform username: forwarding server username (e.g. 123456); Platform password: forw arding server password (e.g. 123456)

(6) Test HTTP connection alarm center: used to test whether the device IPC and proxy se rver network are unobstructed. When you click the test button, if the device and proxy se rver network can be connected, it will show that the test is successful, otherwise it will s how that the test failed.

(7) After completing the above information, click the Apply button to save the data.

(8) (9) Status ON

(10) The above (1), (2), (3), (4), (5), (8) cannot be empty

2. CGI alarm push diagram.

3. The bearer and sending method of alarm message.

The CGI alarm message is sent in the HTTP message body URL and is sent to the CGI server via the HTTP protocol POST method. Therefore, if the user wants to connect to the CGI alarm, it is necessary to parse the HTTP body URL to obtain t he alarm information.

For face recognition

The corresponding alarm information is as follows :

POST HTTP/1.1

Host:

User-Agent:

Content-length: 0

Content-type: text/xml

Connection: Keep-Alive

strAlarmTime=

FaceInfoBegin=1

FacePictureDataLen=38918

FacePictureData=.....

/* The BODY URL carries the alarm message content, which needs to be parsed by the server to obtain the alarm information */

The following packet capture is a CGI alarm packet capture with LPR alarm

strAlarmTime represents time

FaceInfoBegin indicates the number of pictures

FacePictureDataLen indicates the size of the face capture picture

FacePictureData represents picture data

The capture packet is as follows

192.168.0.215.pcap

2.6.20.4.2. CGI full target recognition alarm center description (applicable to face capture, license plate recognition, face temperature measurement, etc.)

If you want CGI to report face recognition information, you need to configure the relevant information on the CGI Alarm Center page:

1. Turn on the CGI alarm.
2. Proxy server settings address and port.

   After setting the address and port, click the Test button to test whether the connection status is OK

The face recognition alarm message is sent as follows:

POST HTTP/1.1

Host:192.168.1.12

User-Agent:Mozilla/5.0 (Windows NT 6.1; WOW64; rv:47.0) Gecko/20100101 Firefox/47.0

Content-length: 3773

Content-type: text/xml

Connection: Keep-Alive

DeviceID=1422DF

AlarmType=0

AlarmTime=1567692473

Age=29

Gender=1

Organ=0

Confidence=62 // Confidence

TemperatureUnit=0 \\ Temperature unit: 0 : Celsius ; 1 : Fahrenheit;

FaceTemperature=37.919353

AIPictureDataLen=3670

AIPictureData=**** \\ Picture data Base64 encryption

The Body carries all target identification information . The following four URL are required for each alarm message. Other URL will be added based on the alarm.

Increase or decrease depending on the type .

AlarmType indicates the type of the current alarm, 0: face 2: body 3 : license plate 4: vehicle

AlarmTime indicates the time of capturing the image

AIPictureDataLen captured image data length

AIPictureData captured image data

When AlarmType is 0 (face recognition)

The attributes of face recognition will be added to the data :

Age =29

Gender=1 1: Male 2: Female

Organ=0 //0: Face 1: Head and shoulders 2: Human figure 3: Upper body 4: Whole body 5: Palm 6: Human body

FaceX=1010 // Face coordinate X, with the upper left as the origin

FaceY=378 //Face coordinate Y, with the upper left as the origin

FaceWidth=352 //Face image width

FaceHeight=480 // Face image width

TemperatureUnit=0 \\ Temperature unit: 0 : Celsius; 1 : Fahrenheit;

FaceTemperature=37.919353 //Face temperature

Confidence=62 // Confidence

When AlarmType is 2 (Human body recognition)

The attributes of human body recognition will be added to the data :

Age =29

Gender=1 1: Male 2: Female

RideBike=0 0 : Not riding a bike 1 : Riding a bike

FaceX=1010 //Human body coordinate X, with the upper left as the origin

FaceY=378 //Human body coordinate Y, with the upper left as the origin

FaceWidth=352 //Human body image width

FaceHeight=480 //Human body image width

Confidence=62 // Confidence

When AlarmType is 3 (license plate recognition)

The attributes of license plate recognition will be added to the data :

CarPlateNum= 12345678 license plate number

FaceX=1010 //License plate coordinate X, with the upper left as the origin

FaceY=378 //Human body coordinate Y, with the upper left as the origin

FaceWidth=352 //Human body image width

FaceHeight=480 //Human body image width

Confidence=62 // Confidence

When AlarmType is 4 (vehicle identification)

The attributes of vehicle identification will be added to the data :

CarColor=1

CarMode=0

FaceX=1010 //Human body coordinate X, with the upper left as the origin

FaceY=378 //Human body coordinate Y, with the upper left as the origin

FaceWidth=352 //Human body image width

FaceHeight=480 //Human body image width

Confidence=62 // Confidence

The following is the enumeration type corresponding to CarColor

```
enum COLOR_
    {
        COLOR_BLUE = 0,
        COLOR_YELLOW = 1,
        COLOR_BLACK = 2,
        COLOR_WHITE = 3,
        COLOR_GREEN = 4,
        COLOR_RED = 5,
        COLOR_GRAY = 6,

        COLOR_PURPLE = 7,
        COLOR_PINK = 8,
        COLOR_BROWN = 9,
        COLOR_CYAN = 10,
        COLOR_COLORFUL = 11,
    };
```

The following is the enumeration type corresponding to CarModle

```
enum CAR_MODLE_
    {
        MODLE_CAR = 0,
        MODLE_SUV = 1,
        MODLE_MICROBUS = 2,
        MODLE_MINIBUS = 3,
        MODLE_BUS = 4,
        MODLE_PICKUP = 5,
        MODLE_TRUCK = 6,};
```

2.6.22 Configuration backup (IPC)

2.6.22.1 Import Configuration

2.6.22.1.1 ask

URL	http://<servername>/cgi-bin/param .cgi ?userName=<username>&password = <password>&action=set&type= **importConfig**	
Connection	keep-alive	
Content-Type	multipart/form-data	
parameter	**parameter name**	**meaning**
	uploadState	Upload Status 0: Send file 1: Sending completed (device will restart)
	file	Configuration Files by **exportConfig** has a maximum upload length of 10KB each time, and the file name suffix must be "bin"

2.6.22.1.2 response

Return	OK (For other responses, Refer to General Response)

2.6.22.2 Export Configuration

2.6.22.2.1 ask

URL	http://<servername>/cgi-bin/param .cgi ?userName=<username >&password=<password>&action=get&type= **exportConfig**

2.6.22.2.2 response

Note: Returns a binary file

Content-Type	application/octet-stream
Return	binary file

2.6.23 param Input common parameters

Configuration general parameters table 2-6-13-1

Table 2-6-13-1

parameter	data	Description
userName	<string>	Login machine account
password	<string>	Password to log in to the machine
action	<string>{set, get}	The type of operation. get: Get set: set
type	<string>	Configuration type. Subtype in param.cgi. For specific meanings, Refer to Configuration General Parameters Table 2
cameraID	<int>[1,n]	Camera ID. The camera IDs supported by the device are related to the device capabilities.
streamID	<int>[1,n]	Stream ID.

		Stream IDs supported by the device, related to the device capabilities
cover	<string>{ cover }	Loop body coverage. Overwrite the original loop data
alarmInID	<int>[1,n]	Alarm input port number. Determined by the alarmInID number obtained from the device information, starting from 1 and accumulating
alarmOutID	<int>[1,n]	Alarm output port number. Determined by the alarmOutID number obtained from the device information, starting from 1 and accumulating
enableFlag	<unsigned char>{0 , 1}	Whether to enable the flag. 0: Disable 1: Enable Setting other values is invalid and Returns -8 (parameter error).
IPProtover	<int>{1.2}	Protocol version. 1:IPV4 2: IPV6 Currently only supports IPV4
comID	<int>{1}	Serial port ID. Serial ports supported by the device, related to the device capabilities
next_paramURL	<int>{2,n}	Next parameter information. Start from 2

Configuration general parameters table 2-6-13-2

Table 2-6-13-2

type	Description
Equipment related	

deviceName	Device Name
deviceID	Device ID
deviceInfo	Device Information
localNetwork	Local Network
WI-FI	WI-FI
devicePort	Device Port
cameraInfo	Channel parameters
dateTime	Date & Time
OSD	Watermark
OSDCanvas	Canvas Information
microphone	microphone
protocolSecurity	Protocol Security
alarmParam	Alarm parameters
ADSL Network	ADSL network
protocolInfo	Protocol Information
deviceDiskInfo	Device disk information
PTZTimer	PTZ Timer
sourceResolution	Source resolution
IPDomePTZID	High Speed Dome ID
Stream Configuration	
streamAbility	Flow Capacity
AVStream	flow
Network service configuration	
PPPoE	PPPoE

DDNS	DDNS
UPNP	UPNP Service
Video recording configuration	
recordPolicy	Video recording strategy
recordDirInfo	Video Catalog
Alarm Configuration	
alarmIn	Alarm input
alarmOut	Alarm Output
motionAlarm	Motion detection alarm
IOalarmLinkage	IO linkage
diskAlarm	Disk alarm
blindArea	Alarm area
External device configuration	
PTZ Keyboard	PTZ Keyboard
PTZ	External PTZ (not supported by high-speed dome cameras)
RS485Device	RS485 Devices
Service Center	
SMTP	SMTP Service
alarmCenter	Alarm Center
NTP	NTP Service

