## FAQ of IPC&PTZ

# 1 Image

#### What is the minimum value can be set of the Min. Focus Value of PTZ?

10 cm

^ Focus		
Focus Mode	Auto	~
Min. Focus Distance	10cm	~

#### Do 7 series IPCs have variable iris?

DS-2CD7 series cameras with 2.8-12 mm focus length does not have variable iris, DS-2CD7 series cameras with 8-32 mm focus length and all iDS-2CD7 cameras have variable iris.

#### What is digital zoom?

The principle of digital zoom is to choose a certain region and enlarge it to the entire window. The chosen region is 16\*16 pixels for minimum, and shall not exceed the window.

#### At what exposure time is the low illuminance value tested?

Normally 1/25 s.

#### What is ABF?

"Automatic Back Focus" technology (ABF) is based on the premise that the focal length of the lens itself has been determined, through image analysis technology, the internal gears, rails and other mechanical devices inside the camera are adjusted to adjust the position of the sensor to achieve automatic and precise focus adjustment. ABF is usually matched with the auto focus technology and effectively solves the blurry image issue.s

#### Can ABF (Automatic Back Focus) function be used together with RS485?

No.

#### What is the meaning of the "0-100" of Smoothing?

0 to 100 represents clear to smooth. The closer to clear, the larger the gap between I frame and P frame; the closer the smooth, the smaller the gap between I frame and P frame.

#### What is the difference between AWB1 and AWB2?

AWB1 has a wider correction range and strong adaptability. AWB2 has a smaller correction range than AWB1, but has higher correction accuracy.

#### What is the minimum focus distance of the scolorvu camera?

Due to the large lens aperture of the 2 series full-color camera, the depth of field will be worse. The minimum focus sharpness distance is as follows:

2.8mm+2MP, depth of field (2.5 m $\sim \infty$ )

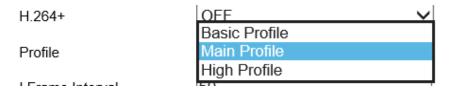
2.8mm+4MP, depth of field (3.5 m $\sim \infty$ )

4mm+2MP, depth of field (2.5 m $\sim \infty$ )

4mm+4MP, depth of field (4 m~∞)

#### What is the meaning of profile?

Profile refers to encoding complexity. The higher the Profile is chosen, the better image quality.



#### What is the difference between Auto and Manual aperture mode?

In Manual mode, the aperture is maximized by default; in Auto mode, the aperture is automatically adjusted according to the brightness of the environment

#### What is the aperture type of 2 series IPC?

2 series zooming cameras all have variable aperture (but not auto-aperture), the other cameras have fixed aperture.

#### What is the infrared wavelength of the camera?

Most of cameras have visible infrared with a wavelength of 850nm. Part of cameras have invisible infrared with a wavelength of 920nm

#### Does DS-2CD2XX5G1 supports Rotate mode?

DS-2CD2X85G1 does not support rotate mode, the other models support.

# Why does the DY9 mid-load positioning system sometimes enter black and white mode when zooming in and out in day mode?

Go to Configuration-Image-Video enhancement to check the Defog mode is set to Auto. In the automatic defog mode the camera may recognize the scenes in the picture (such as sea and forest) as foggy, and automatically turn on defog mode and switch to black and white mode.

#### What is auto tracking white balance?

Auto tracking white balance is named after Sony. In our product, the white balance range will be wider than auto

#### The low illumination data are all AGC on data. Is there AGC off data?

The results of the test of low illumination without gain are as follows:

AGC on refers to auto gain control, which is amplified to the maximum gain under low illumination,

Off is to turn off the automatic gain, which can also be done manually

The gain part is necessary to adjust the low illuminance. In low illumination, the gain needs to be turned on. Secondly, there is no test of this data when the gain is not turned on. Consider this explanation to see if the customer accepts it

#### 69 panoramic duty cycle target pixel ratio

It's the percentage of the drawn space. It's an abstract value. There are specific mapping values in the algorithm, but it's not open to the public. You can set the number of people in the front area to achieve different alarm levels. Users don't need to pay attention to the number of duty cycles

#### The resolution of 2592 x 1944 is more than 5 million. Why is it still called 2746?

The resolution defined by channel products is 2 / 4 / 6 / 8, and 4mp is the mainstream resolution. We used to have 5MP resolution for a period of time before. When the product was switched, 4mp hardware had the ability to be compatible with 5MP resolution. In the next platform switching product (x6g2 (c)), 4mp model is no longer compatible with 5MP resolution.

#### Do devices that support 3D DNR support 2D DNR

Yes

#### What is the mechanism of NVR in fetching IPC?

NVR will take both the main and the sub stream as long as IPC is added.

#### What is the resolution of the photo attached to the camera's event capture?

It is the same as the main stream resolution set by the camera.

#### What is the dynamic range of IPC without WDR on?

It is not tested because there is no testing standard.

#### Which camera support lens distortion correction functions?

In general, the resolution of the gun camera and high resolution ordinary camera (12MP above) support

# 2 Vedio & Audio

#### What audio encoding formats are supported by Hik-connect?

AAC, G711µ, G711A, if the device selects other encoding formats, audio cannot be obtained on Hik-connect.

#### What do the three modes of WDR (ON/OFF/Auto) mean?

ON: WDR is always enabled.

OFF: WDR is off

Auto: In this mode, WDR is turned on during the day and turned off at night to avoid too much image noise at night; under normal circumstances, WDR will be turned off before the screen is switched to night mode, and will not be completely synchronized with day and night switching

#### What is the impact of encoding format on image quality?

- 1. H.265+ will treat smaller objects as the background when dealing with scenes with many moving objects, complex objects or low illumination. Therefore, under the same bit rate, the image quality is generally worse than that of 265.

