4 Megapixel

NETWORK CAMERA

User Manual

Please read this instruction carefully for correct use of the product and preserve it for reference purposes

- Please use the specified power supply to connect.
- Do not attempt to disassemble the camera; in order to prevent electric shock, do not remove screws or covers.
- There are no user-serviceable parts inside. Please contact the nearest service center as soon as possible if there is any failure.
- Avoid from incorrect operation, shock vibration, heavy pressing which can cause damage to product.
- Do not use corrosive detergent to clean main body of the camera. If necessary, please use soft dry cloth to wipe dirt; for hard contamination, use neutral detergent. Any cleanser for high grade furniture is applicable.
- Avoid aiming the camera directly towards extremely bright objects, such as, sun, as this may damage the image sensor.
- Please follow the instructions to install the camera. Do not reverse the camera, or the reversing image will be received.
- Do not operate it incase temperature, humidity and power supply are beyond the limited stipulations.
- Keep away from heat sources such as radiators, heat registers, stove, etc.
- Do not expose the product to the direct airflow from an air conditioner.
- This is product instructions not quality warranty. We may reserve the rights of amending the typographical errors, inconsistencies with the latest version, software upgrades and product improvements, interpretation and modification. These changes will be published in the latest version without special notification.
- When this product is in use, the relevant contents of Microsoft, Apple and Google will be involved in. The pictures and screenshots in this manual are only used to explain the usage of our product. The ownerships of trademarks, logos and other intellectual properties related to Microsoft, Apple and Google belong to the above-mentioned companies.
- This manual is suitable for IR water-proof network camera. All pictures and examples used in the manual are for reference only.

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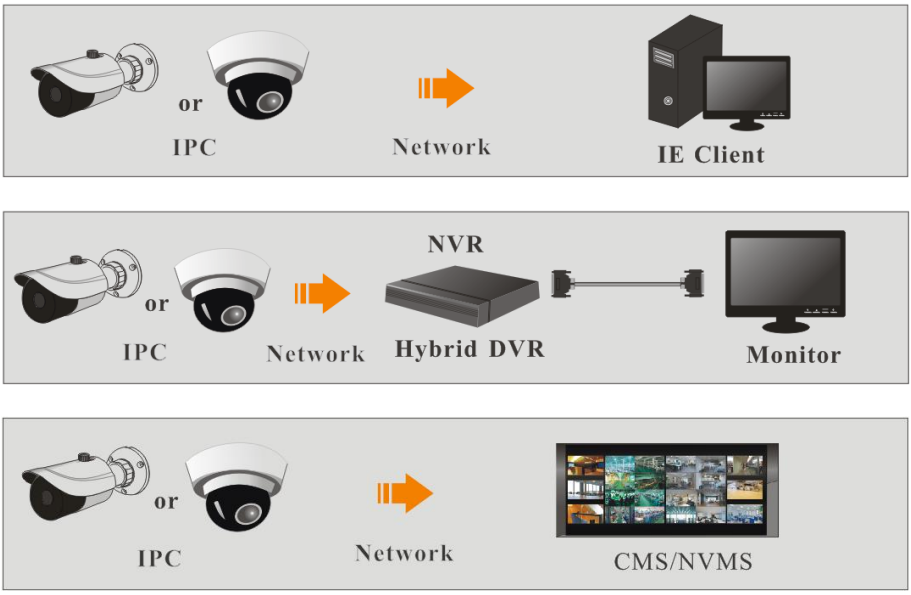
1 Introduction

This IP-CAMERA (short for IP-CAM) is designed for high performance CCTV solutions. It adopts state of the art video processing chips. It utilizes most advanced technologies, such as video encoding and decoding technology, complies with the TCP/IP protocol, SoC, etc to ensure this system more stable and reliable.
This product is widely used in banks, telecommunication systems, electricity power departments, law systems, factories, storehouses, uptowns, etc. In addition, it is also an ideal choice for surveillance sites with middle or high risks.

Main Features

- ICR auto switch, true day/night
- 3D DNR, digital WDR
- ROI coding
- Support BLC, Defog, Anti-flicker
- Support smart phone, iPad, remote monitoring

Surveillance Application



2 IE Remote Access

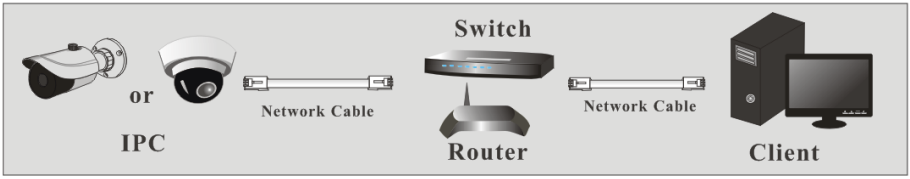
You may connect IP-Cam via LAN or WAN. Here only take IE browser (6.0) for example. The details are as follows:

2.1 LAN

In LAN, there are two ways to access IP-Cam: 1. access through IP-Tool; 2. directly access through IE browser.

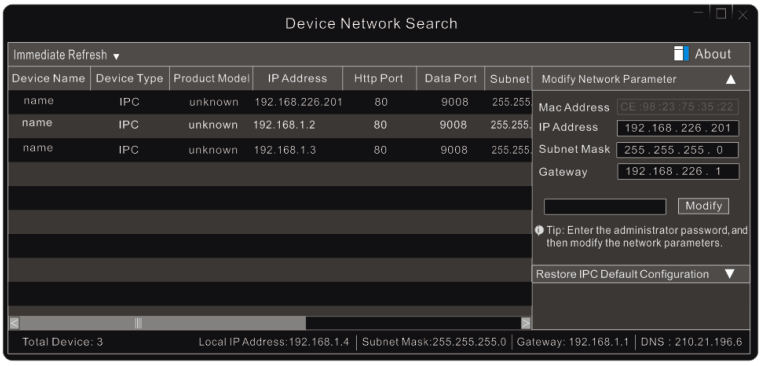
2.1.1 Access through IP-Tool

Network connection:

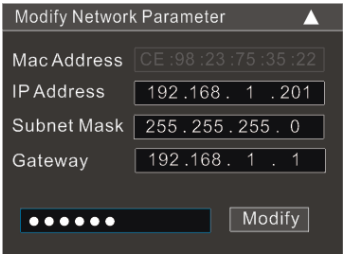


① Make sure the PC and IP-Cam are connected to the LAN and the IP-Tool is installed in the PC from the CD.

② Double click the IP-Tool icon on the desktop to run this software as shown below:



③ Modify the IP address. The default IP address of this camera is 192.168.226.201. Click the information of the camera listed in the above table to show the network information on the right hand. Modify the IP address and gateway of the camera and make sure its network address is in the same local network segment as that of the computer. Please modify the IP address of your device according to the practical situation.



For example, the IP address of your computer is 192.168.1.4. So the IP address of the camera shall be changed to 192.168.1.X. After modification, please input the password of the administrator and click "Modify" button to modify the setting.

☞ The default password of the administrator is "***123456***".

④ Double click the IP address and then the system will pop up the IE browser to connect IP-CAM. IE browser will auto download the Active X control. After downloading, a login window will pop up as shown below.

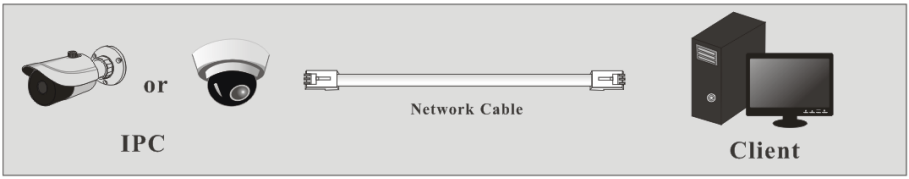
Input the username and password to log in.

☞ The default username is "***admin***"; the default password is "***123456***".

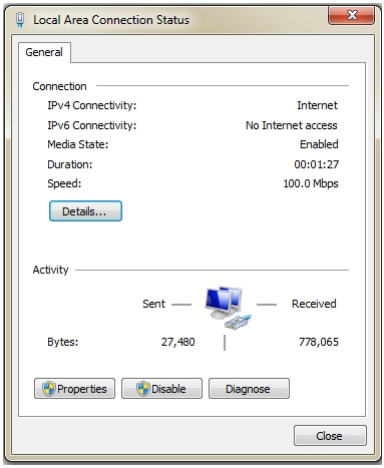
2.1.2 Directly Access through IE

The default network settings are as shown below:
IP address: **192.168.226.201**
Subnet Mask: **255.255.255.0**
Gateway: **192.168.226.1**
HTTP: **80**
Data port: **9008**

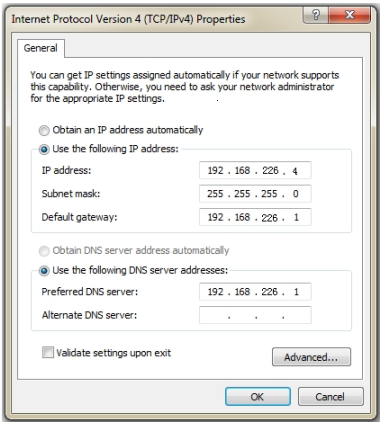
You may use the above default settings when you log in the camera for the first time. You may directly connect the camera to the computer through network cable.



① Manually set the IP address of the PC and the network segment should be as the same as the default settings of the IP camera. Open the network and share center. Click "Local Area Connection" to pop up the following window.



Select "Properties" and then select internet protocol according to the actual situation (for example: IPv4). Next, click "Properties" button to set the network of the PC.