2.7 Device Operation (operate.cgi)

2.7.1. Device Reset (deviceReset)

URL	http : // <servername> /cgi-bin/operate.cgi?action=reset&keepIpAddress=1&cameraID=0
Description	Refer to the common parameters for operator input NVR: cameraID is 0, indicating resetting the device itself, and carries the access device that resets the specified channel (if cameraID = 0, it indicates the device itself)
Example	http://192.168.1.121/cgi-bin/operate.cgi?action=reset& keepIpAddress =1
Return	OK (For other responses, Refer to General Response)

2.7.2. Device Restart (deviceRestart)

URL	http://<servername>/cgi-bin/operate.cgi?action=restart& cameraID =1
Description	Refer to the common parameters for operator input NVR: cameraID is the access device that carries the information about restarting the specified channel (if cameraID = 0, it means the device itself)
Example	http://192.168.1.121/cgi-bin/operate.cgi?action=restart
Return	OK (For other responses, Refer to General Response)

2.7.3 Timing Restart

2.7.2.1. IPC scheduled restart

2.7.2.1.1. Get scheduled restart parameters

URL	http://<servername>/cgi-bin/ operate.cgi ?action=get&type= **timingRestart**
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=get&type= timingRestart
Return	autoRestartEnable=1 restartType=1 dayHour=9 dayMinute=17 (For other responses, Refer to General Response)

2.7.2.1.2. Set the scheduled restart parameters

URL	http://<servername>/cgi-bin/param.cgi?action=set&type= **timingRestart** &autoRestartEnable=1&autoRestartEnable=1&restartType=1&weekCount=2&weekBegin=1&weekDay=0&next_weekDayURL=2&weekDay=1&weekEnd=2&weekHour=7&weekMinute=15
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/param.cgi?action=set&type=timingRestart&autoRestartEnable=1&autoRestartEnable=1&restartType=1&weekCount=2&weekBegin=1&weekDay=0&next_weekDayURL=2&weekDay=1&weekEnd=2&weekHour=7&weekMinute=15
Ret	OK

urn	(For other responses, Refer to General Response)

2.7.2.1.3. Meaning of scheduled restart parameters

parameter	data	Description
autoRestartEnable	<int>	Auto Restart0 : Off1 : On
restart Type	<int>	Restart interval0 : Daily1 : Weekly2 : Monthly
day Hour	<int>	Daily restart time
dayMinute	<int>	Restart time every day
weekCount	<int>	Weekly quantity
weekBegin	<int>	Weekly start sign
weekDay	<int>	Week (0-6)
next_weekDayURL	<int>	Next scheduled time URL start mark
weekEnd	<int>	End of Week Mark
week Hour	<int>	Weekly restart time
weekMinute	<int>	Weekly restart time
monthDay	<int>	Monthly restart date
month Hour	<int>	Monthly restart time
monthMinute	<int>	Monthly restart time

2.7.2.2. NVR timed restart (timedRestart)

2.7.2.2.1. Get timed restart (getTimedRestart)

URL	http://192.168.2.193/cgi-bin/system.cgi?action=get&type=timedRestart
Description	Refer to the common parameters for operator input
Example	http://192.168.2.193/cgi-bin/system.cgi?action=get&type=timedRestart
Return	OK (For other responses, Refer to General Response)

2.7.2.2.2. Set a timed restart (setTimedRestart)

URL	http://192.168.2.193/cgi-bin/system.cgi?action=set &type= timedRestart
Description	Refer to the common parameters for operator input
Example	http://192.168.2.193/cgi-bin/system.cgi?action=set&type=timedRestart&enable=1&interval=2&weekday=3&time=2:00
Return	OK (For other responses, Refer to General Response)

2.7.2.2.3. Scheduled restart parameters

parameter	data	Description
enable	int	Whether to enable scheduled restart 0: Off 1: Open
interval	int	1: Every day 2: Weekly

		3: Monthly
weekday	int	Empty / Monday (1-7) / 1st (1-30)
time	<string>	Specific time, format is 00:00 The time must be a multiple of 30 minutes

2.7.4 Disk formatting (format)

URL	: //<servername>/cgi-bin/operate.cgi?action=format&diskID=1
Description	Refer to the common parameters for operator input
Example	http://192.168.0.121/cgi-bin/operate.cgi?action=format&diskID=1
Return	OK (For other responses, Refer to General Response)

2.7.5 operate Input common parameters

Operation parameter table 2-7-3-1

Table 2-7-3-1

parameter	data	Description
userName	<string>	Login machine account
password	<string>	Password to log in to the machine
action	<string>{reset,restart}	restart reset format
keepIpAddress	< in t >	Keep the set IP address 0: Off

		1: On
diskID	<int>	Disk ID

2.8. Front-end configuration (sensor.cgi) (IPC)

Note: IPC (the lite series) and NVR only support solution 1; **IPC (The lite series)** supports optional solutions and recommends using the new framework (front-end configuration)

2.8.1. Mode(IPC)

2.8.1.1. Get mode parameters (IPC)

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type= **sensorMode** &cameraID=1
Description	Refer to URL description (MVR/the lite series does not carry &schemeID)
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get &type=sensorMode&cameraID=1
Return	switchMode=0 beginHour=0 beginMinute=0 endHour=24 endMinute=0

2.8.1.2. Setting mode parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type= **sensorMode** &cameraID=1 &schemeID=1&switchMode=1&beginHour=5&beginMinute=30&endHour=6&endMinute=10

Description	Refer to URL description (MVR/the lite series does not carry &schemeID)
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=set &type= sensorMode&cameraID=1 &schemeID=1&switchMode=1&beginHour=5&beginMinute=30&endHour= 6&endMinute=10
Return	OK (For other responses, Refer to General Response)

2.8.1.3. Mode parameter meaning

URL	Parameter Description	scope	type of data
switchMode	(IPC) Switch mode 0: None 1: Time mode (NVR) Image Mode 0: Automatic 1: Timed conversion - daytime 2: Timed conversion - night	0-2	int
beginHour	Start time	0-24	int
beginMinute	Start time 0 10 20 30 40		int

	50		
endHour	End time	0-24	int
endMinute	End time 0 10 20 30 40 50		int

2.8.2. Solution (IPC excluding the lite series)

2.8.2.1. Get solution parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type= **sensorScheme** &cameraID=1
Description	Refer to URL description
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get &type=sensorScheme&cameraID=1
Return	schemeID=1 mode=0

2.8.2.2. Setting the scheme parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type= **sensorScheme** &schemeID=2&mode=0&cameraID=1
Description	Refer to URL description
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get

	&type=sensorScheme&schemeID=2&mode=0&cameraID=1
Return	OK (For other responses, Refer to General Response)

2.8.2.3. Solution parameter meaning

URL	Parameter Description	scope	type of data
schemeID	plan 0: Option 1 1: Option 2 2: Option 3 3: Option 4	0-3	int
mode	model 0: debug mode 1: Normal mode	0-1	int

2.8.3. image

2.8.3.1. Get image parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type= **imaging** &cameraID=<cameraID>&schemeID=<schemeID>
Description	Refer to parameter meaning. NVR/the lite series does not need to carry SchemeID .
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get&type=imaging **&** cameraID=1&schemeID=0
Return	brightness=1 saturation=50 sharpness=30 contrast=6

	(-1 means not supported, for other responses, Refer to General Response)

2.8.3.2. Setting image parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type=imaging&cameraID=1&schemeID=0&brightness=1&saturation=5&sharpness=30&contrast=6
Description	Refer to parameter meaning. NV/the lite series does not need to carry S chemeID.
Example	http://192.168.2.21/cgi-bin/sensor.cgi?action=set&type=imaging&cameraID=1&schemeID=0&brightness=1&saturation=5&sharpness=30&contrast=6
Return	OK (For other responses, Refer to General Response)

2.8.3.3. Image parameter meaning

URL	Parameter Description	scope	type of data	Remark
SchemeID (IPC)	plan 0: Option 1 1: Option 2 2: Option 3 3: Option 4	0-3	int	
brightness	brightness	0-100	int	
saturation	saturation	0-100	int	
sharpness	Sharpness	0-100	int	
contrast	Contrast	0-100	int	

2.8.4. day and night

2.8.4.1. Get day and night parameters

URL	http://<servername>/cgi-bin/sensor.cgi? action=get&type= **dayNight** &cameraID=<cameraID>&schemeID=<schemeID>	
Description	Refer to parameter meaning (NVR/the lite series does not need to carry schemeID)	
Example	http://192.168.1.121/cgi-bin/sensor.cgi? action=get&type=dayNight&cameraID=1&schemeID=0	
Return	(IPC) dayNightMode=0 dayToNightThreshold=70 nightToDayThreshold=30 dayNightSensitivity=48 delay=80 lightMode=2 infrared=2 infraredIntensity=80 white=2 whiteIntensity=51 (-1 means not supported, for other responses, Refer to General Response)	(NVR) dayNightMode=3 DTNhour=18 DTNmin=0 NTDhour=6 NTDmin=0 delay=174 translDN=70 translND=30 sensitivity=50

2.8.4.2. Set day and night parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type=dayNight&cameraID=<cameraID>&schemeID=<schemeID>	
Description	Refer to parameter meaning (NVR/the lite series does not need to carry schemeID)	
Example	http://192.168.1.121 /cgi-bin/sensor.cgi?action=set&type=dayNight&cameraID=1&schemeID=0&dayNightMode=3&dayToNightThreshold=70&nightToDayThreshold=30&dayToNightTime=07:20&nightToDayTime=19:30&dayNightSensitivity=48&delay=80&lightMode=0&infrared=2&infraredIntensity=80&white=2&whiteIntensity=51	http://192.168.2.193/cgi-bin/sensor.cgi?action=set&type=dayNight&cameraID=1&dnMode=3&DTNhour=22&DTNmin=10&NTDhour=22&NTDmin=20&delay=11
Return	OK	