  2. Under the premise of the same resolution and bit rate, H.265 saves more space than H.264, with a little compromise
- 2. Under the premise of the same resolution and bit rate, H.265 saves more space than H.264, with a little compromise of image quality. Under the premise of the same image quality, H.265 is twice as efficient as H.264 regarding encoding efficiency.

#### What effect does Play Performance have on the camera screen?

Changing Local-Play Performance settings on the camera web page has no effect on the stream parameters. The parameters are to configure the play library, and tt only affects the personal computer, not the camera.

#### What is Smart Encoding?

Smart encoding saves the bit rate by controlling the I frame interval and the quality of all frames. By calculating whether there is a change in the picture, the I frame interval could be prolonged if there is no encoding so as to meet the requirements of saving code rate.

#### What funcions cannnot be used at high frame rate mode?

HLC, Rotate, WDR

#### What is the decoding method of fisheye camera?

DS-2CD29xx fisheye camera only supports software decoding, DS-2CD63xx fisheye supports both software and hardware decoding.

#### Do 2 series cameras support stereo?

No.

#### What is the file format of the imported audio alarms of strobe light and audio alarm cameras?

8KHz, file size less than 512KB, wav format.

# Custom audio alarm voice, the import file format meets the requirements, why there will be distortion, fast slow down the problem?

Audio data may be compressed during conversion or transmission through some chat software

# G3 platform custom voice, why sometimes there will be abnormal sound at the beginning, but the PC won't play

Because the camera plays the format header of the custom voice as the audio data. Audio format header can be removed by editing software; The software will be optimized in later versions.

#### What does the ON mode of SVC mean?

In the ON mode, the target is the user who needs frame extraction and storage, such as NVRs/DVRs and the decoder. The front-end will not extract frames from the video, but will transmit them to the back-end or the decoder. They will decide whether to extract frames. In extreme cases, when the network environment is very bad, all P frames will be



#### What does the Auto mode of SVC mean?

The target of Auto mode is the device itself. The DSP changes the P frame reference relationship, and then the frontend application layer extracts the frame from the repeatedly identified SVC video stream, that is, the front-end completes the frame extraction action, and the frame extraction mode only supports the private protocol, but not RTSP.

Possible situations: No frame loss, 1/2p frame loss, 3/4P frame loss, all P frames loss, all frames loss



#### What does the level 0-100 of smoothing mean?

0-100 means from clear to smooth. The smaller the value is, the closer the clear is, the larger the gap between I frame and P frame is. The larger the value is, the closer the smooth is, the smaller the gap between I frame and P frame is.



## 3 VCA

#### What's the difference between the first generation acusense and the second generation?

The differences are as follows:

- 1. False alarm filters: the second generation uses video classification, and the first generation uses image classification. Theoretically, the false alarm filter performance is improved by more than 50% compared with the original one. However, the performance of false positives removal is closely related to the scene and environment, and 50% is only a reference value.
- 2. Target extraction: the second generation algorithm has been updated, and the target detection has been improved
- 3. Improvement of the overall performance of the product:
- 1) No mutex (motion detection, triple stream, h.265 +)
- 2) Add built-in mic, zoom interpolation line
- 3) Support 256g SD card

#### G3 platform camera events trigger pixel requirements

G3 platform perimeter camera, 2MP case human car classification requires 30 pixel width, 4MP requires 60 pixels, other resolution analogy.

#### What's the same plate filtering mechanism of 7 Series ANPR cameras?

The same license plate filtering function, after the first recognition of a license plate, in about 2 minutes, if it repeatedly appears (the same adjacent license plate), it will be filtered. This function is implemented by the algorithm, and the same license plate that is not adjacent will not be filtered. Different versions of the same license plate filter time is different, v5.5.62 is about 2 minutes, v5.6.10 is about 4 minutes.

#### When will the analysis data of 63 fish eye intersection be updated?

The intersection analysis data will only be refreshed at integral time, and it will not change if it is refreshed at other times

#### Motion detection rule box drawing rules

The expert mode of motion detection supports 8 regions drawing. In the ordinary mode, small squares can be drawn at will. There is no limit on the number of small squares. However, it does not distinguish which square is triggered. It only limits the detection of objects in small squares

#### What is the difference between motion detection 1.0 and 2.0?

Motion detection 2.0 has deep learning and supports classification of people and vehicles

#### What are the target detection methods of the second generation binocular camera?

Target detection mode: you can select "monocular", "binocular", "binocular first, monocular second", "monocular first, binocular second". Monocular tracking algorithm will be used as the main target detection basis, and binocular tracking algorithm will be used as the target detection basis

#### What is the detection resolution of motion detection 1.0?

The motion detection 1.0 algorithm uses 720 \* 576 images for detection. After sampling by cameras with different resolutions, the sampled images will be scaled to this resolution and sent to DSP for processing

#### How about 7 series camera capture upload mechanism?

Mobile detection does not push a picture; SMD pushes a picture to the back end through SDK protocol, with the size of 1080p, which cannot be changed

#### How many rule lines does the second generation acusense camera support at most?

4 lines.

#### What is the usage of heat map's Validity of 63 fisheye camera?

Validity is used to judge whether the target is close to the actual need to detect. For example, the target detected by heat map is human. The higher the setting is, the closer the target to be detected will be to human. Otherwise, it will not be detected. Therefore, this can also be used to filter out some false positives to a certain extent.