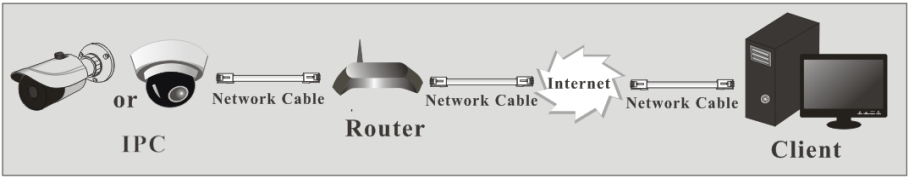
② Open the IE browser and input the default address of IP-CAM and confirm. The IE browser will download Active X control automatically.

③ After downloading Active X control, the login dialog box will pop up.

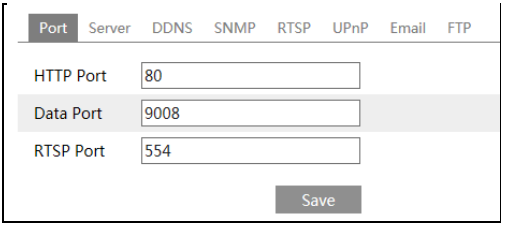
④ Input the default username and password and then enter to view.

2.2 WAN

➢ **Access through the router or virtual server**

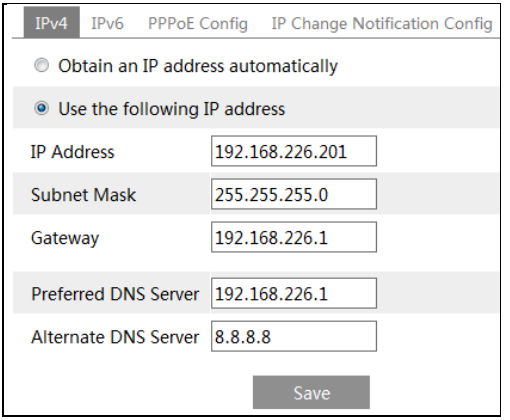


① Make sure the camera is well connected via LAN and then log in the camera via LAN and go to Config→Network→Port menu to set the port number.



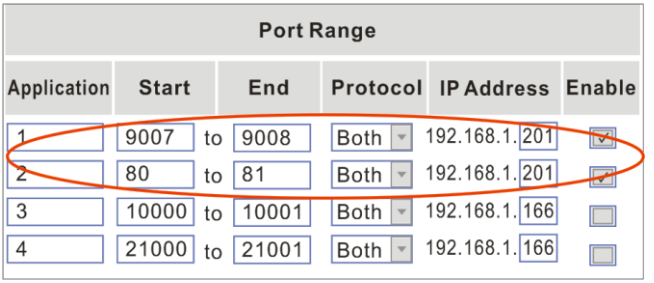
Port Setup

② Go to Config→Network→TCP/IP menu to modify the IP address.



IP Setup

③ Go to the router's management interface through IE browser to forward the IP address and port of the camera in the "Virtual Server".

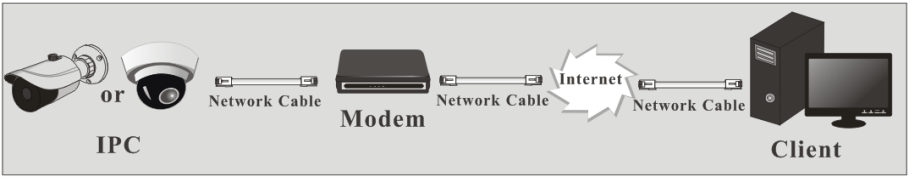


Router Setup

④ Open the IE browser and input its WAN IP and http port to access.

➢ **Access through PPPoE dial-up**

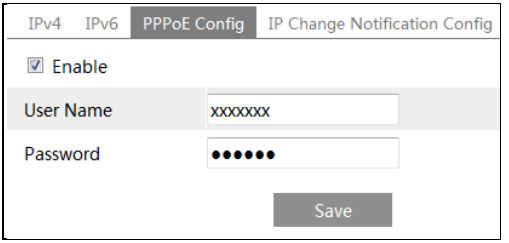
Network connection



You may access the camera through PPPoE auto dial-up. The setting steps are as follow:

① Go to Config→Network→Port menu to set the port number.

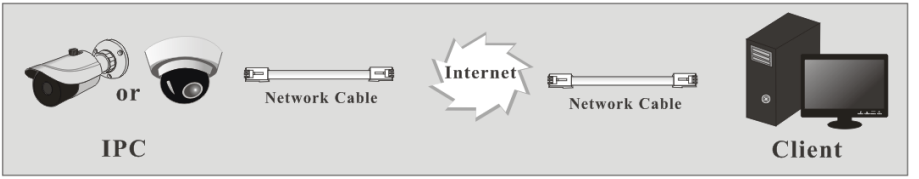
② Go to Config→Network→TCP/IP→ PPPoE Config menu. Enable PPPoE and then input the user name and password which you can get from your internet service provider.



③ Go to Config→Network→DDNS menu. Before you configure the DDNS, please apply for a domain name first. Please refer to DDNS configuration for detail information.
④ Open the IE browser and input the domain name and http port to access.

➢ **Access through static IP**

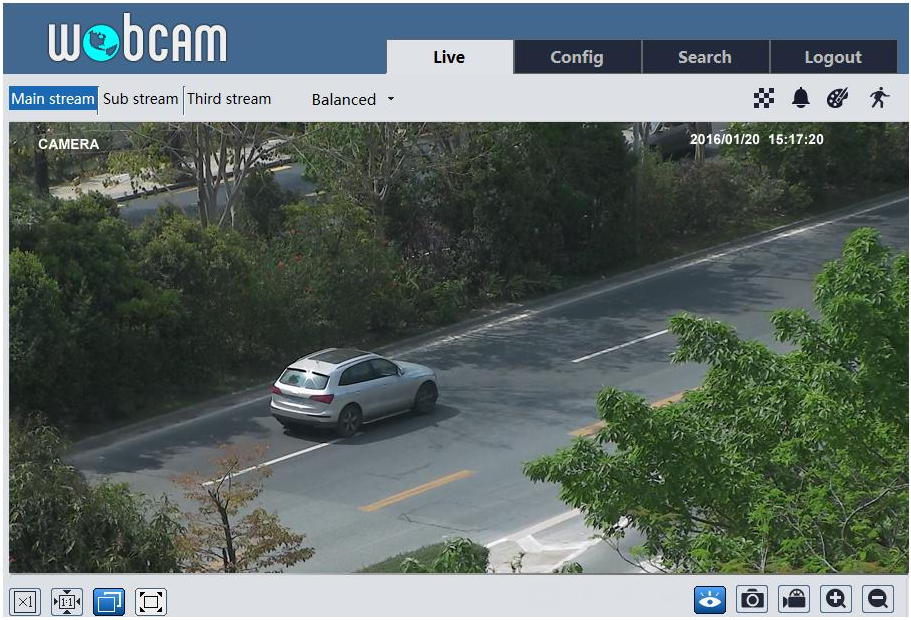
Network connection



The setting steps are as follow:
① Go to Config→Network→Port menu to set the port number.
② Go to Config→Network→TCP/IP menu to set the IP address. Check "Use the following IP address" and then input the static IP address and other parameters.
③Open the IE browser and input its WAN IP and http port to access.

3 Remote Preview

After you log in, you will see the following window.



The following table is the instructions of the icons on the remote preview interface.

Icon	Description	Icon	Description
	Original size		Scene change indicator icon
	Appropriate size		Abnormal clarity indicator icon
	Auto		Color abnormal indicator icon
	Full screen		Motion alarm indicator icon
	Start/stop live view		Zoom in
	Snap		Zoom out
	Start/stop recording		

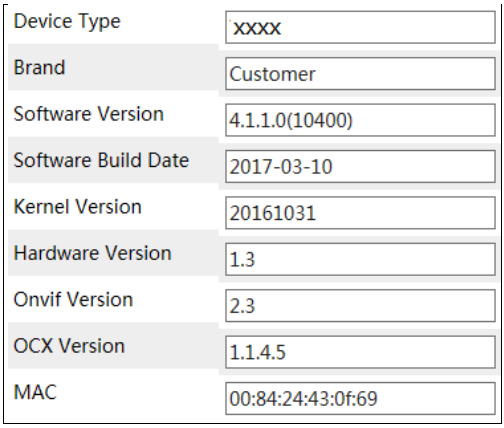
- When motion detection alarm is triggered, the people icon will turn red.
- In full screen mode, double click to exit.

4.1 System Configuration

The “System” configuration includes three submenus: Basic Information, Date and Time and Local Config.

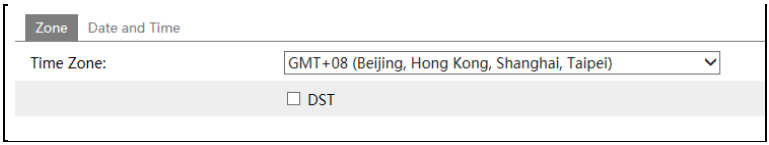
4.1.1 Basic Information

In the “Basic Information” interface, you can check the relative information of the device.

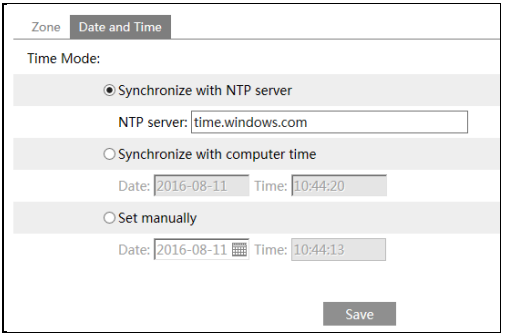


4.1.2 Date and Time

Go to Config→System→Date and Time. Please refer to the following interface.