	(For other responses, Refer to General Response)

2.8.4.3. Meaning of day and night parameters

URL	Parameter Description	scope	type of data	Remark
IPC				
schemeID	plan 0: Option 1 1: Option 2 2: Option 3 3: Option 4	0-3	int	
dayNightMode	Day and night mode 0: Automatic 1: Day mode 2: Night mode 3: Timing	0-3	int	
dayToNightThreshold	Day to night threshold	0-100	int	
nightToDayThreshold	Night-to-day threshold	0-100	int	
dayNightSensitivity	Day and night switching sensitivity	0-100	int	**dayNightMode=0**
delay	Delay (seconds)	0-180	int	**dayNightMode=0**

dayToNightTime	Day to night time (HH:mm)		string	**dayNightMode=3**
nightToDayTime	Night to day time (HH:mm)		string	**dayNightMode=3**
lightMode	Lighting control mode 0: Infrared light 1: White light 2: Intelligence 3: None	0-3	int	
infrared	Infrared light 1: Automatic 2: Manual	1-2	int	**lightMode =0 or 2**
infraredIntensity	Infrared light intensity	0-100	int	**lightMode =0 or 2**
white	White light 1: Automatic 2: Manual	1-2	int	**lightMode =1 or 2**
whiteIntensity	White light intensity	0-100	int	**lightMode =1 or 2**
NVR/the lite series				
dnMode	Day and night mode 0:		<int>	

	Automatic 1: Day mode 2: Night mode 3: Timer			
DTNhour	Day to night time (hours) (Timer mode valid) 0-23	[0,23]	<int>	
DTNmin	Day to night time (minutes) (Timer mode is effective)	{0,10,20,30,40,50}	<int>	
NTDhour	Night to day time (hours) (Timer mode is effective)	[0,23]	<int>	
NTDmin	Night to day time (minutes) (Timer mode is effective)	{0,10,20,30,40,50}	<int>	
delay	Delay time (Automatic mode is effective)	[0,180]	<int>	
translDN	Day to night threshold (Automatic	[0,100]	<int>	

	mode is valid) (-1 means not supported)			
transLND	Night-to-day threshold (Automatic mode is valid) (-1 means not supported)	[0,100]	<int>	
sensitivity	Sensitivity (Automatic mode is effective)	[0,100]	<int>	
IRmode	Infrared light 1: Automatic 2: Fixed (-1 means not supported)	{1,2}	<int>	
IRstrength	Infrared light intensity (infrared light fixed mode is valid, -1 means not supported)	[0,100]	<int>	

2.8.5. Exposure (IPC excluding the lite series/NVR)

2.8.5.1. Get exposure parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type=Exposure &cameraID=<cameraID>&schemeID=<schemeID>	
Description	Refer to parameter meaning	
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get&type=Exposure &cameraID=1&schemeID=0	
Return	(IPC) exposureMode=0 shutter=7 meterArea=4 gain=50 (-1 means not supported, for other Returns, Refer to general response)	(NVR) exposureMode=2 exposureTime = 2

2.8.5.2. Setting exposure parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type=Exposure&cameraID=<cameraID>&schemeID=<schemeID>	
Description	Refer to parameter meaning	
Example	(IPC) http://192.168.1.121/cgi-bin/sensor.cgi?action=set&type=Exposure &cameraID=1&schemeID=0&mode=1&redGain=31&blueGain=58	(NVR) http://192.168.2.193/cgi-bin/sensor.cgi?action=set&type=exposure&cameraID=1&exposureMode=1&exposureTime=2
Return	OK (-1 means not supported, for other responses, Refer to General Response)	

2.8.5.3. Exposure parameter meaning

URL	Parameter	scope	type of data	Remark

	Description			
IPC				
schemeID (IPC)	plan 0: Option 1 1: Option 2 2: Option 3 3: Option 4	0-3	int	
exposureMode	Exposure Mode 0: Automatic 1: Manual 2: Shutter priority	0-2	int	
Shutter	shutter 2: 1/15 3: 1/10 4: 1/12.5 5: 1/15 6: 1/20 7: 1/25 9: 1/50 11: 1/100 13: 1/125 14: 1/150 15: 1/200 16: 1/250 17: 1/500 18: 1/1000 19: 1/2000 20: 1/5000 21: 1/10000 22: 1/20000		int	

meterArea	Metering area 4: Global 0: Center point 1: Central area			
gain	Gain	0-100		
NVR				
exposureMode	Exposure Mode IPC 1: Automatic 2: Manual NVR 0: Automatic 1: Manual 2: Shutter Priority 3: Aperture Priority	<int>		
exposureTime (the lite series) maxShutter (NVR)	Exposure time/maximum shutter speed (effective in automatic exposure mode and aperture priority) 0 ：1/1，1：1/2，2：1/5，3：1/10，4：1/12.5， 5: 1/15 , 6 : 1/20 , 7 : 1/25 , 8 : 1/30 , 9 : 1/50 , 10 ： 1/60 , 11 ： 1/100 , 12 ： 1/120 , 13 ： 1/125 , 14 : 1/150 , 15: 1/200 , 16 : 1/250 , 17 :	<int>[0,25]		

	1/500 , 18 : 1/1000 , 19: 1/2000 , 20: 1/5000 , 1/10000 (NVR is 21, IPC is 24), 1/20000 (NVR is 22, IPC is 25), 23: 1/50000 , 24: 1/100000 , 25: 1/200000			
meterArea	Metering area 0: Center Spot 1: Center Area 4: whole -1: This configuration is not supported	int{0,1,4}		
maxGain	Maximum Gain	<int>[0,100]		
iris	aperture 0: fully open 1: auto -1: This configuration is not supported	int{0,1}		
irisSpeed	Aperture speed -1: This configuration is not supported	int[0,100]		
irisOpt Note: When iris and isisSpeed are -1, it means this option is enabled. This option is turned on when testing the dome camera.	aperture 0: Off 1: F1.0 2: F1.1 3: F1.2 4: F1.3 5 : F1.4 6 : F1.6	int[0, 48]		

	7 : F1.7 8 ： F1.8 9 : F2.0 10 : F2.2 11 : F2.4 12 : F2.6 13 : F2.8 1 4：F 3 . 2 15 ： F 3 . 4 16 ： F 3 . 6 17 ： F 4 . 0 18 ： F 4 . 5 19 ： F 4 . 8 20 ： F 5 . 0 21 ： F 5 . 6 22 : F 6 . 3 23 : F 6 .8 2 4：F 7 . 1 25 : F 8 . 0 26 : F 9 . 0 27 : F 9 . 6 28 : F 10 . 0 29 : F 11 . 0 30 ： F1 3 .0 31 ： F1 4.0 32 ： F1 6.0 33 ： F1 8.0 34 ： F1 9.0 35 ： F 20.0 36 ： F 22.0 37 ： F2 5.0 38 ： F2 7.0 39 ： F2 9.0 40 ： F3 2.0 4 1 ： F3 6 .0 4 2 ： F3 8 .0 4 3 ： F 40 .0 4 4 ： F 45 .0 4 5 ： F5 2 .0 4 6 ： F5 4 .0 4 7 ： F5 8 .0 4 8 ： F 6 4.0			

2.8.6. Zoom Focus

2.8.6.1. Dome Camera (IPC excluding the lite series)

2.8.6.1.1. Set Zoom Focus (setZoomFocus)

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type=zoomFocus&digitalZoom=<digitalZoom>&focusMode=<focusMode>&focusSensitivity=<focusSensitivity>&leastFocusDistance=<leastFocusDistance>&focusSwitch=<focusSwitch>
Description	Refer to the front-end configuration input general parameters and the meaning of zoom and focus parameters.
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=set&type=zoomFocus&digitalZoom=1
Return	OK (For other responses, Refer to General Response)

2.8.6.1.2. Get zoom focus (getZoomFocus)

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type= zoomFocus
Description	Refer to the front-end configuration input general parameters and the meaning of zoom and focus parameters .
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get&type=zoomFocus
Return	digitalZoom=0 focusMode=0 focusSensitivity=30 leastFocusDistance=2 focusSwitch=1 (For other responses, Refer to General Response)

2.8.6.2. Non-dome camera (IPC/NVR/the lite series)

2.8.6.2.1. Set Zoom Focus (setZoomFocus)

URL	IPC	NVR/the lite series
	http://<servername>/cgi-bin/sensor.cgi?action=set&type= zoomFocus &DNFocusSwitch=<DNFocusSwitch>	http://192.168.2.193/cgi-bin/sensor.cgi?action=set&type= **zoomFocus** &cameraID=<cameraID>[ ]
Description	Refer to the front-end configuration input general parameters and the meaning of zoom and focus parameters .	
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=set&type=zoom Focus&DNFocusSwitch=0	http://192.168.2.193/cgi-bin/sensor.cgi?action=set&type=zoom Focus&cameraID=1& zoomEnable= 1& zoomOut= 1& zoomIn= 1& farFocus= 1& nearFocus = 1& autoFocus = 1& init= 1& DNenable= 0& focusMode= 1& autoSensitivity= 33& leastDistance= 0
Return	OK (For other responses, Refer to General Response)	