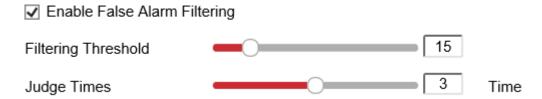
The standard of detection is that the algorithm detects automatically, and judges whether it is close to the detected target according to the modeling

#### Does the id-2cd8146 have to plug in the SD card before using the face comparison function?

No

#### What is the function of false alarm filtering of the second generation passenger flow statistics camera?

For false alarm filtering: the higher the sensitivity, the easier it is to filter the error target. The number of times indicates that it needs to reach the set value. For example, when it is set to 3, it means that it needs to recognize the object in three consecutive frames before it is regarded as a target



#### How many targets can acunse camera detect at most in a picture at the same time?

64

# 4 Storage

#### What is the maximum NAS capacity supported by the camera?

NAS capacity cannot be less than 8GB, and the maximum limit is 4T

#### Does FTP capture storage support read / write overlay?

No

#### Is video read / write coverage for SD card?

The overwrite option in the video recording setting is to set the erasure and write overlay of NAS storage, and the default erasure and write overlay of SD card video recording

#### How to check the 6825 camera's ANR successfully configured?

You can take a look at the scene with taskshow. There is a thread called alarmup30. If it is followed by a P, it means that the connection is successful. If it is not, it means that the configuration is not successful

### How many SD card logs can be saved?

There are two files to store logs, one is the current log file and the other is the main log file: when the current log is full, it will be copied to the main log, and when the main log is full, it will be rewritten

The current log file size is 16m, which can store 250 fragments, each fragment size is 64000, each log size is 72 bytes, and a total of 250 \* 64000 / 72 = 222000 logs can be written

The size of the main log file is 32m, which can store 500 fragments, each fragment is 64000, each log is 72 bytes, and a total of 500 \* 64000 / 72 = 444000 logs can be written

#### Will the anr video be deleted after being returned?

No

#### Will the number of access paths be occupied when the video is stored to NAS?

No

## How many passenger flow data does the first generation passenger flow statistics camera support to store?

10000

# How many passenger flow data does the second generation passenger flow statistics camera support to store?

60000

#### How much data can a generation of passenger flow cameras store?

The time of each item is calculated according to the set statistical cycle. For example, if the set statistical cycle is 15 minutes, a piece of data will be uploaded in 15 minutes, and the total storage time =  $10000 \div (60 \div 15) = 2500h$ . If the statistical cycle is other, the total storage time of 10000 items will be calculated in the same way.

# How to judge the health status of Haikang high distribution card? How long is the general life span? We suggest that customers replace the SD card?

If the number of bad blocks is more than 15, or the number of power on and off is more than 3000 times, or the percentage of remaining life is less than 3%, it is considered as damaged; if the number of bad blocks is 0, and the number of power on and off is less than 2000, and the percentage of remaining life is more than 10, it is considered as good; others are in poor health. If the service life is less than 3%, it is recommended to replace the SD card.

#### What is the processing logic of the ANR function?

The off-line continuous transmission device needs to be equipped with storage medium, otherwise NVR cannot obtain the off-line continuous transmission data from the device after networking. The logic of the specific working mechanism is as follows: when the preview module detects that the device is disconnected from the NVR network, it will send a start recording message to the video module, and the storage module will start recording. When the network is restored, the preview module will send a stop recording message to the storage module to stop recording, and the rear NVR will actively send a request to the device side for recording return.

#### How long will it take for the network to recover and start transmitting data back?

After the network is disconnected, the ANR will work about 8 seconds later. About 120 seconds after the network

is restored, the NVR will request the IPC for the video during the network is disconnected. About 2 minutes later, the camera will start to send back the data

#### Could the SD card video be read by computer

SD card cannot be directly accessed on PC. Because of encryption and format, record in SD card has specific format, which some PC cannot play directly

#### Which Hikvision Black cards do support encryption?

DS-UTF64G-H1,DS-UTF32G-H1

#### How are the three levels of Lite storage divided?

High: people at 5M and car at 10m, ensuring full frame rate

Middle: people at 5m, 16-20 frames Low: people at 5m, 10-14 frames

#### Does IDS-2CD8146 have to insert SD first for face comparison function?

No

#### Does Acusense & ColorVu camera support SFTP?

2xx6g2/2xx7g2 is not supported, 3xx6g2/3xx7g2 is supported.

# The camera uses NAS storage. Is it supported to view video playback of different types of events on 4200 by classification after connecting 4200?

Yes, NAS and SD card only different storage media, SD video storage supports operations NAS also supports.



#### How to configure the image and video memory ratio in the SD card of the camera?

Set the memory ratio of pictures and videos in [Configuration]-[Storage]-[Storage Management]-[HDD Management]-[Quota]. After setting, you must format the SD card before it takes effect.



#### What are the specific protocols of Cloud1.0 and Cloud2.0 supported by our devices?

Hikvision Cloud Storage Picture Storage Protocol. (HPSP)

### Does Cloud storage protocol is private of Hikvision?

Yes

# 5 Preview, playback

After configured multicast, does the device push streams all the time or only when needs to get streams?

Only push the stream when gets the live view

How long does the camera's picture delay?

About 100-300ms and difference from resolution.

Why is there a time stamp offset between the clip video and the actual output video in the local playback of the camera?

Due to the playback library cache, the video clip output time cannot be exactly the same as the video clip time when the control presses the clip key, and there will be a delay of more than 10s. This is a known problem, and there is no solution

#### Does the playback link include the playback in Hik-connect?

Yes, it includes.

#### What are the applicable models of compulsory HTTPS browsing function in 1 / 2 series?

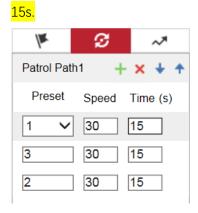
This function requires a high CPU frequency of the device, so only G1 / G3 / G5 platform is supported in the 2 series, but not in the low-end platform



#### How many streams can be get via RTSP?

As long as the stream is supported by the camera, it can be get by RTSP. For 1 and 2series, 6 steams at most can be get simultaneously (including RTSP and other protocols), for 3 series above, 20 streams at most.