You can select the time zone and DST as required.
Click “Date and Time” tab to set the time mode.



4.1.3 Local Config

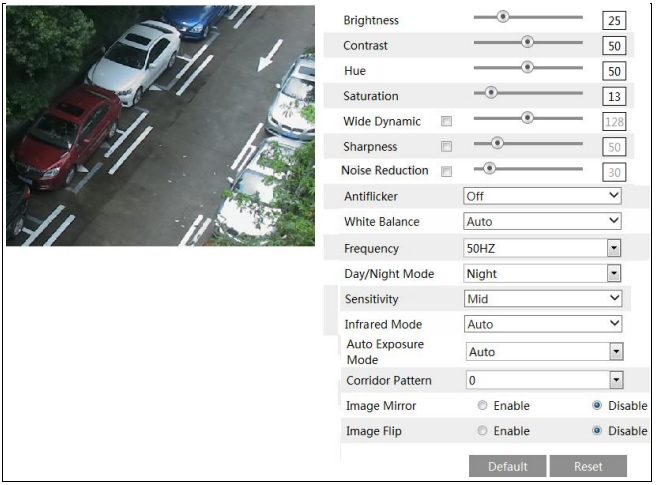
Go to Config→System→Local Config. You can set the storage path of the captured pictures and video records. You can also enable or disable the video audio.

4.2 Image Configuration

Image Configuration includes Display, Video/Audio, OSD, Video Mask, ROI Config and Lens Control.

4.2.1 Display Configuration

Go to Image→Display interface as shown below. You may set and adjust the picture's brightness, contrast, hue and saturation, etc.



Brightness: Set the brightness level of the camera's image.
Contrast: Set the color difference between the brightest and darkest parts.
Hue: Set the total color degree of the image.
Saturation: Set the degree of color purity. The purer the color is, the brighter the image is.
Sharpness: Set the resolution level of the image plane and the sharpness level of the image edge.
Noise Reduction: Decrease the noise and make the image more thorough. Increasing the value will make the noise reduction effect better but it will reduce the image resolution.
WDR

◆ As to the WDR scene, WDR will help the camera provide clear images when there are both very bright and very dark areas simultaneously in the field of the view by lowering the brightness of the highlight area and increasing the brightness of the lowlight area. High, middle and low can be selected.

◆ There will be some record lost in a few seconds during mode changing from non-WDR to WDR mode.

Antiflicker:

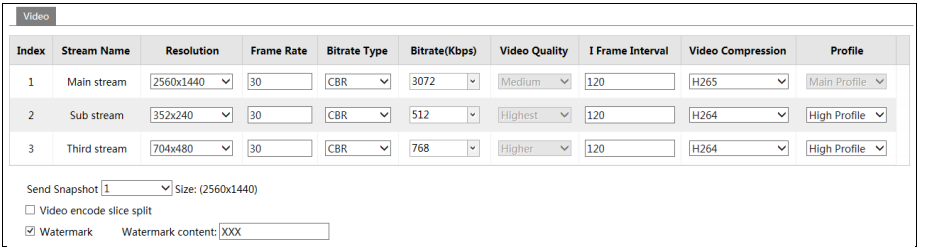
- Off: Close the anti-flicker function.
- 50Hz: Make sure the horizontal stripes will not appear in the image while the device is adjusting the exposure automatically according to the brightness of the scene when the electric supply is 50Hz.
- 60Hz: Make sure the horizontal stripes will not appear in the image while the device is adjusting the exposure automatically according to the brightness of the scene when the electric supply is 60Hz.

White Balance: Adjust the color temperature according to the environment automatically.
Frequency: 50Hz and 60Hz can be optional.
Day/night Mode: Please choose the mode as needed.
Sensitivity: High, middle and low can be selected.
Infrared Mode: You may choose "ON", "OFF" and "Auto" as required.

Exposure Mode: You may choose "Auto" or "Manual" as required.
Corridor Pattern: You can change the direction of the video image by using this function. 0, 90, 180 and 270 are available. The default value is 0. The video resolution should be 1080P or under 1080P if you use this function.
Image Mirror: Reverse the current video image right and left.
Image Flip: Turn the current video image upside down.

4.2.2 Video Configuration

Go to Image→Video interface as shown below. In this interface, you can set the resolution, frame rate, bitrate type, video quality and so on subject to the actual network condition.



Three video streams can be adjustable.
Resolution: The higher the resolution is, the clearer the image is.
Frame rate: The higher the frame rate is, the more fluency the video is. However, more storage room will be taken up.
Bitrate type: Including CBR and VBR. CBR means that no matter how changeable the video resources are, the compression bitrate keeps constant. This will not only facilitate the image quality better in a constant bitrate but also help to calculate the capacity of the recording. VBR means that the compression bitrate can be adjustable according to the change of the video resources. This will help to optimize the network bandwidth.
Bitrate: Please choose it according to the actual network situation.
Video Quality: When VBR is selected, you need to choose image quality. The higher the image quality you choose, the more bitrate will be required.
I Frame interval: It is recommended to use the default value. If the value is over high, the read speed of the group of pictures will be slow resulting in the quality loss of the video.
Video Compression: H264 and H265 are optional. Higher quality of image can be transferred under limited network bandwidth by using H265 video encoding, however, higher quality of the hardware is required.
Profile: Baseline, main/high profiles are optional. Baseline profile is mainly used in interactive application with low complexity and delay. Main/high profile is mainly used for higher coding requirement.
Send Snapshot: Please select it according to the actual situation.
Video encode slice split: If enabled, you may get more fluency image even though using the low-performance PC.
Watermark: If enabled, input the watermark content. You may check the watermark when

playing back the local record in the search interface, lest the record files is tampered.

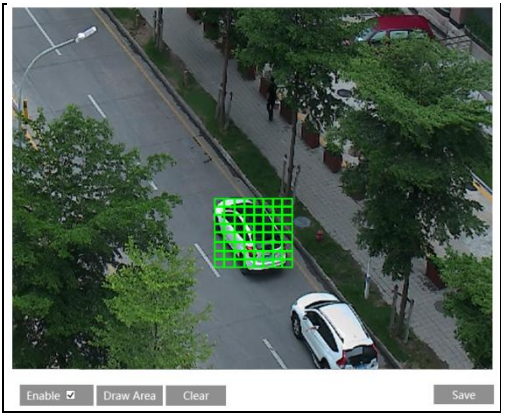
4.2.3 OSD Configuration

Go to Image→OSD interface as shown below.

You may set time stamp, device name and OSD content here. After enabling the corresponding display and entering the content, drag them to change their position. Then click "Save" button to save the settings.

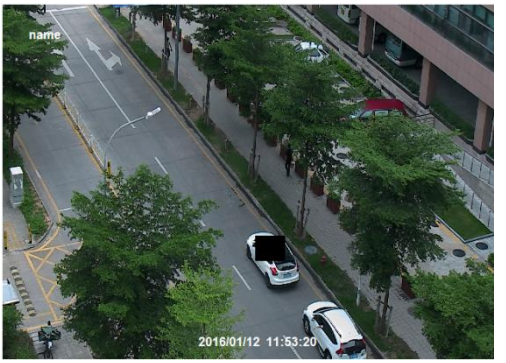
4.2.4 Video Mask

Go to Image→Video Mask interface as shown below. You can set 4 mask areas at most.



To set up video mask:

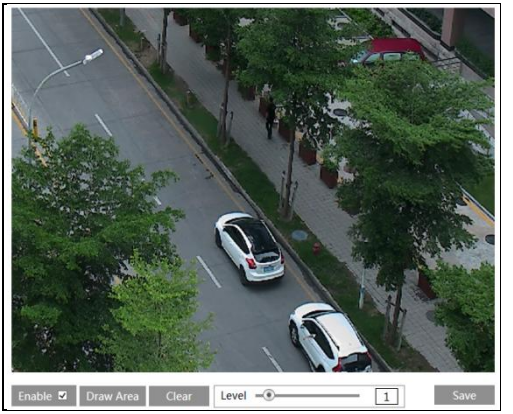
1. Enable video mask.
2. Click "Draw Area" button and then drag the mouse to draw the video mask area.
3. Click "Save" button to save the settings.
4. Return to the live to see the following picture.



Clear the video mask:
Go to video mask interface and then click “Clear” button to delete the current video mask area.

4.2.5 ROI Configuration

Go to Image→ROI Config interface as shown below.

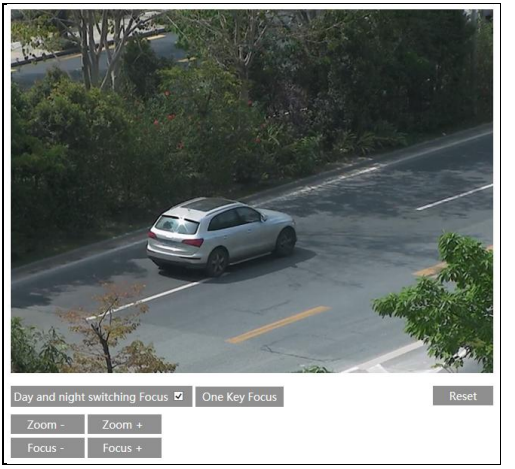


1. Check “Enable” and then click “Draw Area” button.
2. Drag the mouse to set the ROI area.
3. Set the level.
4. Click “Save” button to save the settings.

Now, you will see the selected ROI area is clearer than other areas especially in low bitrate condition.

4.2.6 Lens Control

This function is only available for the model with auto varifocal lens. You may adjust zoom and focus manually and choose the focus mode or one key focus.