2.8.6.2.2. Get zoom focus (getZoomFocus)

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type= zoomFocus	
Description	Refer to the front-end configuration input general parameters and the meaning of zoom and focus parameters (IPC (The lite series)/NVR needs to carry &cameraID)	
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get&type=zoomFocus &cameraID=1	
Return	(IPC) DNFocusSwitch=0 (For other responses, Refer to General Response)	(NVR/the lite series) zoomEnable=0 zoomOut=0 zoomIn=0

		farFocus=0 nearFocus=0 autoFocus=1 init=-1 DNenable=-1 focusMode=0 autoSensitivity=50 leastDistance=4

2.8.6.2.3. Initialize zoom focus (initZoomFocus) (IPC)

URL	http://<servername>/cgi-bin/sensor.cgi?action=init&type= zoomFocus
Description	Refer to the front-end configuration input general parameters and the meaning of zoom and focus parameters.
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=init&type=zoomFocus
Return	OK (For other responses, Refer to General Response)

2.8.6.2.4. Zoom focus parameter meaning

Table 2-8-8-3-1

parameter	data	Description
IPC		
digitalZoom	<int>{0,1}	0: Disable digital zoom 1: Turn on digital zoom
focusMode	<int>[0,2]	0: Auto focus 1: Manual 2: Semi-automatic
focusSensitivity	<int>[0,100]	

leastFocusDistance	<int>[0,6]	0: Infinity 1: Empty 2:10m 3:6m 4:3m 5:2m 6:1.5m
focusSwitch	<int>{0,1}	0: Day/night switch auto focus off 1: Day and night switch auto focus on
NVR/the lite series		
zoom E nable	<int>	Digital zoom switch 0: Off 1: On
zoomOut	<int>	Wide Angle 1: start, 0: end
zoomIn	<int>	Longhorn 1: start, 0: end
earFocus	<int>[0,1]	A state change from 0 to 1 triggers close focus 1: start, 0: end
farFocus	<int>[0,1]	A state change from 0 to 1 triggers far focus 1: start, 0: end
a utoFocus	<int>[0,1]	A state change from 0 to 1 triggers autofocus
init	<int>[0,1]	When the state changes from 0 to 1 or from 1 to 0, an initialization is triggered
DN enable	<int>[0,1]	Toggle focus switch for day and night 0: Off 1: On
focus Mode	<int>[0,2]	Focus Mode

		0 Automatic 1 Manual 2 Semi-automatic
auto Sensitivity	<int>[0,100]	Auto focus sensitivity
least Distance	<int>[0,6]	Shortest focusing distance 0 Infinity 2:10 m 3: 6m 4: 3m 5: 2m 6: 1.5m

Note: The URL marked in red only support some devices. If you want to use ptz related operations, it is recommended to use the PTZ (ptz.cgi) module interface.

2.8.7. IR Lamp (IPC excluding the lite series)

2.8.7.1. Get infrared light parameters (getInfraredLight)

URL	: //<servername>/cgi-bin/sensor.cgi?action=get&type=infraredLig ht
Description	Refer to the front-end configuration input general parameters and infrared light parameter meanings
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get&type=infraredLight
Return	mode=1 brigthnessMode=1 far=50 near=50 (For other responses, Refer to General Response)

2.8.7.1.1. Set infrared light parameters (set InfraredLight)

URL	http://<servername>/cgi-bin/ sensor.cgi?action=set&type=infraredLight & mode=mode&brigthnessMode=brigthnessMode&far=far&middle=middle&near=near
Description	Refer to the front-end configuration input general parameters and infrared light parameter meanings

Example	Example 1: Set all parameters of infrared light http://192.168.1.121/cgi-bin/sensor.cgi?action=set&type=infraredLight&cameraID=1&mode=1&brigthnessMode=1&far=50&near=50 Example 2: Set to turn on the infrared light http://192.168.1.121/cgi-bin/sensor.cgi?action=set&type=infraredLight&cameraID=1&mode=1
Return	OK (For other responses, Refer to General Response)

2.8.7.1.2. Infrared light parameters meaning

Table 2-8-9-3-1

parameter	data	Description
mode	<int>{0,1}	Infrared light mode. 0: Off 1: Open
brigthnessMode	<int>{1,2}	Light Mode 1: Automatic 2: Manual
far	<int>[0,100]	High beam value
near	<int>[0,100]	Low beam value

2.8.8. SceneMode

2.8.8.1. Get the scene mode (getSceneMode)

URL	http://<servername>/cgi-bin/sensor.cgi? action=get&type= SceneMode &cameraID=<cameraID>

Description	Refer to Sensor Configuration Parameters and SceneMode Parameters NVR/the lite series does not need to carry SchemeID
Example	**http://192.168.1.121/cgi-bin/sensor.cgi? action=get&type=** SceneMode **&cameraID=1 &schemeID=3**
Return	Scene =0 CorridorMode = 0 MirrorMode=3 (-1 Indicates not supported, Refer to General Response)

2.8.8.2. Set the scene mode (setSceneMode)

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type=SceneMode&cameraID=<cameraID>[ ]
Description	Refer to Sensor Configuration Parameters and SceneMode Parameters
Example	***http://192.168.0.199/cgi-bin/sensor.cgi?action=set&type*=SceneMode**&cameraID=1&schemeID=3&Scene=0&CorridorMode=0& MirrorMode=3
Return	OK (Refer to General Response)

2.8.8.3. Scene mode parameter meaning

Table 2-8-3-3-1

Parameter	Data	Description
Scenes	<int>	SceneMode 0: Indoor 1: Outdoor
Corridor Mode	<int>	CorridorMode 0: Close 1: Open
MirrorMode	<int>	Mirroring (NVR/IPC) 0: Normal 1: Horizontal 2: Vertical

		3: Horizontal + Vertical

2.8.9. White balance parameters (WBMode)

2.8.9.1. Get white balance (getWBMode)

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type=WBMode&cameraID=<cameraID>
Description	Refer to Sensor Configuration Parameters and WBMode Parameters
Example	**http://192.168.1.121/cgi-bin/sensor.cgi?action=get&type=*WBMode*&cameraID=1**
Return	wbMode=0 (IPC)/rgbMode(The lite series) redGain=50 blueGain=50 (-1 Indicates not supported, Refer to General Response)

2.8.9.2. Set White Balance (setWBMode)

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type= WBMode &cameraID=<cameraID>[ ]
Description	Refer to Sensor Configuration Parameters and WBMode Parameters
Example	**http://192.168.0.199/cgi-bin/sensor.cgi?action=set&type= WBMode &cameraID=1&wbMode=9&redGain=10&blueGain=20**
Return	OK (Refer to General Response)

2.8.9.3. Meaning of white balance parameters

Table 2-8-3-3-1

Parameter	Data	Description
model	<int>	WBMode/ rgbMode 0: Auto 1: Tungsten 2: Fluorescent 3: Daylight 4: Shadow 9: Manual (Refer to the Return value when obtaining)
Red Gain	<int> [0,100]	redGain (WBMode manual mode active) 0-100
Blue Gain	<int> [0,100]	blueGain (WBMode manual mode active) 0-100

2.8.10. Reset front-end parameters (ResetParameters) (IPC excluding the lite series)

2.8.10.1. Reset front-end parameters (setResetParameters)

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type= ResetParameters &cameraID=<cameraID>[ ]
Description	Refer to Sensor Configuration Parameters and ResetParameters Parameters
Example	***http://192.168.0.199/cgi-bin/sensor.cgi?action=set&type=*** ResetParameters &cameraID=1
Return	OK (Refer to General Response)

2.8.10.2. Reset front-end parameter meaning

Table 2-8-3-3-1

Parameter	Data	Description
Reset front-end parameters	< string >	Reset Parameters

2.8.11. Intelligent Tracking Parameters (IPC excluding the lite series)

2.8.11.1. Get smart tracking parameters

URL	http://<servername>/cgi-bin/param.cgi?action=get&type=IntelligentTracking&cameraID=<cameraID>
Description	Refer to URL Descriptions
Example	http://192.168.17.189/cgi-bin/param.cgi?action=get&type=IntelligentTracking&cameraID=1
Return	enable=1 calibrate=15 magnify=21 duration=56 startPointPresetID=2 trackType=3

2.8.11.2. Set Intelligent Tracking Parameters (setIntelligentTracking)

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type=IntelligentTracking&cameraID=<cameraID>[ ]
Description	Refer to Smart Tracking Configuration to enter common parameters.
Example	http://192.168.0.96/cgi-bin/sensor.cgi?action=set&type=IntelligentTracking&cameraID=1&enable=1&calibrate=15&magnify=21&duration=56&startPointPresetID=3&trackType=3
Return	OK (For other responses, Refer to General Response)

2.8.11.3. Smart Tracking Parameters

URL	Parameter Description	scope	type of data
enable	switch 0: Off 1: On	0-1	int
calibrate	Calibration coefficient	1-30	int
magnify	Tracking magnification	1-30	int
duration	Duration (seconds)	1-300	int
startPointPresetID	Starting point (preset position ID)		int
trackType	Tracking Type 1: Humanoid 2: Vehicles 3: People or cars		int

2.8.12. Noise Reduction

2.8.12.1. Get Noise Reduction (getNoiseReduction)

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type= NoiseReduction &cameraID=<cameraID> &schemeID= <schemeID>
Description	Refer to Sensor Configuration Parameters and NoiseReduction Parameters
Example	**http://192.168.1.121/cgi-bin/sensor.cgi?action=get&type=***NoiseReduction***&cameraID=1&schemeID=3**
Return	2DNR=1 3DNR=0 2DNRMode=1

	3DNRMode=2 2DNRMaxStrength=20 3DNRMaxStrength=66 2DNRFixedStrength=56 3DNRFixedStrength=88 (-1 Indicates not supported,Refer to General Response)