#### What is the minimum dwell time for patrol?



#### What does "V" stand for when the same circle appears on the screen of the ball machine as OSD?

That is a low voltage alarm, indicating that the ball machine power supply voltage is insufficient (generally around 36%~64%\* standard voltage)

### 6 Network

#### Does camera in G1 platform support SMB protocol?

Yes, support SMBV1.0 2.0 2.1 3.0

#### What is the upper limit of the output bandwidth of all IPC code streams?

60M

#### Does the IPC support LLDP protocol?

Not support

#### Which protocol does use when active the camera by SADP?

The process of SADP activation of the camera includes three ways of simultaneous unicast, multicast and link layer custom protocol. When SADP and camera are in different network segment, the unicast will traffic bypassing the route table and get the Mac address of camera by ARP; In multicast, the SADP and camera are in one LAN, they could join the multicast group for communication.

#### What is the range of multicast addresses that users can configure?

224.0.2.0 ~ 238.255.255.255

#### How to turn on RTCP manually?

Use the SSH to enter the debug mode, enter: setRtcpEnable 1 //Turn on RTCP setRtcpEnable 0 //Turn off RTCP getRtcpEnable //Get current RTCP status

#### Does 7 series camera support rules box overlay in screenshot

It does not support in smart event; it supports customized if required.

#### How to get Onvif version on web

All the platform after 5.5.80 support, in Network-- Advanced Settings-- Integration Protocol



#### What is the server port number of camera connected to the Hik-Connect

dev.hik-connect.com: 8555 litedev.hik-connect-com: 8666

#### Does camera support RTMP protocol?

Baseline does not support, it supports customized if required.

#### Could the audio prompt of configuring network and power on for Wifi camera turn off?

Not support to turn off, it supports customized if required.

#### Which model of camera in 1 series does not support to get stream by HTTP?

E3,E3S,E4 wired product does not support.

#### Which platforms support mandatory HTTPS browsing?

G1 and G3

#### Does camera support SIP protocol?

SIP is the base of GB28181, oversea products do not support.

#### Does camera support ARP?

All model support.

#### Does the camera support adding NAS servers by domain names?

Not support, only support adding NAS servers by IP address.

#### What is MIB2?

MIB2 is a queryable information node for industry standards development. Hikvision baseline product only support private MIB information query and it supports customized if required.

#### **Does IP Speaker support Onvif?**

Not support.

### Front-end product support ability and version of IGMP protocol:

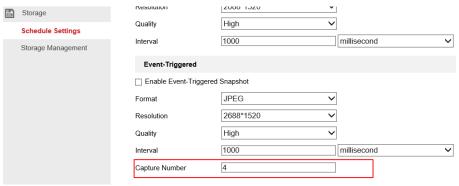
Both V2 and V3 support.

#### How to get IGMP version of camera?

After entering debug mode, enter cat /proc/sys/net/ipv4/conf/eth0/force\_igmp\_version

#### How many images does the devices of G1 platform push to FTP?

Motion detection pushes one picture and cannot be changed, the resolution is the same as main stream. The number of push pictures for SMD events can be configured on the camera interface as below:



#### Does the front end device support ARP Protocol?

All front end devices support

#### Does the front end device support NTCIP protocol?

No

#### Which platforms support AP distribution network with WiFi cameras?

At present, only E6 / E7 / G3 and later platforms E8 / G5, and later new platforms are AP distribution networks.

#### Does RTSP streaming support h.265

Yes, VLC version 2.2.4 and above

#### How does EPTZ save bandwidth?

EPTZ can focus on the area being zoomed in with the maximum resolution, and then generally use streams of 720P or 1080P to save bandwidth, but this feature does not work with high frame rates.

#### What is a transparent channel?

The transparent channel is used to pass through the data, the data sent in the SDK Demo can be directly displayed through the serial port, do not need to parse.



#### Front-end products to IGMP protocol support ability and version

Signal attenuation is so small that it can be ignored. Therefore, in theory, 3000m in SPEC name can be referred to. In practical application, 10-30m is recommended in consideration of signal interference

#### Do Hikvision cameras support MQTT protocol?

No

#### Through what protocols can our customer's third-party software control our PTZ?

HTTP (ISAPI、ONVIF、HIKCGI) SDK, ISUP, Hik-Connect

#### Can the tripartite platform control the ball machine through UDP protocol?

No. UDP protocol is the transport layer protocol, control ball machine is through the application layer protocol. ISuppl2.0 and 4.0 in the application layer protocol are UDP based.

#### Which products of our company support the CGI protocol?

IPC: Vari-Focal lens devices support lens initialization function.

PTZ: All of PTZ dome camera support lens initialization function.

#### Does our camera support 3GPP protocol?

3GPP is a mobile communication protocol, which is only supported by 4G camera.

#### Does WiFi camera support hik connect under WiFi?

(D) Can't, the performance is four spaces above the label, write a D, and the system does not show, can only be found in the shipping information.

The starting point of its restriction strategy is to make way for similar Ezviz equipment. This restriction has been synchronized with all regional Mkts and presales. If you have any questions, please ask the corresponding

#### regional MKT



How often does our IPC poll with a DDNS service if it's in use?

Per 10 min.

What should pay attention to in order to realize the ANR function of people counting data when the camera connects with HCP?

The camera is necessary to connect with NVR firstly, then add to HCP platform.

# 7 System

Why is the serial number of the box camera with a housing displayed on SADP different from that on the web browser?

For the cameras with a housing, the SADP shows the serial number of the housing, while the web browser displays the serial number of the box camera.

#### What are the differences between 2 and 3 series cameras?

The 2 series camera supports 4 privacy masking areas, 1 ROI area and does not support auto iris function. 3 series camera supports 8 privacy masking areas, 5 ROI area and the Vari-Focal model supports auto iris.