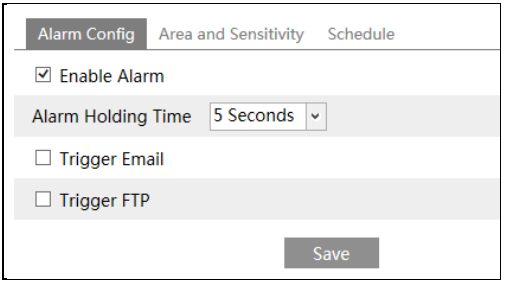


4.3 Alarm Configuration

Alarm configuration includes two submenus: Motion Detection and Alarm Server.

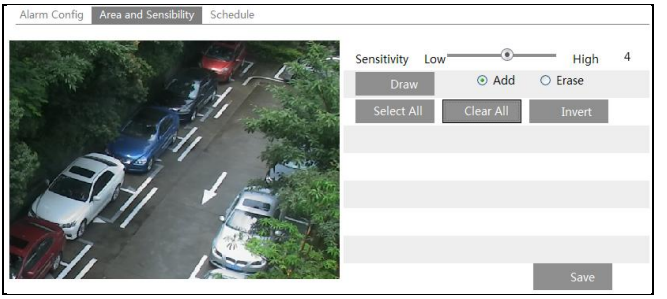
4.3.1 Motion Detection

Go to Alarm→Motion Detection to set motion detection alarm.



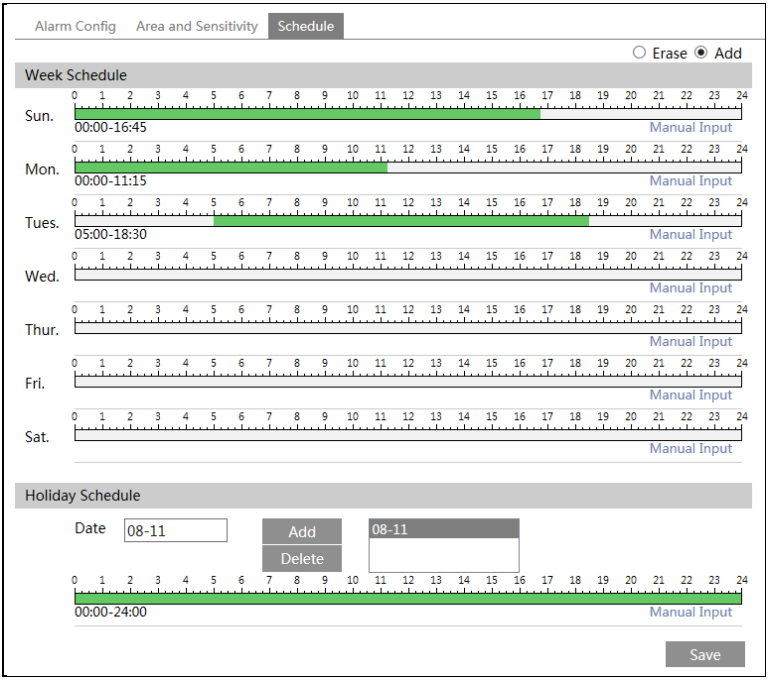
1. Check “Enable Alarm” check box to activate motion based alarm, choose alarm holding time and set alarm trigger options.
Trigger Email: If “Trigger Email” and “Attach Picture” checkbox is checked (email address shall be set first in the Email configuration interface), the captured pictures and triggered event will be sent into those addresses.
Trigger FTP: If “Trigger FTP” and “Attach Picture” checkbox is checked, the captured pictures will be sent into FTP server address. Please refer to FTP configuration chapter for more details.

2. Set motion detection area and sensitivity. Click “Area and Sensitivity” tab to go to the interface as shown below.



Move the “Sensitivity” scroll bar to set the sensitivity.
Select “Add” and click “Draw” button and drag mouse to select the motion detection area;
Select “Erase” and drag the mouse to clear motion detection area.
After that, click “Save” to save the settings.

3. Set the schedule of the motion detection. Click “Schedule” tab to go to the interface as shown below.



Week schedule

Set the alarm time from Monday to Sunday for alarm everyday in one week. The lengthwise means one day of a week; the rank means 24 hours of a day. Green means selected area. Blank means unselected area.

"Add": Add the schedule for a special day.

"Erase": Delete holiday schedule.

Day schedule

Set alarm time for alarm in some time of a special day, such as holiday.

Set a date at the "Date" box, click "Add" button to add that date to the list box on the right side and then drag the scroll bar to set the schedule of that day.

Select a date in the list box on the right side, and click "Delete" to remove the schedule on that day.

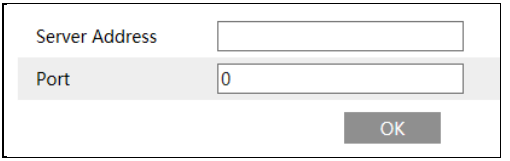
Click "Save" button to save the settings.

Note: Holiday schedule is prior to Week schedule.

4.3.2 Alarm Server

Go to Alarm→Alarm Server interface as shown below.

You may input the alarm server address and port. When the alarm happens, the camera will automatically transfer the alarm event to the alarm server. If the alarm server is not used, there is no need for you to configure here.

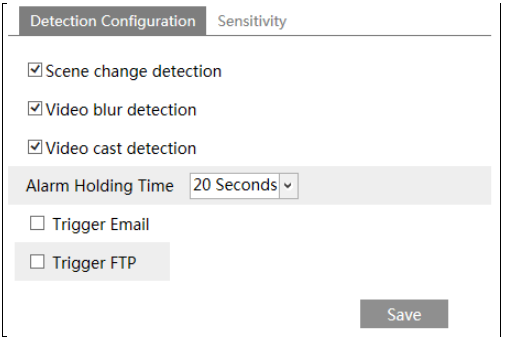


4.4 Event Configuration

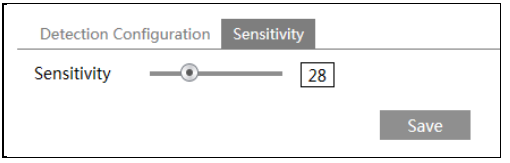
Event configuration includes three submenus: Exception, Line Crossing and Intrusion.

4.4.1 Exception

To set exception detection:
Go to Config→Event→Exception interface as shown below.



1. Enable the relevant detection as required.
Scene Change Detection: The relevant alarms will be triggered if the scene of the monitor video has changed.
Video Blur Detection: The relevant alarms will be triggered if the monitor video is blurry.
Video Cast Detection: The relevant alarms will be triggered if color cast happens to the monitor video.
2. Set the alarm holding time and alarm trigger options. The setting steps are the same with that of motion detection. Please refer to motion detection chapter for details.
3. Click "Save" button to save the settings.
4. Set the sensitivity of the exception detection. Click "Sensitivity" tab to go to the interface as shown below.



Drag the slider to set the sensitivity value or directly input the sensitivity value in the textbox.

Click “Save” button to save the settings.

The sensitivity value of Scene Change Detection: The higher the value is, the more sensitive the system responds to the amplitude of the scene change.

The sensitivity value of Video Blur Detection: The higher the value is, the more sensitive the system responds to the defocus of the device image. You should just the value according to the real situation.

The sensitivity value of Video Cast Detection: The higher the value is, the more sensitive the system responds to the color cast of the device image. You should also consider other factors.

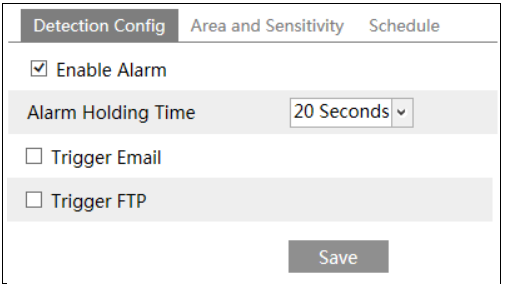
※ Application Scenario Illustration

1. Auto-focusing function should not been enabled for exception detection.
2. Try not to enable object removal detection when light changes greatly in the scene.
3. Please contact us for more detailed application scenarios.

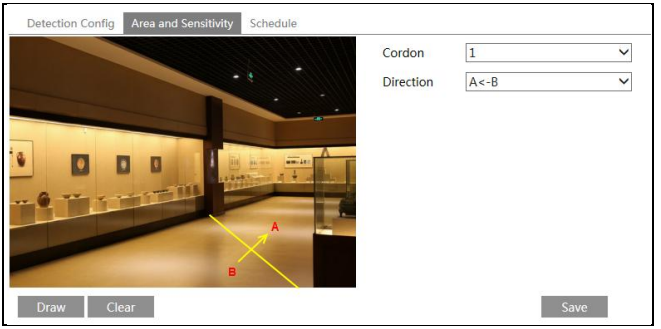
4.4.2 Line Crossing

Line Crossing: The relevant alarms will be triggered if someone or something crosses the pre-defined alarm lines.

Go to Config→Event→Line Crossing interface as shown below.



1. Enable line crossing alarm and set the alarm holding time.
2. Set alarm trigger options. The setting steps are the same with that of motion detection. Please refer to motion detection chapter for details.
3. Click “Save” button to save the settings.
4. Set area and sensitivity of the line crossing alarm. Click “Area and Sensitivity” tab to go to the interface as shown below.



Set the cordon number and direction. You can add 4 cordons at most.

Direction： A<->B, A->B and A<-B optional. It is the crossing direction of the intruder who crosses over the alarm line.

A<->B: The alarm will be triggered when the intruder crosses over the alarm line from B to A or from A to B.

A->B: The alarm will be triggered when the intruder crosses over the alarm line from A to B.

A<-B: The alarm will be triggered when the intruder crosses over the alarm line from B to A.