2.8.12.2. Set Noise Reduction (setNoiseReduction)

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type=NoiseReduction & cameraID=<cameraID>[ ] &schemeID= <schemeID>
Description	Refer to Sensor Configuration Parameters and NoiseReduction Parameters
Example	***http://192.168.0.199/cgi-bin/sensor.cgi?action=set&type=*** NoiseReduction &cameraID=1&2DNR=1&3DNR=0&2DNRMode=1&3DNRMode=2&2DNRMaxStrength=20&3DNRMaxStrength=66&2DNRFixedStrength=56&3DNRFixedStrength=88 &schemeID=3
Return	OK (Refer to General Response)

2.8.12.3. What are the noise reduction parameters?

Table 2-8-3-3-1

Parameter	Data	Description
2DNR	<int> [0,1]	2DNR 0: close 1: open
3DNR	<int> [0,1]	3DNR 0: close 1: open
2DNRMode	<int> [1,2]	2DNRMode 1: Auto 2: Manual
3DNRMode	<int>[1,2]	3DNRMode 1：Auto 2：Manual
2DNRMaxStrength	<int>[0,100]	2DNRMaxStrength（2DNR auto mode active）0-100

3DNRMaxStrength	<int>[0,100]	3DNRMaxStrength（3DNR auto mode active）0-100
2DNRFixedStrength	<int>[0,100]	2DNRFixedStrength （2DNR manual mode active）0-100
3DNRFixedStrength	<int> [0,100]	3DNRFixedStrength (3DNR manual mode active) 0-100

2.8.13. Image enhancement parameters (EnhanceImage)

2.8.13.1. Get Enhanced Image (getEnhanceImage)

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type= EnhanceImage &cameraID=<cameraID>
Description	Refer to Sensor Configuration Parameters and EnhanceImage Parameters
Example	http://192.168.1.121/cgi-bin/sensor.cgi? action=get&type= EnhanceImage &cameraID=1
Return	WDR=1 WDRvalue=23 HLC=1 HLCvalue=33 BLC=0 BLCvalue=1 AntiShake=1 Defog=0 Defogvalue=88 (-1 Indicates not supported, Refer to General Response)

2.8.13.2. Set image enhancement (setEnhanceImage)

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type= EnhanceImage &cameraID=<cameraID>[ ]
Description	Refer to Sensor Configuration Parameters and EnhanceImage Parameters , Note: WDR, HLC, BLC cannot be enabled at the same time
Example	http://192.168.0.199/cgi-bin/sensor.cgi?action=set&type=EnhanceImage&cameraID=1&WDR=1&W

	DRvalue=23&HLC= 0 &HLCvalue=33&BLC=0&BLCvalue=1&AntiShake=1&Defog=0&Defogvalue=88
Return	OK (Refer to General Response)

2.8.13.3. Image enhancement parameter meaning

Table 2-8-3-3-1

Parameter	Data	Description
WDR	<int>[0,1]	WDR 0：close 1：open
HLC	<int>[0,1]	HLC 0：close 1：open (only BLC close active)
BLC	<int>[0,1]	BLC 0：close 1：open (only HLC close active)
AntiShake	<int>[0,1]	电子防抖 0：关 1：开
Defog	<int>[0,1]	Defog 0：close 1：open
WDRvalue	<int>[0,100]	WDRvalue（WDR open active）0-100
HLCvalue	<int>[0,100]	HLCvalue（HLC open active）0-100
BLCvalue	<int>[0,100]	BLCvalue（BLC open active）0-100
Defogvalue	<int> [0,100]	Defog value (Defog open active) 0-100

2.8.14. False Color Setting (falseColor) (IPC excluding the lite series)

2.8.14.1. Get pseudo color parameters

URL	http://<servername>/cgi-bin/ sensor .cgi?action=get&type= **falseColor** &cameraID=1&schemeID=0
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/sensor.cgi?action=get&type=falseColor&cameraID=1&schemeID=0
Return	falseColorModel=5 temperatureBarEnable=2 mixStreamXOffset=91 mixStreamYOffset=92 mixStreamWidthScale=93 mixStreamHeightScale=94 (For other responses, Refer to General Response)

2.8.14.2. Set pseudo color parameters

URL	http://<servername>/cgi-bin/ sensor .cgi?action=set&type= **falseColor** &cameraID=1&schemeID=0& falseColorModel=5&temperatureBarEnable=2&mixStreamXOffset=91&mixStreamYOffset=92&mixStreamWidthScale=93&mixStreamHeightScale=94
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/sensor.cgi?action=set&type= falseColor&cameraID=1&schemeID=0& falseColorModel=5&temperatureBarEnable=2&mixStreamXOffset=91&mixSt

	reamYOffset=92&mixStreamWidthScale=93&mixStreamHeightScale=94
Return	OK (For other responses, Refer to General Response)

2.8.14.3. Meaning of pseudo color parameters

parameter	data	Description
falseColorModel	<int>	False Color Mode 0: White Hot 1: Black Hot 2: Rainbow 3: Iron Red 4: Amber 5: Bone China 6: Cold 7: Brass 8: Hot 9: Pink 10: Spring Flowers 11: Midsummer 12: Autumn Leaves 13: Midwinter 14: Purple Blue 15: Red Flame 16: Rose
temperatureBarEnable	<int>	Temperature bar display 1: On 2: Off
mixStreamXOffset	<int>	Blend X Offset
mixStreamYOffset	<int>	Blend Y Offset

mixStreamWidthScale	<int>	Fusion Wide Zoom
mixStreamHeightScale	<int>	Fusion High Zoom

2.8.15. FFC Control (ffcCtrl) (IPC excluding the lite series)

2.8.15.1. Get FFC control parameters

URL	http://<servername>/cgi-bin/ sensor .cgi?action=get&type= **ffcCtrl** &cameraID=1&schemeID=0
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/sensor.cgi?action=get&type=ffcCtrl&cameraID=1&schemeID=0
Return	ffcCtrlModel=1 ffcIntervalMinute= 5 ffcIntervalCelsius =2 shutterInitTrigger =1 (For other responses, Refer to General Response)

2.8.15.2. Setting FFC control parameters

URL	http://<servername>/cgi-bin/ sensor .cgi?action=set&type= **ffcCtrl** &cameraID=1&schemeID=0&ffcCtrlModel=0&ffcIntervalMinute=50&ffcIntervalCelsius=25&shutterAdjustTrigger=1&backgroundAdjustTrigger=1
Description	Refer to parameter meaning
Example	http://192.168.2.21/cgi-bin/sensor.cgi?action=set&type=ffcCtrl&cameraID=1&schemeID=0&ffcCtrlModel=0&ffcIntervalMinute=50&ffcIntervalCelsius=25&shutterAdjustTrigger=1&backgroundAdjustTrigger=1

Return	OK (For other responses, Refer to General Response)

2.8.15.3. FFC control parameter meaning

parameter	data	Description
ffcCtrlModel	<int>	FFC control mode 0: Automatic 1: Manual
ffcIntervalMinute	<int>	FFC interval (unit: minutes) (5-255)
ffcIntervalCelsius	<int>	FFC interval (unit: Celsius) (2-255)
shutterAdjustTrigger	<int>	Shutter Correction 1: Trigger
backgroundAdjustTrigger	<int>	Background Correction 1: Trigger

2.8.16. White balance

2.8.16.1. Get white balance parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=get&type=**whiteBalance**&cameraID=<cameraID>&schemeID=<schemeID>
Description	Refer to parameter meaning
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=get&type=**whiteBalance**&cameraID=1&schemeID=0
Return	mode=0 redGain=0 blueGain=0

	(-1 means not supported, for other responses, Refer to General Response)

2.8.16.2. Set white balance parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type= **whiteBalance** &cameraID=<cameraID>&schemeID=<schemeID>
Description	Refer to parameter meaning
Example	http://192.168.1.121/cgi-bin/sensor.cgi?action=set&type= **whiteBalance** &cameraID=1&schemeID=0&mode=1&redGain=31&blueGain=58
Return	OK (-1 means not supported, for other responses, Refer to General Response)

2.8.16.3. Meaning of white balance parameters

URL	Parameter Description	scope	type of data	Remark
schemeID	plan 0: Option 1 1: Option 2 2: Option 3 3: Option 4	0-3	int	
redGain	Red Gain	0-100	int	
blueGain	Blue Gain	0-100	int	

2.8.17. Red and blue light (IPC excluding the lite series)

2.8.17.1. Get red and blue light parameters

URL	: //<servername>/cgi-bin/sensor.cgi?action=get&type=RedBuleLamp
Description	Refer to parameter meaning

Example	http://192.168.32.95/cgi-bin/sensor.cgi?action=get&type=RedBuleLamp
Return	mode=0 redGain=0 blueGain=0 (-1 means not supported, for other responses, Refer to General Response)

2.8.17.2. Set red and blue light parameters

URL	http://<servername>/cgi-bin/sensor.cgi?action=set&type= RedBuleLamp ...
Description	Refer to red and blue lights
Example	http://192.168.32.95/cgi-bin/sensor.cgi?action=set&type=RedBuleLamp&RedBuleLampMode=0&RedBuleManualDuration=31&RedBuleFlickerDuration=12 &RedBuleFlickerInterval=0 &weekDayCount=2&weekDayBegin=1&weekDay=0&startTime=0&endTime=86400&next_weekDayURL=2 &weekDay=1&startTime=0&endTime=86400&weekDayEnd=2
Return	OK (-1 means not supported, for other responses, Refer to General Response)