#### What are the platforms that support preview without plugins?

H3, G1

#### What is the MTBF of the camera?

6W hours for 1/2/3 series Network Camera, 10W hours for 4/5/6/7/8 series Network Camera and 3W hours for PTZ Dome camera.

#### Does the camera support global shutter technology?

At present, only traffic cameras use the global shutter technology, and ordinary Network Camera and PTZ Dome camera does not support.

#### What is Lot Number?

Lot Number represents the production order number, which can be reversed according to the serial number.

#### How to choose the lens for box camera?

The conditions for the lens to match the box camera are the sensor size of the lens is larger than the box camera, the lens mount of the lens is the same as the box camera.

#### What is EPTZ?

EPTZ is implemented on the third or fourth stream(depending on different devices), usually the maximum resolution is only 720P or 1080P;

But the part of the target that triggers tracking and zooming will use the maximum resolution supported by the camera.

#### How does EPTZ save bandwidth?

EPTZ can focus on the enlarged piece using the maximum resolution, and then use 720P or 1080P to push stream to save bandwidth, but this function cannot use high frame rates.

#### What is the pressure range in which the 63xx fisheye device can work normally?

12kpa-0.2Mpa

#### What is Transparent Channel?

Transparent Channel uses for the transparent transmission of data. The data sent by SDK Demo can display via serial port and no need to analyze further.

# After importing the configuration file of ball machine, will the information of preset points be exported synchronously

Yes, including all the information of the preset point (Pan / tilt / zoom / focus and name)

#### What is the maximum number of settable passwords for camera associated mailbox?

The baseline currently supports the password length of 32 bits for filling in the mailbox. If it is exceeded, only the first 32 bits will be sent. There is no restriction on the page.

#### G3 platform has the function of metadata settings. Why not G1 platform?

G3 platform devices can enable overlay rule box in code stream in metadata settings (H3 UI is still used). Older devices such as G1 platform still do not have this function, because this function consumes a lot of memory. Memory consumption is fixed and cannot be adjusted. G3 only supports this function on sub code stream

#### Will the Scheduled Tasks of the PTZ camera be executed repeatedly within the set time period?

No, a maximum of 8 time periods can be configured in a day. Each time period is executed only once at the beginning. If it is interrupted by other tasks, the execution will be resumed once according to the park time on the page.

#### What is the default password for a water drop WiFi camera DS-2CV2U21FD-IW

Last 8 digits of serial number or admin + verification code (The label at the bottom of the camera is written)

#### After SSH access to debug, I want to input dspstatus to check DSP status. Why is the input invalid

The instruction to display DSP status is debug, and then enter dspstatus; In some new versions, you need to output open to see the content of dspstatus

# PTZ is configured with smart tracking. Why does the ball machine wait 10 s before it starts to track when it is transferred to a new preset point (or other events are linked to the new preset point)? How to solve it?

In order to prevent the ball machine from rotating too frequently, this residence time threshold is set. 10 s is the dead time of the program and cannot be modified. If you want to realize the effect that the ball machine starts tracking immediately, it is recommended to configure the regional intrusion linkage tracking, and set the time threshold to 0, as shown in the following figure

#### How can ANPR camera turn on the off-line transmission of license plate alarm and license plate map?

Open under SDK demo others guard / unguard



### What common functions do 4G solar cameras support when connected to HikCentral Professional via ISUP?

Preview, playback, configure and remote wake up

#### What is the EPTZ?

EPTZ is implemented on either a third or fourth stream (depending on the device), usually with a maximum of 720P, 1080P, but triggers the tracking and magnification portion of the target, and the resolution is the maximum supported by the camera.

#### Does 2XX5G1-camera support rotate mode?

8 MP is not supported, other resolutions are supported.

#### What is the file format of the sound and light alarm camera to import the custom audio alarm?

8KHz, less than 512KB, WAV format

#### After the PTZ changes the name of the preset point, does the OSD change when the preset point is called?

After modification, you need to click the setting button to synchronize the modification with OSD.



#### What is SVC?

SVC is a scalable coding technology that can extract frames, decode and record. Through the SVC function to process any time period recording or real-time preview stream, you can extend the recording time or alleviate the serious preview freeze problem caused by poor network conditions.

#### How to enable the lens initialization function?

IPC: Control on the PTZ control panel of the live preview interface.

PTZ: Open in Configuration - Image - Others.



#### Can the list of past-by plates number be exported from the 7 series ANPR camara?

Cannot be exported from camera web page, can be exported from hcp

#### Why does the PTZ device import certificate fail in H3,R7?

This platform only supports certificates in PEM format, and there is format validation, and the filename suffix must end with.pem.



# Why is it that PT3326IZ does not have FTP capability on the configuration screen, but the SPEC annotation supports it?

This device will turn off the capture function by default after the sub-stream is enabled, resulting in the failure of FTP related functions, which will not be displayed on the interface.



#### Why does the DS-2CD2443G0 have two speaker holes?

On the right is the new structure, which will raise the sound better.



# 8 Hardware and Structure

#### What is the function of the camera's USB port?

The USB interface of the camera strap is used to supply power to external devices and provide 5V voltage to the outside. However, due to the relatively small current consumption, it is not recommended to use this USB.

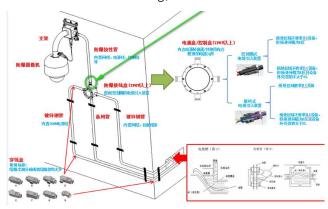
#### How to use explosion-proof flexible conduit?

Explosion-proof flexible conduit has two kinds of interfaces, one is female at both ends, and the other is male and female.