Click “Draw” button and then drag the mouse to draw a cordon in the image on the left side. Click “Stop” button to stop drawing. Click “Clear” button to delete the cordons. Click “Save” button to save the settings.

5. Set the schedule of the line crossing alarm. The setting steps of the schedule are the same with that of motion detection. Please refer to motion detection chapter for details.

※ Application Scenario Illustration

1. Auto-focusing function should not been enabled for line crossing detection. If enabled, the video image will change so greatly that the algorithm will stop working temporarily.
2. Try not to enable line crossing detection when light changes greatly in the scene.
3. Try to install the camera at a certain angle of depression.
4. Adequate light and clear scenery are very important to line crossing detection.
5. Adjust the camera to make the detection area in the center of the video image. Make sure no obstructions are in the main crossing area. It is strongly recommended to make the obstructions (like trees, bushes, flags, etc.) outside the detection area.
6. Please contact us for more detailed application scenarios.

Here we take some improper application scenarios for instance.

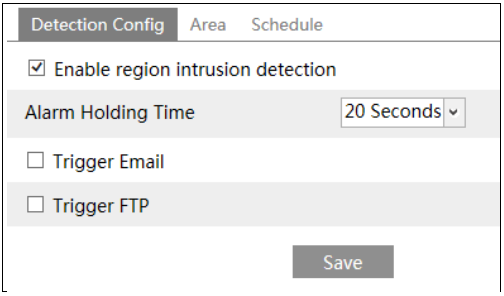
There are so many trees near the road and cars running on the road, which make the scene too complex to detect the crossing objects.

The ground is covered with vegetation; at the right of the fence is a gym where people pass by frequently. The above mentioned environment is too complex to detect the crossing objects.

4.4.3 Intrusion

Intrusion: The relevant alarms will be triggered if someone or something intrudes into the alarm areas or moves in the pre-defined alarm areas.

Go to Config→Event→Intrusion interface as shown below.



1. Enable region intrusion detection alarm and set the alarm holding time.
2. Set alarm trigger options. The setting steps are the same with that of motion detection. Please refer to motion detection chapter for details.

3. Click “Save” button to save the settings.
4. Set the alarm area of the intrusion detection. Click “Area” tab to go to the interface as shown below.

Set the alarm area number on the right side. You can add 4 alarm areas at most.
Click “Draw Area” button and then click around the area where you want to set as the alarm area in the image on the left side (the alarm area should be a closed area). Click “Stop Draw” button to stop drawing. Click “Clear” button to delete the alarm area. Click “Save” button to save the settings.
5. Set the schedule of the intrusion detection. The setting steps of the schedule are the same with that of motion detection. Please refer to motion detection chapter for details.

※ Application Scenario Illustration

1. Auto-focusing function should not been enabled for intrusion detection. If enabled, the video image will change so greatly that the algorithm will stop working temporarily.
2. Try not to enable intrusion detection when light changes greatly in the scene.
3. Try to install the camera at a certain angle of depression.
4. Adequate light and clear scenery are very important to intrusion detection.
5. Adjust the camera to make the detection area in the center of the video image. The detected object should be in the detection area for about two seconds at least. Make sure no obstructions are in the main crossing area. It is strongly recommended to make the obstructions (like trees, bushes, flags, etc.) outside the detection area.
6. Please contact us for more detailed application scenarios.

Here we take some improper application scenarios for instance.

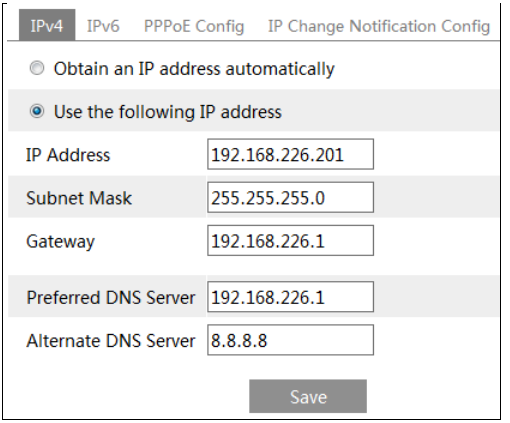
The camera's angle of depression is not wide enough; there are so many trees in the scene. The above mentioned environment is too complex to detect the intrusion.

The camera's angle of depression is not wide enough; the street lamps at night lead to light interference; the swaying trees in a windy day lead to random interference. All the above mentioned factors make the scene improper for intrusion detection.

4.5 Network Configuration

4.5.1 TCP/IP

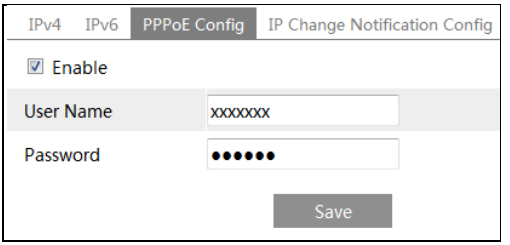
Go to Config→Network→TCP/IP interface as shown below. There are two ways for network connection.



Use IP address (take IPv4 for example)-There are two options for IP setup: obtain an IP address automatically by DHCP protocol and use the following IP address. Please choose one

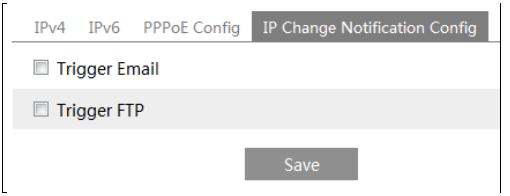
of the options for your requirements.

Use PPPoE-Click "PPPoE Config" tab to go to the interface as shown below. Enable PPPoE and then enter the user name and password from your ISP.



You can choose either way of the network connection. If you use PPPoE to connect internet, you will get a dynamic WAN IP address. This IP address will change frequently. You may use the function of IP change notification.

Click "IP Change Notification Config" to go to the interface as shown below.

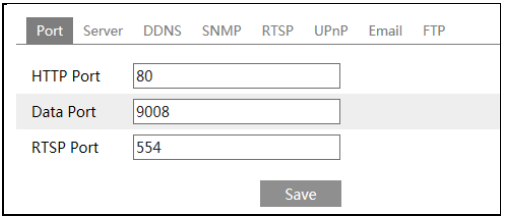


Trigger Email: when the IP address of the device is changed, a new IP address will be sent to the appointed mailbox automatically

Trigger FTP: when the IP address of the device is changed, a new IP address will be sent to FTP server.

4.5.2 Port

Go to Config→Network→Port interface as shown below. HTTP port, Data port and RTSP port can be set.

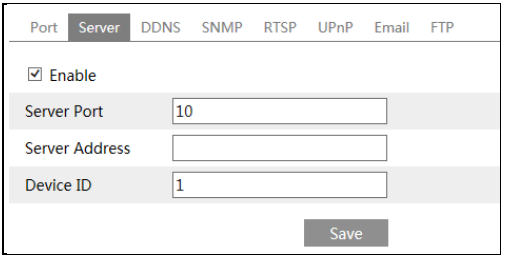


HTTP Port: The default HTTP port is 80. It can be changed to any port which is not occupied.

Data Port: The default data port is 9008. Please change it as required.
RTSP Port: The default port is 554. Please change it as required.

4.5.3 Server Configuration

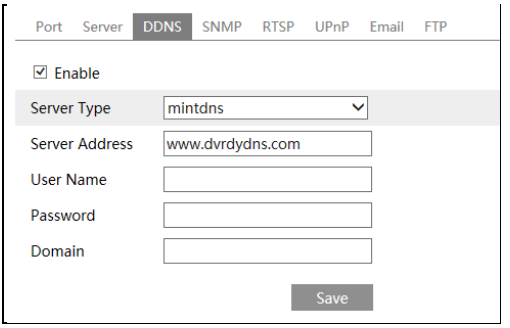
This function is mainly used for connecting network video management system.



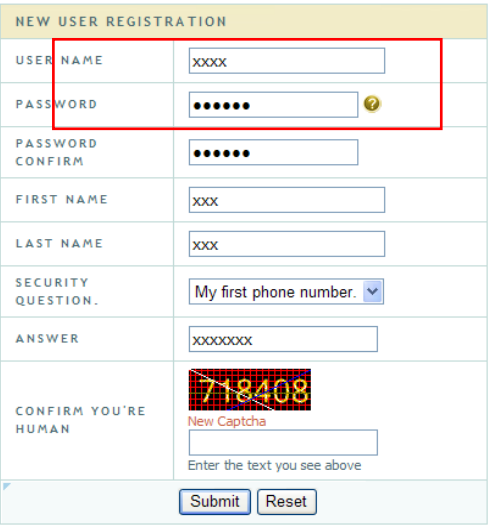
1. Check “Enable”.
2. Check the IP address and port of the transfer media server in the ECMS/NVMS. Then enable the auto report in the ECMS/NVMS when adding a new device. Next, input the remaining information of the device in the ECMS/NVMS. After that, the system will auto allot a device ID. Please check it in the ECMS/NVMS.
3. Input the above-mentioned server address, server port and device ID in the responding boxes. Click “Save” button to save the settings.

4.5.4 DDNS

If your camera is set to use PPPoE as its default network connection, DDNS should be set for network access. Before you set the DDNS, please make sure you have registered a domain name on the DDNS server.
1. Go to Config→Network→ DDNS.

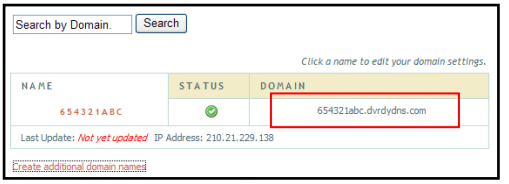


2. Apply for a domain name. Take www.dvrdyndns.com for example.
Input www.dvrdydns.com in the IE address bar to visit its website. Then click “Registration” button.