2.8.17.3. The meaning of red and blue light parameters

URL	Parameter Description	scope	type of data
RedBuleLampMode	Consecration 0: Open 1: Off	0-1	int
RedBuleManualDuration	Manual control duration	Unit: s	int
RedBuleFlickerDuration	Alarm duration	1s-60s	int
RedBuleFlickerInterval	Flashing frequency	0 (low), 1 (medium),	Int

		2 (High)	
weekDayCount	Number of defenses		int
weekDayBegin	Arming start indicator		int
weekDay	which day	0-6	int
startTime	Arming start time (seconds)		int
endTime	Arming end time (seconds)		int
next_weekDayURL	Next arming time start mark		int
weekDayEnd	Arming end mark		int

2.8.18. Front-end configuration parameters (sensorParam) IPC (The lite series)/NVR

2.8.18.1. Reset the front-end configuration parameters to factory settings (resetSensorParam)

URL	http://<servername>/cgi-bin/sensor.cgi?action=reset&type=sensorParam&cameraID=<cameraID>
Description	Refer to the image mode parameter meaning table
Example	http://192.168.2.193/cgi-bin/sensor.cgi?action=reset&type=sensorParam&cameraID=1
Return	OK (For other responses, Refer to General Response)

2.8.18.2. Front-end configuration parameter meaning

Front-end configuration parameter table

Table 2-8-1-3-1

parameter	data	Description
cameraID	<int>[1]	Channel ID

2.8.18.3. Front-end configuration capability (sensorAbility) (the lite series)

2.8.18.3.1. Get front-end configuration capabilities (getSensorAbility)

URL	http://192.168.2.193/cgi-bin/sensor.cgi?action=get&type= sensorAbility &cameraID=<cameraID>
Description	Refer to the meaning of the front-end configuration capability parameters.
Example	http://192.168.2.193/cgi-bin/sensor.cgi?action=get&type=sensorAbility&cameraID=1
Return	maxGainSupport=0 exposureTimeCount=18 exposureTimeBegin=1 exposureTimeSupport_1=1/5 exposureTimeSupport_2=1/10 exposureTimeSupport_3=1/12.5 exposureTimeSupport_4=1/15 exposureTimeSupport_5=1/20 exposureTimeSupport_6=1/25 exposureTimeSupport_7=1/50 exposureTimeSupport_8=1/100 exposureTimeSupport_9=1/125 exposureTimeSupport_10=1/150 exposureTimeSupport_11=1/200 exposureTimeSupport_12=1/250 exposureTimeSupport_13=1/500 exposureTimeSupport_14=1/1000 exposureTimeSupport_15=1/2000 exposureTimeSupport_16=1/5000 exposureTimeSupport_17=1/10000 exposureTimeSupport_18=1/20000 exposureTimeEnd=18 (For other responses, Refer to General Response)

2.8.18.3.2. Front-end configuration capability parameter meaning

Front-end configuration capability parameter **table**

Table 2-8-11-3-1

parameter	data	Description
maxGainSupport	<int>{0,1}	Is the maximum gain supported? 0: Not supported 1: Supported
exposureTimeCount	<int>[0,n]	Exposure time capability
exposureTimeBegin	<int>{1}	Exposure time capability starts
exposureTimeSupport_N	<string>	Exposure time capability
exposureTimeEnd	<int>[1,n]	Exposure time capability ends

2.8.19. Front-end configuration input common parameters

In the sensor .cgi program, at least 4 parameters are carried, namely user name **userName,** password **password,** operation type **action** and program subtype type **. (userName and password must be in the first and second positions of the parameter)**

Front-end configuration general parameter table 2-8-10-1

Table 2-8-10-1

parameter	data	Description
userName	<string>	Login machine account
password	<string>	Password to log in to the machine
action	<string>{get,set}	get Set
type	<string>	For the specific meaning of Type, please refer to the table **Front-end**

		Configuration General Parameters Table 2-8-10-2

Front-end configuration general parameter table 2-8-10-2

Table 2-8-10-2

type	Description
schemeID	Solution (IPC excluding the lite series/NVR does not need to be brought) 0: Option 1 1: Option 2 2: Option 3 3: Option 4
brightness	brightness
brightnessRange	Brightness range
contrast	Contrast
contrastRange	Contrast range
hue	tone
hueRange	Tonal Range
saturation	saturation
saturationRange	Saturation range
sharpness	Sharpness
sharpnessRange	Sharpness range
gamma	Gamma
gammaRange	Gamma Range
mirror	Mirror Status
zoomFocus	Zoom focus
infraredLight	Infrared light

2.9. Real-time audio (audio.cgi) (IPC excluding the lite series) (Other equipment is not yet developed)

2.9.1. G711, PCM, AMR real-time audio CGI

2.9.1.1. Get G711, PCM, AMR audio stream (HTTP G711, PCM, AMR, AudioStream)

URL	http://<servername>/cgi-bin/audio.cgi?action=recv&cameraID=<cameraID>&streamID=<streamID> &EncoderType=<EncoderType>
Description	Refer to Real-time Audio Input Common Parameters
Example	http://192.168.1.121/cgi-bin/audio.cgi?action=recv &cameraID=1&streamID=1&EncoderType= g711_alaw
Return	--myboundary Content-Type: audio/g711_alaw Content-Length: <audio size> < audio data> … (For other responses, Refer to General Response)

2.9.1.2. Real-time audio input common parameters

In the audio.cgi program, enter at least 4 parameters, namely user name **userName,** password **password,** channel ID **cameraID,** stream ID **streamID. (userName and password must be in the first and second positions of the parameter).**

The following table shows the information corresponding to each string in the general parameters of the audio.cgi program:

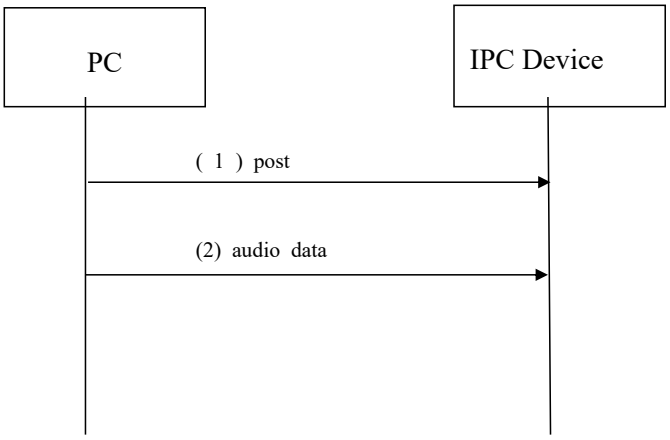
audio.cgi parameter table:

Table 2-10-1-2-1

parameter	data	Description
userName	<string>	username
password	<string>	password
action	<string>{recv,send}	recv receives audio data from the device sendSend audio data to the device
cameraID	<int>[1,n]	Channel number, default 1, obtained from device capabilities;
streamID	<int>[1,n]	Stream ID, the value range is obtained from the device capabilities;
EncoderType	<string>	Encoding type (case-insensitive). RAW_PCM, G711_ALAW, G711_ULAW, AAC, AMR, G7231, G722, G726, G729

2.9.2. CGI Voice Broadcast Protocol Access Instructions

2.9.2.1. CGI voice sending block diagram.



(3)audio end

(1) The PC or platform establishes a link to the IPC device through the standard HTTP p rotocol POST method .

(2) The PC or platform sends pure audio data over the established link (1), and the IP C plays the data after receiving it.

(3) After (2) the audio data is sent, an end command is sent to inform the IPC device that the data transmission is complete.

2.9.2.2. POST request and audio stream data format

POST /cgi-bin/audio.cgi?action=play&cameraID=1&EncoderType=G711_ALAW HTTP/1.1

Date: Fri, 31 Dec 1999 22:47:06 GMT

Cache-Control: no-cache

Contact: no-cache

Host:192.168.35.74 // IP address of the device . This is just an Exa mple . Users need to fill it in.

Server: ServerName

Connection: keep_alive

Content-Length:0

Content-Type:multipart/form-data;boundary= myboundary

// Blank line , must have

<Data>

<Data>

<Data>

-- myboundary --

POST sends audio data in the format of the sample data above. First, construct and send a standard POST request header , where userName=admin and password=admin are the user name and password of the device , which need to be filled in according to the user name and password of the actual device. There are spaces between POST and /cgi-bin/ , and between streamID=1 and HTTP/1.1 , which must be strictly followed.

Note : When docking an IPC device , the frequency of sending audio data to the IPC device over the network should match the sampling rate of the audio data

being sent !

For Example: The audio of G711A is 8000 bytes per second, which can be sent 10 times in 1 second, with 800 bytes sent each time and 100 milliseconds

2.10. Upgrade

2.10.1 Upgrade (IPC excluding the lite series)

2.10.1.1. Spatial query before upgrade

URL	http://<servername>/cgi-bin/ upgrade.cgi ?action=get&type= UpdateStatus&FlashSpace= < FlashSpace >
Description	FlashSpac indicates the upgrade package size in M
Example	http://192.168.0.188/cgi-bin/upgrade.cgi?action=get&type=UpdateStatus&FlashSpace=26
Return	If OK is Returned, it means there is enough space.