One male and one female interface: one end is connected to the camera, one end is connected to the purchased explosion-proof junction box or the self-developed junction box after removing the male connector.

Female at both ends interface: the explosion-proof junction box that is connected to the female connector is self-developed devices. As shown in the figure below, the green arrow is different.

The interface of our camera is the same. The main difference is the connection method at the junction box end. The flexible conduit mainly solves the connection between the movable device interface part and the galvanized steel pipe for a short distance, and it is not recommended to use it too long. There is no fixing measure in the actual installation of the explosion-proof flexible conduit and if it is too long, the internal cables will be pulled.



#### Can AC24V power dome camera use DC24V power supply?

NO.

#### What is the alarm volume of the 2xx6G2/SL camera?

When set to the maximum volume, it can reach 70dB at a distance of 10m away from the camera.

#### What are the lightning protection measures that the dome camera can take?

The yellow-green wire in the middle of the power cord represents the ground wire and must be connected. Even if the power cord is not used for POE power supply, the ground wire must be connected separately.

#### Does the anti-corrosion bullet camera support POE power supply?

Most of anti-corrosion bullet camera currently only support AC24V power supply. But after connecting to POE switch, you will find that the camera can also be power on.

Principle: The internal power supply board of the anti-corrosion bullet camera is separated. After 24VAC power supply comes in, it will be distributed to the wiper, heater, IR and then to the camera. If only POE is connected, the power supply will only go to the camera module, the wiper and heater, IR will not supply power.

#### Can the 4-core network cable used by the customer be connected to Hikvision devices?

4-core network cable cannot be used on 1000M devices. If it is a 100M device, you can use the power supply to power on the device separately. In this case, the 4-core cable is only used for data transmission.

#### How does the network camera control the movement of the ptz dome camera?

After the network camera and the ptz dome camera are correctly connected through 485 line, the baud rate and address of the two are consistent, and the ptz dome camera can be controlled on the network camera side.

#### Why the camera will be restored to the factory inactive state every time it restarts?

Two common reasons:

- 1. If there are too many bad flash blocks, the parameters cannot be saved.
- 2. The reset button is short-circuited or jammed by the structure, the rule: it must appear every time it restarts and it does not increase within time.

Judging method: check the print log, use the dmesg command to check the reset flag is always in the enable state when it starts.

#### What is PVC Free?

PVC Free refers to halogen-free environmentally friendly materials, specifically PE materials are used.

#### How to check the ICR life of network camera or ptz dome camera?

Enter the following URL in the browser: 10.16.112.85/ISAPI/System/status, see the red value in the cut icon on the right for specific feedback results.

#### How does it work if the camera PoE and adapter are powered at the same time?

When PoE and the adapter supply power to the camera at the same time, the one with the higher voltage will be used for power supply. After one of the power supply methods is cut off, it can automatically switch without restarting.

#### How to control the wiper and IR of the box with housing camera?

Only the box with housing camera can control the wiper and IR light of the housing, and the device makes the wiper and IR light of the housing through 485 protocol.

#### What is the situation of IPC surge protection?

Power Supply: differential mode 1KV, common mode 2KV Network Port: differential mode 2KV, common mode 4KV

#### How will if eMMC Protection exceeds its service life?

It will forbid some contents writing if eMMC is out of its service life. It mainly influences the data of ANR.

#### Does HDMI outout support audio?

No

#### Can we open the Explosion-proof camera?

Usually it needs to select if it is necessary to assemble SD card when out of factory. So it is forbidden for customer to open the camera then install the SD card or use the serial port by themselves, which it will influent the explosion ability. If necessary, we recommend send the camera to our RAM to check that.

#### Can we extend the length of the Explosion-proof flexible pipe?

The standard length of our explosion-proof flexible pipe is 1m. We cannot montage several pipes together because the explosion-proof ability cannot be ensured. We support customize the longer length if the customer needs.

#### What is the material of the turret camera body?

The rotatable part is metal and the other part is plastic.

#### How does the camera heater work?

After power on, the main board detects the temperature. When the temperature is less than  $-15^{\circ}$ C, it will power on the heater first. When the temperature is higher than  $-15^{\circ}$ C, it will stop heat and supply power to main board. If it has not been heated to  $-15^{\circ}$ C, it will be forced to power on after heating for 30 minutes. If it cannot be powered on yet, it will continue to cycle the previous step. Generally, when the power is on, the heater will turn on only the environment temperature is lower than  $-15^{\circ}$ C.

#### What is the power consumption of 4G camera solar panel?

40W

#### What is the anti-shock mode?

The design of anti-shock mode is to prevent the environment from changing, which causes the infrared lamp to turn on and off for many times in a short time and affects the customer experience. In auto mode, from the first time when switching day & night mode to night, if the number of times of switching is 5 within 10 minutes, the device will enter the anti-shock mode and the device will keep the night mode for 1 hour (starting timing from the fifth time). After 1 hour, the device will return to normal, that is to say according to the current scene, it will decide whether to switch to day mode or keep night mode.

#### **How to connect Pickup?**

The red wire connects to the positive pole of power supply, the black wire connects to the negative pole of audio and power supply, and the white wire connects to the positive pole of audio

#### What is the minimum life of the relay used in IPC

Mechanical life (action times under no-load): 5 million times of opening and closing; Electrical life (action times under rated load): 100000 times of opening and closing

#### Can the camera be used in alkaline environment such as ammonia?

Dome and the camera with plastic material are not allowed, which will be corroded

#### Does our camera support overvoltage protection?

Support

#### What is the farthest transmission distance of Hikvision pickup?

The signal attenuation is very small and can be ignored. So in theory, it can refer to 3000m as spec tag. In practical application, considering the signal interference, 10-30 m is recommended

### What's the resolution of the Event-Triggered Snapshot attached with email?

Same with the set resolution of mainstream.