Create domain name.

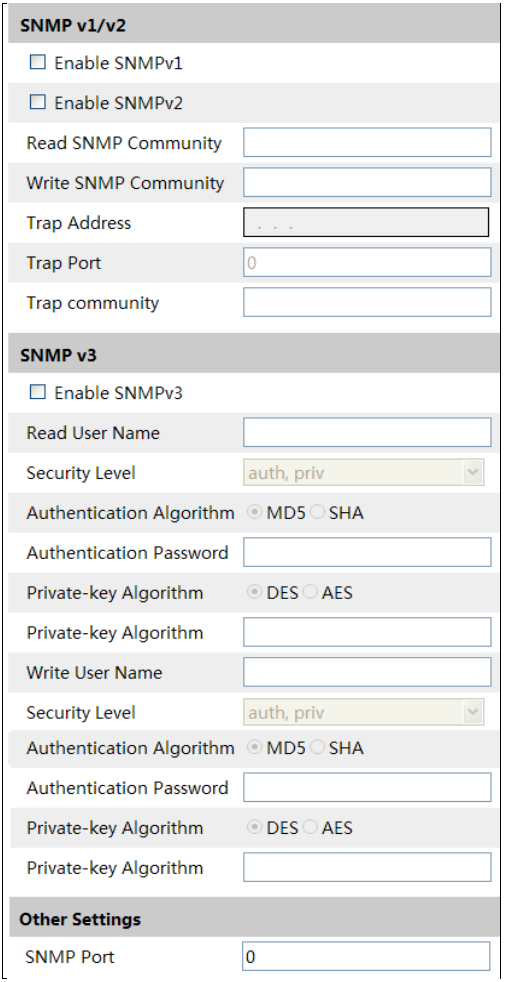
After you successfully request your domain name, you will see your domain in the list.



3. Input the username, password, domain you apply for in the DDNS configuration interface.
4. Click “Save” button to save the settings.

4.5.5 SNMP

To get camera status, parameters and alarm information and remotely manage the camera, you can set the SNMP function. Before using the SNMP, please download the SNMP software and set the parameters of the SNMP, such as SNMP port, trap address.
1. Go to Config→Network→SNMP.

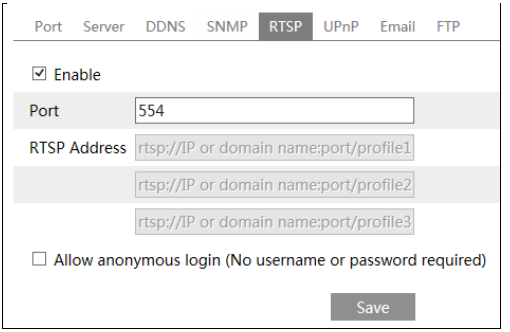


2. Check the corresponding version checkbox (Enable SNMPv1, Enable SNMPv2, Enable SNMPv3) according to the version of the SNMP software you download.
3. Set the "Read SNMP Community", "Write SNMP Community", "Trap Address", "Trap Port" and so on. Please make sure the settings are the same as that of your SNMP software.

Note: Please use the different version in accordance with the security level you required. The higher the version is, the higher the level of the security is.

4.5.6 RTSP

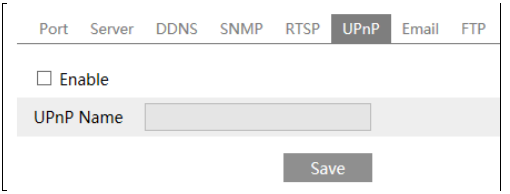
Go to Config→Network→RTSP.



1. Select “Enable”.
2. **RTSP Port**: Access port of the streaming media. The default number is 554.
3. **RTSP Address**: The RTSP address you need to input in the media player.
4. Check “Allow anonymous login…”.

4.5.7 UPNP

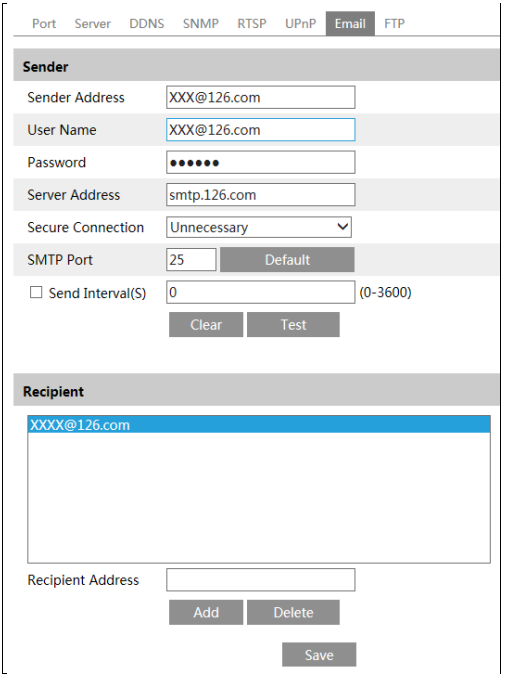
If you enable this function, you can quickly access the camera via LAN and you don’t need to configure the port mapping when the camera is connected to the WAN via the router.
Go to Config→Network→UPnP. Enable UPNP and then input UPnP name.



After you enable it and set the UPnP name, you will see the UPnP name by clicking “Network” on the desktop of your computer which is in the same local area network. Then double click this name to access the camera quickly.

4.5.8 Email

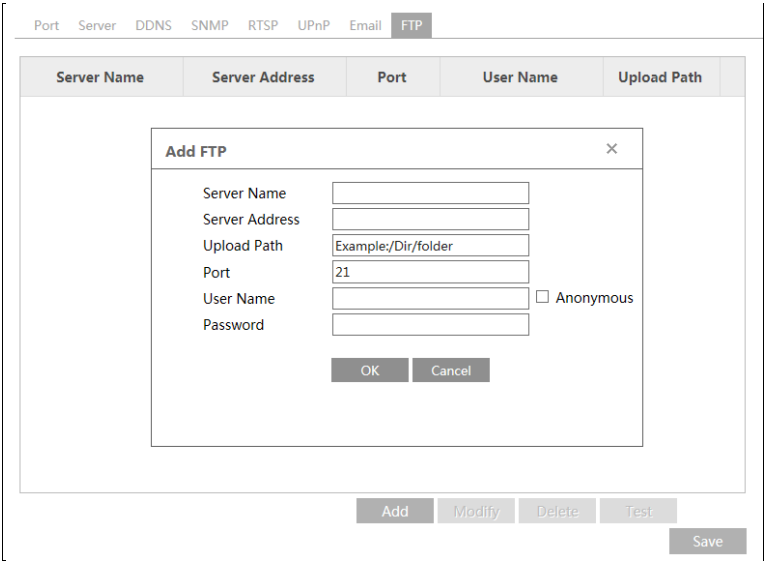
If you need to trigger Email when an alarm happens or IP address is changed, please set the Email here first.
Go to Config→Network →Email.



Sender Address: Sender's e-mail address.
User name and password: Sender's user name and password.
Server Address: The SMTP IP address or host name.
Select the secure connection type at the "Secure Connection" pull-down list according to actual needs.
SMTP Port: The SMTP port.
Send Interval(S): Set it as needed.
Click "Test" button to test the effectiveness of the account.
Recipient Address: Receiver's e-mail address.

4.5.9 FTP

After you set the FTP server, the captured pictures on an alarm will be uploaded to the FTP server.
Go to Config→Network →FTP.

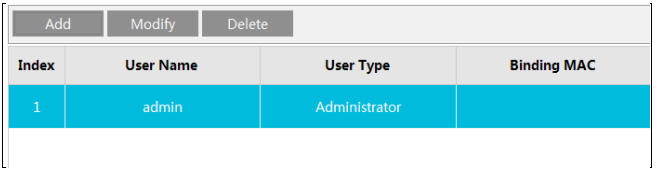


To Add FTP:
Server Name: The name of the FTP.
Server Address: The IP address or domain name of the FTP.
Upload Path: The path of uploading the files.
Port: The port of the FTP.
Use Name and Password: The username and password are used to login the FTP.

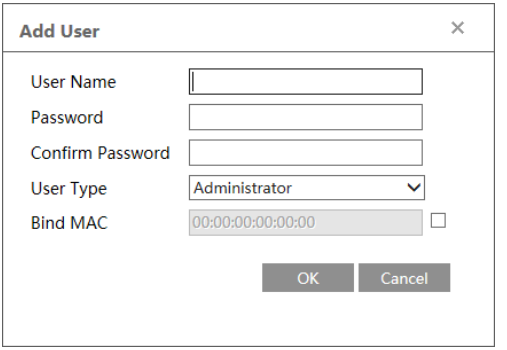
4.6 Security Configuration

4.6.1 User Configuration

Go to Config→Security→User interface as shown below.

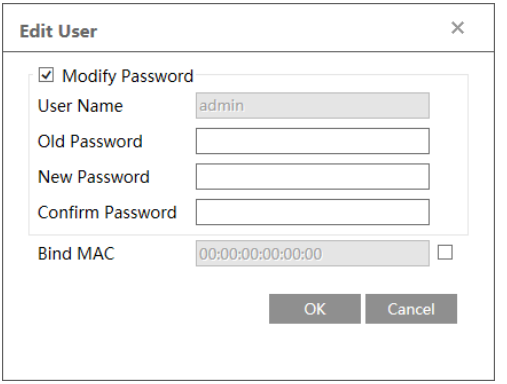


Add user:
1. Click “Add” button to pop up the following textbox.