2.10.1.2.Equipment upgrade (IPC)

2.10.1.2.1. ask

URL	http://<servername>/cgi-bin/param .cgi ?userName=<username>&password=<password >&type= **UpdateData**
Connection	keep-alive
Content-Type	multipart/form-data

	parameter name	meaning
parameter	uploadState	Upload Status 0: Send file 1: Sending completed (device will restart)
	file	a The maximum length of each upload is 10KB

2.10.1.2.2. response

Return	OK (For other responses, Refer to General Response)

2.10.2. Upgrade (IPC lite series / NVR)

2.10.2.1. Upgrade setting parameters (UpdateStatus)

URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type= UpdateStatus
Description	Send channel number and file size Kb After the upgrade, the space size Returns OK and port number normally
Example	http://192.168.2.193/cgi-bin/param.cgi? action=set&type= UpdateStatus & channel_id=0&FlashSpace= 89789872
Return	OK prot: 32768
Example 2:	Description: NVR upgrade multiple devices
	1.http://192.168.2.193/cgi-bin/param.cgi? action=set&type= UpdateStatus & channel_num = 2 & FlashSpace = 89789872 Return OK port:32768 2.http://192.168.2.193/cgi-bin/param.cgi? action=set&type= UpdateIPC &

	channel 1=1& channel 2=2
Return	Ok

2.10.2.2. UpdateOver

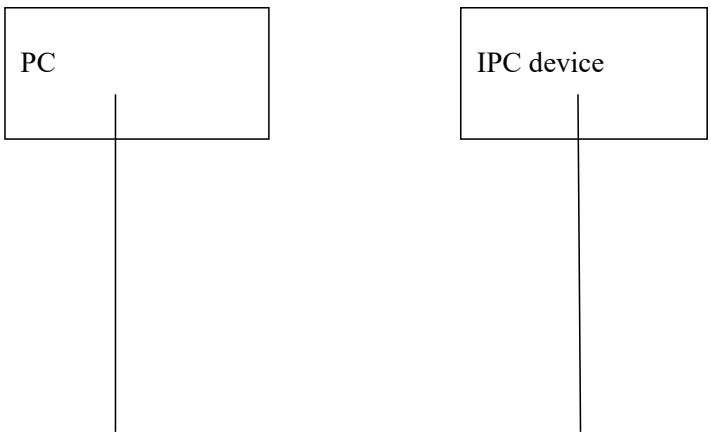
URL	http://192.168.2.193/cgi-bin/param.cgi?action=set&type= UpdateOver
Description	The file data is sent and the device is informed that it has ended.
Example	http://192.168.2.193/cgi-bin/param.cgi? action=set&type= UpdateOver
Return	Ok

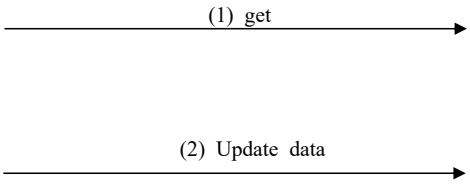
2.10.2.3. UpdateData

URL	**http** : // <servername>/cgi-bin/param.cgi?type=UpdateData	
Connection	keep-alive	
Content-Type	multipart/form-data	
parameter	**parameter name**	**meaning**
	file	a The maximum length of each upload is 50KB

2.10.3. CGI Upgrade Protocol Access Instructions

2.10.3.1. CGI upgrade sending block diagram.





(4) The PC or platform establishes a link to the IPC device through the standard HTTP p rotocol get method .

(5) The PC or platform sends the upgrade package data over the established link (1), and the IPC performs the upgrade after receiving the data.

(6) After (2) the upgrade data is sent, an end command is sent to inform the IPC device that the data sending is complete.

Call before upgrading

http://192.168.0.188/cgi-bin/upgrade.cgi?action=get&type=UpdateStatus&FlashSpace=26

You need to check whether the device space is sufficient. If it Returns OK, it means there is enough space (FlashSpace=26 means the upgrade package size in M)

2.10.3.2.Get request and upgrade package data format

GET /cgi-bin/ upgrade .cgi?action= update&type=UpdateData&UpdateData=data HTTP/1.1

Date: Fri, 31 Dec 1999 22:47:06 GMT

Cache-Control: no-cache

Contact: no-cache

Host:192.168.0.188 // IP address of the device . This is just an Exa mple . Users need to fill it in.

Server: ServerName

Connection: keep_alive

Content-Length:0

Content-Type:multipart/form-data;boundary= myboundary

// Blank line, must have

<Data>

<Data>

<Data>

The size of the data sent each time cannot exceed 10*1024. Wait 100 milliseconds for each send.

Called after sending the upgrade package

http://192.168.0.188/cgi-bin/upgrade.cgi?action=get&type=UpdateOver

3 CGI group text rules, common errors, disk status description

3.1 Group text rules

The specific Returned plain text, image data body and URL address are determined by different access requests:

1. Some operation requests need to Return image data bodies, such as snapshots and video streams under the HTTP protocol.

2. Device configuration, device operation and other related requests generally Return plain text.

3. Under the RTSP protocol, all relevant command requests Return URL addresses.

4. Alarm information and other related requests generally Return plain text. When requesting in attach mode, a plain list will be obtained.

IO alarm list:

Among them, the arguments involving lists are as follows:

planning time	Action: scheduleTimeAction Begin: weekDayBegin Flag: next_weekDayURL End weekDayEnd
Example	&scheduleTimeAction=<action>

	&weekDayBegin=1 &weekDay=1 &startTime1=<startTime1> &endTime1=<endTime1> … &startTime3=<startTime3> &endTime3=<endTime3> &next_weekDayURL=1 … next_weekDayURL=6 &weekDay=7 &startTime1=<startTime1> &endTime1=<endTime1> … &startTime3=<startTime3> &endTime3=<endTime3> &weekDayEnd=n

Alarm PTZ event	Count: alarmPTZActionCount Begin: alarmPTZActionBegin Flag: next_PTZAcitonURL End: alarmPTZActionEnd
Example	&scheduleTimeAction=<action> &weekDayBegin=1 &weekDay=1 &startTime1=<startTime1> &endTime1=<endTime1> … &startTime3=<startTime3> &endTime3=<endTime3>

	&next_weekDayURL=1 … next_weekDayURL=6 &weekDay=7 &startTime1=<startTime1> &endTime1=<endTime1> … &startTime3=<startTime3> &endTime3=<endTime3> &weekDayEnd=n

Linkage list	Count: AlarmLinkageCount Begin: AlarmLinkageBegin Flag: next_AlarmLinkageURL End: AlarmLinkageEnd
Example	AlarmLinkageParam=<AlarmLinkageParam> &AlarmLinkageBegin &ActionID=<ActionID(1)> &ActionType=<ActionType(1)> &next_AlarmLinkageURL=2 … next_AlarmLinkageURL=n &ActionID=<ActionID(n)> &ActionType=<ActionType(n)> &AlarmLinkageEnd=n (For other responses, Refer to General Response)

Modify the license plate black and white list:

Among them, the arguments involving lists are as follows:

License plate information	Begin: PlateParamBegin Flag: NextUrl End: PlateParamEnd
Example	& OldListBegin=1 &PlateParamBegin=1 &PlateText=< PlateText(1)> &Type=<Type(1)> &StartTime=< StartTime(1)> &EndTime= <EndTime(1)> &NextUrl=2 …… &NextUrl =*n* &PlateText=< PlateText(n+1)> &Type=<Type(n+1)> &StartTime=< StartTime(n+1)> &EndTime= <EndTime(n+1)> &PlateParamEnd=n &OldListEnd=1 &NewListBegin=1 &PlateParamBegin=1 &LprPlateText=< LprPlateText(1)> &Type=<Type(1)> &StartTime=< StartTime(1)> &EndTime= <EndTime(1)> &NextUrl=2 … &NextUrl =*n* &LprPlateText=< LprPlateText(n+1)> &Type=< Type(n+1)> &StartTime=< StartTime(n+1)>

	&EndTime= <EndTime(n+1)> &PlateParamEnd=n &NewListEnd=1

3.2 Error constants

General Errors

Error Number	**describe**
-2	Not enough memory available
-3	Use of invalid handle
-4	A NULL pointer was used
-5	Invalid function call.
-6	System environment error.
-7	Format error White loading program.
-8	Wrong parameters when loading the program.
-9	The device or data is not ready.
-10	The data length is incorrect.
-11	The thread is already running.
-12	Thread start failed
-13	The queue is full.
-14	The queue is empty
-15	System timeout
-16	not found
-17	No SSL encryption required

-18	SSL encryption required
-19	ssl accpect timeout
-20	ssl connect timeout
-twenty one	Cgi main program name error
-twenty two	Cgi subtype does not exist
-twenty three	Cgi parameter error

3.1.1 I/O Errors

This type of error mainly defines errors that occur during disk operations, such as disk access, file and path non-existence, serial port access, and audio device access.

Error Number	describe
-101	file does not exist
-102	The file path does not exist
-103	Error opening disk
-104	Error reading disk
-105	Error writing to disk
-106	Error in Refer toking file position
-107	Reading and writing disk to the end
-108	Insufficient disk space or the disk is full
-109	Disk does not exist
-110	Disk write protection
-112	Disk is not formatted
-113	Disk Error
-150	An error occurred White opening the serial port.

-151	An error occurred White reading serial port (com) data
-152	An error occurred White writing data to the serial port.

3.1.2 Network Error

Network errors are mainly defined for errors that occur during network transmission, including Socket transmission errors and packet assembly and unpacking errors.