#### DS-2XE6452F-IZHRS can't pass through our explosion-proof hose. What's the reason?

This is an old explosion-proof camera (ds-2xe6452f-izhrs), which can not be directly passed through. It is necessary to cut off the black mesh (the red ring section below), then through the explosion-proof hose, and then make the crystal head of the mesh wire again.



### Does the voltage of ptz camera fluctuate up and down?

Yes, the fluctuate range is  $\pm 25\%$ .

#### How long does the white light life of full color camera last

100000 hours

#### Why do many ball machines automatically raise their heads at 1 a.m. and have virtual focus

After accumulating 1W lens actions, the system will perform lens self check and initialization at 1:00 a.m. to maintain that the lens will not lose step

#### Distance and angle of infrared light compensation for iDS-2CD7A26G0/P-IZHS(Y)

2.8-12mm model: fill light distance 60m, maximum angle 120mm  $^{\circ}$  8-32mm model: fill light distance 100m, maximum angle 50m  $^{\circ}$ 

#### The angle range of white light in full color camera

8mm, generally more than 120 degrees; 4mm, generally 100 degrees

6mm, 70 degrees in general

8mm, 50 degrees in general

# There is no problem with the pickup on the computer. Why is there no sound when the camera is connected

Most likely, our current IPC pickup only supports three terminals, but does not support two terminals. The left and right channels are the same circuit in hardware. From bottom to top, the three terminals are left channel, right channel and grounding respectively. When connected to the two terminals, it is equivalent to grounding without sound.



#### Why does the 2-inch ball of ds-2de2a404iw-de3 not support the patrol cruise function

To be exact, PT12 and pt18 do not support the patrol cruise function, because in terms of hardware, the cruise function of this structure will greatly affect the life of the swing line, so this function is reduced

#### Will the use of solar cameras in high temperature affect the service life and safety?

When the battery reaches the upper limit of spec nominal working temperature, it will be powered off, which has no impact on the service life and safety.

#### Do our cameras all support overvoltage protection?

Yes

#### What is the normal working pressure range of the 63-fisheye?

12kpa-0.2Mpa

#### What should be paid attention to when the battery of 4G solar camera is stored if it is not used?

It is recommended to charge and discharge the battery every 30 days

#### Why does DY9 go into black and white mode when scaling in day mode?

Check whether the Defog in the image-video enhancement configuration is AUTO. In the mode of automatic fog penetration, the camera may recognize the scene in the picture (such as sea, forest) as foggy and switch to the black and white mode automatically when the fog penetration is enabled.

#### How to solve the issue if the camera enters the aperture oscillation?

Reboot the device or wait for 30 minutes.

#### Under which mode can 4G solar camera work continuously for 7 days in rainy days?

Low Consumption Mode.

#### What are the production date and expiration date on the desiccant package?

There are two dates on the desiccant package, one is the production date, and the other is the expiration date.

Production date: refers to the date of production of the desiccant itself.

Expiration date: it is for the production line. When the production line is assembled, the desiccant whose expiration date is not earlier than the assembly time should be selected. This expiration date is more similar to the "recommended date of equipment assembly", and customers need not pay attention to it

#### Gooseneck bracket is connected to PTZ. Do you need a transfer plate?

No, just single gooseneck bracket.





Can the 1236 line sequence of the network cable simultaneously power the IPC's POE and transmit data?

#### What is the RAL color number of Hikvision products?

(Hik White):approach to RAL9003

(Hik Black):approach to RAL9011

(Hik Grey):approach to RAL7022

(Hik silver/grey): approach to RAL 9023, glossiness 40 degrees

### How do I turn on/off the camera's Telnet port?

In the SDK Demo, the Product Related-IPC/IPD CFG-Device Server is enabled or disabled.



#### What is the difference between DS-2CD1343G0E-I and DS-2CD1343G0-I?

E stands for the economical model, which supports 15 FPS frame rate and DWDR, while the model without E supports up to 30 FPS and 120 dB WDR.

#### What is the intensity (expressed as Lumens) of the white light of the full-color camera?

Internal: light flux = light power \*100 Lm /W estimation, the previous supplementary light lamps: 2 400 mA, later changed to 2 200 mA. The data given above is 2 200 mA.

#### How to adjust the volume of FP2020 pickup?

The blue knob in the hole position on the back of the equipment can be adjusted, non-level adjustment.



#### How to start RTCP?

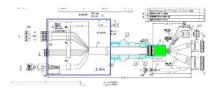
Release SSH and use serial port or CRT to input setRtcpStatus 1 command

#### What is the meaning of FUS in model DS-2CV2046G0-IDW (D) /FUS?

The model matches with American standard power as default.

#### What is the length of pigtail of DS-2XE6242F-IS?

1.8 m (1.4 m on the outside of the camera)



### What is the speaker power and sound pressure of 2xx6g2 sound light alarm camera on G3 platform?

20x6, 23x6: power 1.2 W; Sound pressure 95 dB@10 cm 2tx6, 26x6: power 2 W; Sound pressure 97 dB@10 cm

#### The standard of audio output of our cameras.

1 Maximum output amplitude: 3.3 Vpp

2 Output impedance:  $100\Omega$ 

Third-party speakers that meet this requirement can be connected to the audio output port of our cameras.

#### How many IR lights does 2xx6G2 has?

2 pairs for 26x6G2 and 2Hx6G2 (one pair of low beam, one pair of high beam), one pair for 2Tx6G2 (high beam)

#### What is the IR distance and angle of 26x6G?

When the high beam is at its maximum, the distance reaches 60m, which can meet the fill light in the T-end field of view; the angle is 50° cone;

When the low beam is at its maximum, the distance reaches 30m, which can meet the fill light in the W-end field of view; the angle is 140° cone.