2. Input user name in “User Name” textbox.
3. Input letters or numbers in “Password” and “Confirm Password” textbox.
4. Choose the use type.
5. Input the MAC address of the PC in “Bind MAC” textbox.
After binding physical address to the IP-CAM, you can access the device on this PC only. If the MAC address was “00:00:00:00:00:00” which means it can be connected to any computers.
6. Click “OK” button and then the new added user will display in the user list.

Modify user:
1. Select the user you need to modify password and physical address in the user configuration list box.
2. The “Edit user” dialog box pops up by clicking “Modify” button.



3. Input old password of this user in the “Old Password” text box.
4. Input new password in the “New password” and “Confirm Password” text box.
5. Input computer’s MAC address as required.
6. Click “OK” button to save the settings.

Delete user:

1. Select the user you want to delete in the user configuration list box.
2. Click “Delete” button to delete the user.

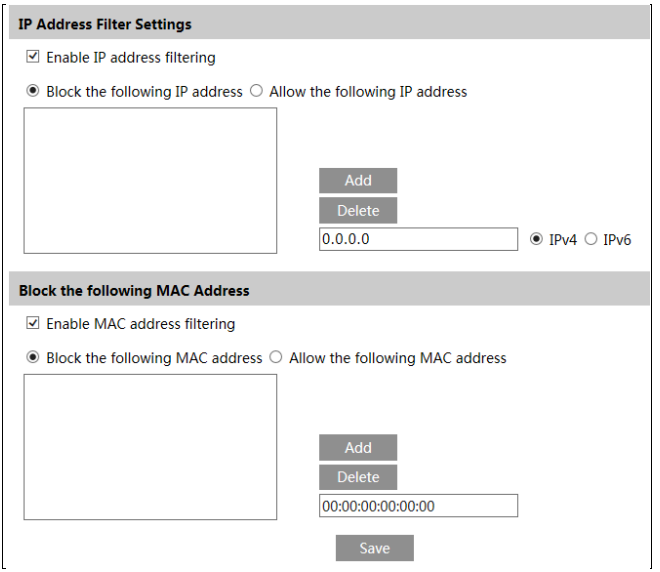
Note: The default super administrator cannot be deleted.

4.6.2 Online User

Go to Config→Security→Online User. You can view the user who is viewing the live video.

4.6.3 Block and Allow Lists

Go to Config→Security→Block and Allow Lists interface as shown below.



Setting steps are as follows:

Check “Enable IP address filtering” check box.

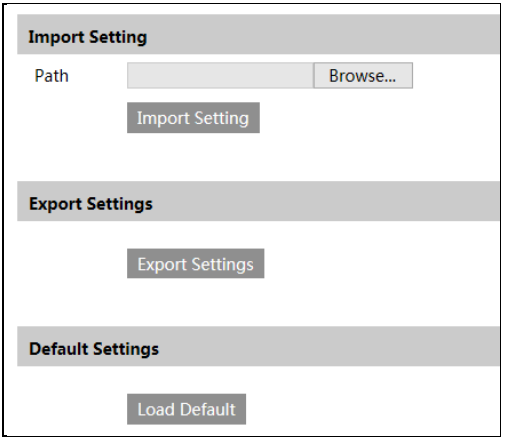
Select “Block the following IP address”, input IP address in the IP address list box and click “Add” button. The operation step of “Allow the following IP address” and MAC address filter settings are the same with “Block the following IP address”.

After you set the IP address or MAC address, the system will block or allow the user using the added IP address or MAC address to access the camera.

4.7 Maintenance Configuration

4.7.1 Backup and Restore

Go to Config→Maintenance→Backup & Restore.



- **Import & Export Settings**

You can import or export the setting information from PC or to device.
1. Click “Browse” to select save path for import or export information on PC.
2. Click “Import Setting” or “Export Setting” button.

- **Default Settings**

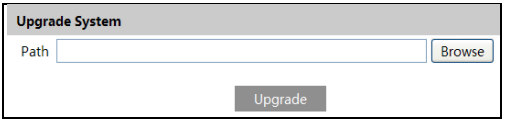
Click “Load Default” button to restore all system settings to default status.

4.7.2 Reboot

Go to Config→Maintenance→Reboot.
Click “Reboot” button to reboot the device.
Timed Reboot Setting:
Enable “Time Settings”, set the date and time and then click “Save” button to save the settings.

4.7.3 Upgrade

Go to Config→Maintenance→Upgrade. In this interface, you can upgrade the system.



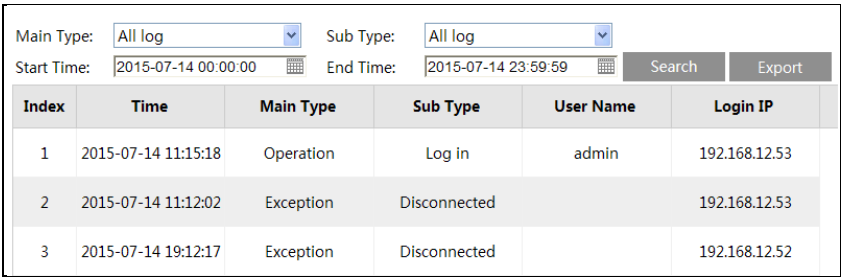
1. Click “Browse” button to select the save path of the upgrade file
2. Click “Upgrade” button to start upgrading the application program.
3. The device will restart automatically
4. After you successfully update the software, click “OK” button to close IE and then re-open IE to connect IP-Cam.

Caution! You can’t disconnect to PC or close the IP-CAM during upgrade.

4.7.4 Operation Log

To query and export log:

1. Go to Config→Maintenance→Operation Log.

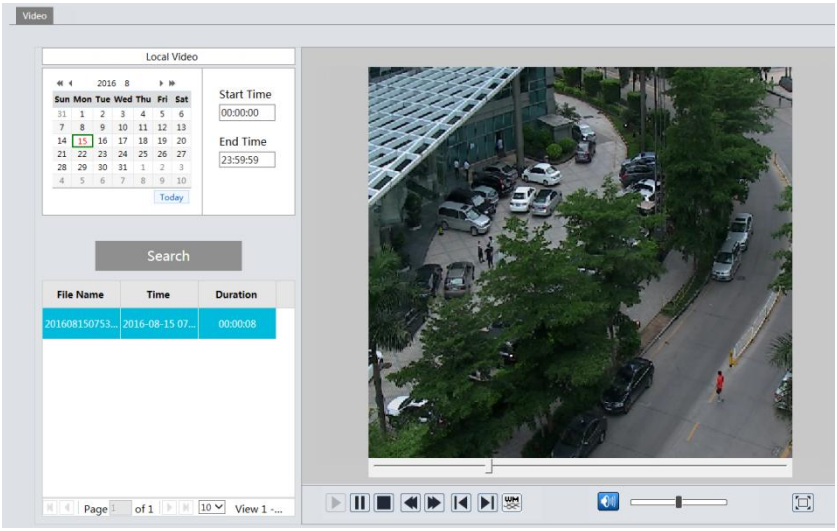


Index	Time	Main Type	Sub Type	User Name	Login IP
1	2015-07-14 11:15:18	Operation	Log in	admin	192.168.12.53
2	2015-07-14 11:12:02	Exception	Disconnected		192.168.12.53
3	2015-07-14 19:12:17	Exception	Disconnected		192.168.12.52

2. Select the main type, sub type, start and end time.
3. Click “Search” to view the operation log.
4. Click “Export” to export the operation log.

5 Record Search

Click Search to go to the interface as shown below. You can play the local video record. Before playing, please set the storage path of the video record in the local configuration interface and make sure there are record files.



Choose the date and the start time and end time and then click “Search” button to search the record files. Double click the record file to play the record. The descriptions of the buttons on the playback interface are as follows.

Icon	Description	Icon	Description
	Play button. After pausing the video, click this button to continue playing.		Pause button.
	Stop button.		Speed down.
	Speed up.		Click it to play the previous record.
	Click it to play the next record.		Open/close watermark.
	Click it to enable / disable audio; drag the slider to adjust the volume after enabling audio.		Full screen. Click it to display full screen. Double click to exit full screen.

Appendix 1 Q& A

Q: How to find my password if I forget it?

A：Reset the device to the default factory settings.

Default IP: 192.168.226.201; User name: admin; Password: 123456

Q：Fail to connect devices through IE browser, why?

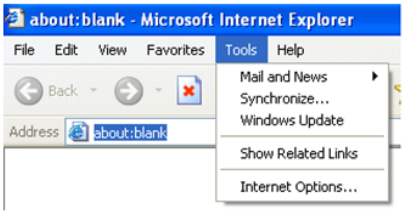
A: Network is not well connected. Check the connection and make sure it is connected well.
B: IP is not available. Reset the valid IP.
C: Web port number has been revised: contact administrator to get the correct port number.
D: Exclude the above reasons. Recover default setting by IP-Tool.

Q：IP tool cannot search devices, why?

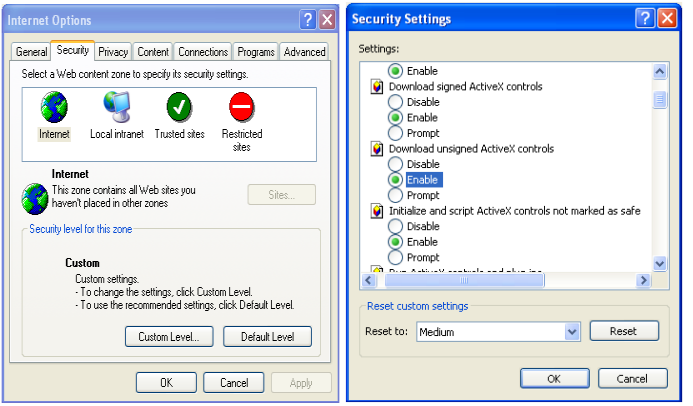
A：It may be caused by the anti-virus software in your computer. Please exit it and try to search device again.