Error Number	describe
-201	The network socket was not created
-202	The network socket could not be created
-203	Unable to bind (BIND) to the specified IP address and port, binding failed
-204	Unable to connect to the specified IP address and port. Failed to connect to the server.
-205	Timeout White connecting to the server
-206	Unable to listen to the specified IP address and port. Listening failed.
-207	Unable to accept the client's connection request. Failed to accept the connection.
-208	Timeout when accepting the client's connection request
-209	The network link has been disconnected
-210	Network SOCKET sending failed
-211	Timeout when sending data
-212	An error occurred White receiving data
-213	Timeout when receiving data
-214	An error occurred White getting the socketaddr address.
-215	An error occurred White getting the network socket option parameter.

-216	Failed to obtain network socket option configuration
-217	The network protocol used is not supported
-218	The port is already occupied
-230	Unable to create data package. Failed to create data package.
-231	An error occurred White parsing the packet header. Packet header error
-232	Unable to create data packet header. Failed to create data packet header.
-233	An error occurred White analyzing the packet payload. The payload data is incorrect.
-234	Unable to create packet payload data, error creating packet payload data
-235	An error occurred White parsing the RPT packet extension URL. The RTP packet header is incorrect.
-236	Communication compression failed

3.1.3 Database Error

This type of error mainly defines errors that occur when performing database operations, such as database opening, closing, transaction operations, adding, deleting, and modifying.

Error Number	**describe**
-301	An error occurred White opening the database. Access to the database failed.
-302	An error occurred White closing the database
-303	An error occurred White starting a database transaction
-304	An error occurred White executing the database transaction rollback operation, and the database transaction operation failed.
-305	An error occurred White executing the database transaction commit operation, and the database transaction operation failed.
-306	An error occurred White executing the database insert operation and data

	insertion failed.
-307	An error occurred White executing the database delete operation and data deletion failed.
-308	An error occurred White executing the database update operation, and the data update failed.
-309	An error occurred White executing the database query (select) operation, and the data query failed.
-310	Database query condition error
-311	The query result is empty.

3.1.4 Command Error

This type of error mainly defines the communication command errors that occur when communicating with network video devices, such as: command parsing failure, command load error, command version error, etc.

Error Number	**describe**
-401	Unknown command,
-402	Command header parsing error.
-403	Error creating command header.
-404	Command payload parsing error.
-405	Command payload creation error
-406	The command version number is incorrect.

3.1.5 Business application error

This type of error mainly defines the errors that may occur when the application interacts

with the network video device, such as: incorrect login username, incorrect login password, etc.

Error Number	describe
-501	The response received was not the one expected
-502	Remote device processing data error
-503	The device is not turned on
-504	Device open failed
-505	The device is occupied
-506	Device not supported
-507	Wrong login username.
-508	The login password is incorrect.
-509	ADSL network dial-up failed.
-510	The serial port is exclusively used
-511	The maximum number of connections has been reached
-512	Insufficient permissions
-513	Device not configured
-550	The video session has been closed
-551	The video chat thread has been closed
-552	Failed to create Directshow video component.
-553	Failed to create Directshow video component.
-601	The audio session has been closed.
-602	The audio session thread has been closed.
-603	Failed to create DirectShow audio component.
-604	Operation of DirectShow audio component failed.

-605	Failed to initialize the DirectDraw component.
-606	Failed to initialize decoder.
-607	Decoding failed.

3.3 Disk Status Constants

Macro	value	describe
DISKSTATUS_TIME_OUT	-1,	Write file timeout
DISKSTATUS_NOT_RECOGNIZE	0	Device status not reported
DISKSTATUS_OK	1	normal status
DISKSTATUS_ERROR	2	Abnormal state
DISKSTATUS_SD_NOT_EXISTENT	3	sd card does not exist
DISKSTATUS_WRITE_PROTECT	4	Disk write protection
DISKSTATUS_NOT_FORMAT	5	Disk is not formatted
DISKSTATUS_FORMATTING	6	The disk is being formatted
DISKSTATUS_HD_NOT_EXISTENT	7	Disk does not exist
DISKSTATUS_HD_SLEEP	8	Disk Hibernation
DISKSTATUS_CONNECT_FAILED	9	Connection failed
DISKSTATUS_NAS_NOT_EXISTENT	10	NAS does not exist
DISKSTATUS_NOT_EXISTENT	11	NAS disk does not exist
DISKSTATUS_NO_PARTITION	12	Disk is not partitioned
DISKSTATUS_DISCONNECT_DEVICE	13,	Disk not connected
DISKSTATUS_DISK_ISREPAIRING	14	Hard drive repairing
DISKSTATUS_DISK_REMOVED	15	Hard Drive Removed
DISKSTATUS_WAIT_FROMAT	16	Prepare to format

DISKSTATUS_DISK_ISREMOVING	17	Removing the hard drive
DISKSTATUS_FORMAT_SUCCEED	18	Format successfully
DISKSTATUS_FORMAT_FAILED	19	Format failed
DISKSTATUS_WAIT_REPAIR	20	Waiting for a fix
DISKSTATUS_REPAIR_SUCCEED	twenty one	Repair Success
DISKSTATUS_REPAIR_FAILED	twenty two	Repair failed
DISKSTATUS_HD_EXISTENT	twenty three	Disk storage
DISKSTATUS_PYSICAL_ERROR	twenty four	Disk physical failure

4 appendix

4.1 System log type

4.1.3 Main Type

Value (hexadecimal)	Description
0x2	Exception log
0x3	Operation log
0x4	Operation Log v2

4.1.4 Subtype

Value (hexadecimal)	Description
0x01	User Management
0x02	system maintenance
0x03	Device Configuration
0x04	Video recording operation

0x05	Audio and video control
0x06	Audio and video on demand
0x07	Web access mode and SSL encryption configuration
0x11	NVR User Management
0x12	NVR Configuration
0x13	NVR Channel Management
0x14	Video recording operation
0x15	Audio and Video
0x21	Signal loss
0x22	Unauthorized access
0x23	Disk Full
0x24	Disk Error
0x25	MODEM disconnected
0x26	IP address conflicts
0x27	Disk does not exist
0x28	Disk write protection
0x29	Disk is not formatted
0x30	Alarm recording disk full
0x31	Scheduled recording disk is full
0x32	7*24 recording disk full
0x41	Power on
0x42	Shutdown
0x43	Illegal shutdown
0x50	Local login

0x51	Local logout
0x52	Local Configuration Parameters
0x53	Local playback by file
0x54	Local playback by time
0x55	Start recording locally
0x56	Stop local recording
0x57	Local PTZ control
0x58	Local PreRefer to
0x59	Local modification time
0x5a	Local upgrade
0x5b	Local backup files
0x70	Remote login
0x71	Remote Logout
0x72	Remotely start recording
0x73	Remotely stop recording
0x74	Start transparent transmission
0x75	Stop transparent transmission
0x76	Remotely obtain parameters
0x77	Remote Configuration Parameters
0x78	Remotely obtain status
0x79	Remote Arming
0x7a	Remote disarming
0x7b	Remote Reboot
0x7c	Start voice intercom

0x7d	Stop voice intercom
0x7e	Remote upgrade
0x7f	Remote playback by file
0x80	Remote playback by time
0x81	Remote PTZ control
0x82	Remotely start live video
0x83	Remotely stop live video
0x84	Remotely start live audio
0x85	Stop live audio remotely
0x86	Device storage format (SD card format)

4.2 Alarm log type

4.2.3 Main Type

value	Description
1	Security Alarm
4	Disk alarm
5	Video alarm
6	Intelligent analysis alarm
7	Temperature detection alarm

4.2.4 Subtype

4.2.4.1 **Security Alarm Subtype**

value	Description

1	I/O Alarm
2	Motion detection alarm
3	Camera blocking alarm
4	Video loss alarm
5	Network disconnection alarm
9	PIR Alarm
10	NVR channel I/O alarm

4.2.4.2 **Disk Alert Subtype**

value	**Description**
1	Disk status is normal
2	Disk read and write abnormality
3	Network disk connection failed
4	Disk Full
5	Disk does not exist
6	The disk space has reached the specified threshold.
7	Disk is not formatted
8	Insufficient device storage space
9	The data version is too low
10	Data version is too high
11	Disk access capability mismatch

4.2.4.3 **Video Alarm Subtype**

value	**Description**
1	Data source connection successful
2	The data source connection username and password is

	incorrect.
3	The data source connection does not have permission
4	The data source connection has reached the maximum number of connections
5	The data source has reached the maximum rate limit
6	
7	
8	
9	Storage failed
10	Start recording
11	Stop recording
12	
13	
14	
15	

4.2.4.4 **Smart Analysis Alarm Subtype**

value	**Description**
twenty one	Intelligent analysis tripwire detection alarm
twenty two	Intelligent analysis of mobile detection alarm
twenty three	Intelligent analysis and occlusion detection alarm
twenty four	Intelligent analysis of perimeter intrusion alarm
25	Intelligent analysis of double tripwire alarm
26	Intelligent analysis of wandering alarm
27	Intelligent analysis of multiple people wandering alarm
28	Intelligent analysis of item left behind alarm

29	Intelligent analysis of item removal alarm
30	Intelligent analysis of abnormal speed alarm
31	Intelligent analysis and reverse alarm
32	Intelligent analysis of illegal parking alarm
33	Intelligent analysis of camera displacement alarm
34	Intelligent analysis of video signal abnormality alarm
35	
37	License plate recognition alarm

4.2.4.5 **Temperature detection alarm subtype**

value	**Description**
0	Temperature threshold warning
1	Temperature threshold alarm
4	Temperature difference warning
5	Temperature difference alarm
6	Face high temperature alarm
7	Temperature range alarm
8	Face alarm
9	Humanoid alarm
10	Vehicle alarm
11	Face low temperature alarm
12	Normal face temperature alarm