#### Can I buy third-party batteries for 4G solar camera?

Yes, you can purchase a battery with a solar controller and the output is 12V.

Risk Description: 1. Customers need to cut their own thread, there are security risks. 2. The battery should be suspended independently, so it can't be put into our standard bracket, so we can't buy the same size battery. 3. If the power cannot be obtained, the camera will run in full power consumption mode

#### What is the 4G module model of the 4G solar camera?

NL668.

# Why DY3220IW-DE power-on self-check can rotate 360° horizontally, but can only rotate 240° in actual use?

The wall-mounted version of this model has a limit. If the limit is set to T<-20, the range of P is 0-120°, 240°-360°, in order to prevent crash with the wall

#### What does the PTZ with electronic compass function (e-compass) mean?

The electronic compass can display the direction of the current ball machine image on the map, and can be used with the platform to do the function of viewable field

#### What is the speed of face capture on each platform?

H3 has a maximum of 30 people on the same screen, and the capture rate is 5-6 per second

H7 has a maximum of 40 people on the same screen, the capture rate is 10 per second, and the comparison (modeling)

H5 has a maximum of 120 people on the same screen, the capture rate is 10 per second, and the comparison (modeling) rate is 3 per second

G3 has a maximum of 30 people on the same screen, and the capture rate is 6-7 per second

#### Maximum pupil distance limit for face capture

The maximum pupil distance is limited to 62.5% of the current resolution and changes with the current resolution.

#### The meaning of R in ids7 series naming rule

Anticorrosive coating is the meaning of Y, and R is the anti electromagnetic standard in the railway scene. It supports the track certification of en50121-4, which is highlighted by the absence of external audio interface.

#### What are the requirements of Wi-Fi Kit (D)?

- 1. Only one camera can be connected to the repeater camera.
- 2. The camera that connected on the repeater camera cannot serve as repeater camera again.
- 3. Enterprise-level encryption of WEP and wifi is not supported. (Only support following topology)



### What are the maximum recommended length of the cable when using PoE?

100 m

### How to use ball machine without infrared lamp with external infrared lamp?

Yes, the camera support day/night switch on web page.



#### What are the anti-shake methods currently supported by the device?

EIS, OIS and GIS. GIS is currently displayed as EIS on the page.

#### What is the heating strategy of the PTZ dome camera?

If the temperature is lower than 5° or the module does not emit a heartbeat for 10 minutes after power on, the module will shut down and the microcontroller will start heating at low temperature. After heating for 10 minutes or the temperature in the device reaches 50° and the device has a heartbeat, the module will be re-powered.

This applicable to most dome cameras, old models are not in this range.

#### Can a PoE switch with a different standard than camera's datasheet power to the camera?

It depends on the situation. If it is an 802.3at switch, it can supply to devices that indicate 802.3af on the datasheet. Otherwise, it won't work.

### 9 Wifi

#### Does our Wifi camera support 802.11ac protocol?

No. Only supports 802.11g/n/b. 5G frequency band is necessary for 802.11ac protocol. So far our Wifi camera Only supports 2.4G frequency band.

#### Can we open the web page for the Wifi camera without network port?

Connect the PC and camera in the same LAN and we can search the camera on SADP. We can login the camera via web if the camera supports it.

# 10 4G

# What general functions support for 4G solar camera connected to Hikcentral Professional platform through ISUP?

Preview, playback, configure and remote wake up.

### What should we need notice when store the 4G solar camera battery?

We recommend to charge and discharge the battery once every 30 days

# 11 Alarm

#### Can we change the alarm output mode?

The alarm output mode is NO and we cannot modify it.

### What are the alarm input modes? How to connect the wires?

Two types: NO (Normal Open, NC (Normal Close)

NO Mode: It will trigger the alarm when short circuit alarm in and GND; NC Mode: It will trigger the alarm when separate alarm in and GND.

#### What is the meaning of the maximum voltage and current of the alarm output?

It refers to the maximum voltage and current value of the power supply for the external alarm of the camera. If the external voltage is too large, it will not play the role of anti-surge protection. The alarm output of our camera is the switch signal, theoretically there is no voltage

#### What is the volume of the Sound and Light alarm speaker?

0.1m, 98dBspl1m, 78dBspl10m, 58dBspl

# Whether the alarm input mode is exclusive with the normal alarm input mode when ANPR recognition mode selects alarm input mode?

When the license plate recognition mode is selected as alarm input mode, the alarm input function in basic event will not take effect, because alarm input is used as license plate recognition function, and it will be mutually exclusive with conventional alarm input, so it will not take effect.

### What is the number of pictures sent by the email alarm linkage for 2 series cameras?

G1 platform: Three pieces G3 platform: One piece

#### How to connect the alarm output cable?

1A interface connects to Positive and 1B connects to Negative. Both of them will be connected into circuit as a switch signal.

#### What is the alarm picture push mechanism between the camera and the NVR?

Distinguish between different events:

- 1) Motion Detection: does not support pushing alarm pictures to NVR.
- 2) Face Detection: 1/2/3 series camera does not support push pictures, 4/5/6/7/8 series camera support push pictures.
- 3) VCA events are divided into deep learning intelligent events and ordinary events. Deep learning intelligent events(Intrusion/Line Crossing/Region Entering/Region Exiting with human and vehicle classification) supports push alarm pictures. Ordinary events (Intrusion/Line Crossing/Region Entering/Region Exiting without human and vehicle classification and Object removal, object leave) does not support push alarm pictures.
- 4) Face Capture: support push alarm pictures.

#### Does the license plate camera support HTTP and HTTPS listening alarm?

HTTP monitoring alarm only custom protocol alarm upload support; Neither HTTPS customization nor baselines are supported.