Q：IE cannot download ActiveX control. How can I do?

a. IE browser blocks ActiveX. Please do setup as below.
① Open IE browser. Click Tools-----Internet Options….



② Select Security------Custom Level….
③ Enable all the sub options under “ActiveX controls and plug-ins”.
④ Then click OK to finish setup.
b. Other plug-ins or anti-virus blocks ActiveX. Please uninstall or close them.


Internet Options
General
Security
Privacy
Content
Connections
Programs
Advanced
Select a Web content zone to specify its security settings.
Internet
Local intranet
Trusted sites
Restricted sites
Internet
This zone contains all Web sites you haven't placed in other zones
Sites...
Security level for this zone
Custom
Custom settings.
- To change the settings, click Custom Level.
- To use the recommended settings, click Default Level.
Custom Level...
Default Level
OK
Cancel
Apply
Security Settings
Settings:
Enable
Download signed ActiveX controls
Disable
Enable
Prompt
Download unsigned ActiveX controls
Disable
Enable
Prompt
Initialize and script ActiveX controls not marked as safe
Disable
Enable
Prompt
Reset custom settings
Reset to:
Medium
Reset
OK
Cancel

Appendix 2 Specifications

Specification /Model		20m IR Water-proof Bullet Network Camera
Camera	Image Sensor	1/3 " CMOS
	Image Size	2592 ×1520
	Electronic Shutter	1/25s~1/100000s
	Iris Type	Fixed Iris
	Min. llumination	0.05lux@F1.2, AGC ON: 0lux with IR
	Lens	3.6mm@F1.6, horizontal field of view: 85 °(2.8mm optional)
	Lens Mount	M12
	Day&Night	ICR
	Digital NR	3D DNR
	WDR	Digital WDR
	Angle Adjustment	Three-axis adjustment
Image	Video Compression	H.265/H.264/MJPEG
	H.265 Type	Main Profile @Leve4.1 High Tier
	Video Bit Rate	128Kbps~8Mbps
	Resolution	4MP (2592 ×1520), 2K(2560×1440), 3MP(2304×1296), 2048×1536 1080P, 720P, D1, CIF, 480×240
	Main Stream	60Hz: 4MP(1~20fps)/ 2K(1~20fps)/3MP(1~30fps)/ 1920×1080(1~30fps)/ 1280×720(1~30fps) 50Hz: 4MP (1~20fps)/ 2K (1~20fps)/3MP(1~25fps)/1920×1080(1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, Anti-flicker, etc. adjustable through client or web browser
	ROI	Support
Interfaces	Network	RJ45
Fucntion	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to10 users and multi-stream transmission
	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP
	Interface Protocol	ONVIF
	Storge	Network remote storage
	Smart Alarm	Motion alarm
Others	IR Distance	10~20 m
	Ingress Protection	IP66
	Power	DC12V/PoE
	Power Consumption	<2.5W(ICR OFF); < 6.5W(ICR ON)
	Opterating Environment	Temperature: -20 ℃~50 ℃; Relative humidity: 10%~90%
	Dimension (mm)	Ø70mm×156mm
	Weight（net）	370g
	Installation	Wall mounting; pendent mounting

Specification /Model		20m IR Water-proof Bullet Network Camera			
Camera	Image Sensor	1/3 " CMOS			
	Image Size	2592 ×1520			
	Electronic Shutter	1/25s~1/100000s			
	Iris Type	Fixed Iris			
	Min. llumination	0.05lux@F1.2, AGC ON: 0lux with IR			
	Lens	3.6mm@F1.6, horizontal field of view: 85 °;(2.8mm,6mm optional)	3.3-12mm @ F1.4; horizontal field of view: 80~38 °		
	Lens Mount	M12	Ø14		
	Day&Night	ICR			
	Digital NR	3D DNR			
	WDR	Digital WDR			
	Angle Adjustment	Three-axis adjustment			
Image	Video Compression	H.265/H.264/MJPEG			
	H.265 Type	Main Profile @Leve4.1 High Tier			
	Video Bit Rate	128Kbps~8Mbps			
	Resolution	4MP (2592 ×1520), 2K(2560×1440), 3MP(2304×1296), 2048×1536 1080P, 720P, D1, CIF, 480×240			
	Main Stream	60Hz: 4MP(1~20fps)/ 2K(1~20fps)/3MP(1~30fps)/ 1920×1080(1~30fps)/ 1280×720(1~30fps) 50Hz: 4MP (1~20fps)/ 2K (1~20fps)/3MP(1~25fps)/1920×1080(1~25fps)/ 1280×720(1~25fps)			
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, Anti-flicker, etc. adjustable through client or web browser			
	ROI	Support			
Interfaces	Network	RJ45			
Fucntion	Remote Monitoring	IE browser, CMS remote control			
	Online Connection	Support simultaneous monitoring for up to10 users and multi-stream transmission			
	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP			
	Interface Protocol	ONVIF			
	Storge	Network remote storage			
	Smart Alarm	Motion alarm			
Others	IR Distance	20~30 m			
	Ingress Protection	IP66			
	Power	DC12V/PoE			
	Power Consumption	<2.5W(ICR OFF); < 6W(ICR ON)			
	Opterating Environment	Temperature: -20 ℃~50 ℃; Relative humidity: 10%~90%			
	Dimension (mm)	Ø 87mm×219mm	Ø 87mm×221mm	Ø 87mm×219mm	Ø 87mm×221mm
	Weight（net）	695g	638g	695g	638g
	Installation	Wall mounting; pendent mounting			

Specification /Model		**20m IR Vandal-proof Dome Camera**
Camera	Image Sensor	1/3 " CMOS
	Image Size	2592 ×1520
	Electronic Shutter	1/25s~1/100000s
	Iris Type	Fixed Iris
	Min. llumination	0.05lux@F1.2, AGC ON: 0lux with IR
	Lens	3.6mm@F1.6, horizontal field of view: 72 °(2.8mm optional)
	Lens Mount	M12
	Day&Night	ICR
	Digital NR	3D DNR
	WDR	Digital WDR
	Angle Adjustment	Pan: 0 °~240 °, Tilt: 0 °~68 °, Rotate: 0 °~220 °
Image	Video Compression	H.265/H.264/MJPEG
	H.265 Type	Main Profile @Leve4.1 High Tier
	Video Bit Rate	128Kbps~8Mbps
	Resolution	4MP (2592 ×1520), 2K(2560×1440), 3MP(2304×1296), 2048×1536 1080P, 720P, D1, CIF, 480×240
	Main Stream	60Hz: 4MP(1~20fps)/ 2K(1~20fps)/3MP(1~30fps)/ 1920×1080(1~30fps)/ 1280×720(1~30fps) 50Hz: 4MP (1~20fps)/ 2K (1~20fps)/3MP(1~25fps)/1920×1080(1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, Anti-flicker, etc. adjustable through client or web browser
	ROI	Support
Interfaces	Network	RJ45
Fucntion	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to10 users and multi-stream transmission
	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP
	Interface Protocol	ONVIF
	Storge	Network remote storage
	Smart Alarm	Motion alarm
Others	IR Distance	10~20 m
	Ingress Protection	IP66&IK10
	Power	DC12V/PoE
	Power Consumption	<2.5W(ICR OFF); < 4W(ICR ON)
	Opterating Environment	Temperature: -20 ℃~50 ℃; Relative humidity: 10%~90%
	Dimension (mm)	Ø 116mm×91mm
	Weight（net）	593g
	Installation	Pendent mounting (wall mounting available with the juction box and bracket)

Specification /Model		20m IR Vandal-proof Dome Camera	
Camera	Image Sensor	1/3 " CMOS	
	Image Size	2592 ×1520	
	Electronic Shutter	1/25s~1/100000s	
	Iris Type	Fixed Iris	
	Min. llumination	0.05lux@F1.2, AGC ON: 0lux with IR	
	Lens	3.6mm@F1.6, horizontal field of view: 85 °(2.8mm optional)	
	Lens Mount	M12	
	Day&Night	ICR	
	Digital NR	3D DNR	
	WDR	Digital WDR	
	Angle Adjustment	Any angle	
Image	Video Compression	H.265/H.264/MJPEG	
	H.265 Type	Main Profile @Leve4.1 High Tier	
	Video Bit Rate	128Kbps~8Mbps	
	Resolution	4MP (2592 ×1520), 2K(2560×1440), 3MP(2304×1296), 2048×1536 1080P, 720P, D1, CIF, 480×240	
	Main Stream	60Hz: 4MP(1~20fps)/ 2K(1~20fps)/3MP(1~30fps)/ 1920×1080(1~30fps)/ 1280×720(1~30fps) 50Hz: 4MP (1~20fps)/ 2K (1~20fps)/3MP(1~25fps)/1920×1080(1~25fps)/ 1280×720(1~25fps)	
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, Anti-flicker, etc. adjustable through client or web browser	
	ROI	Support	
Interfaces	Network	RJ45	
Fucntion	Remote Monitoring	IE browser, CMS remote control	
	Online Connection	Support simultaneous monitoring for up to10 users and multi-stream transmission	
	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP	
	Interface Protocol	ONVIF	
	Storge	Network remote storage	
	Smart Alarm	Motion alarm	
Others	IR Distance	10~20 m	
	Ingress Protection	IP66	
	Power	DC12V (PoE power supply optional)	
	Power Consumption	<2.5W(ICR OFF); < 5W(ICR ON)	
	Opterating Environment	Temperature: -20℃~50℃; Relative humidity: 10%~90%	
	Dimension (mm)	Ø 87mm×108mm	Ø 84.3mm×94.6mm
	Weight（net）	415g	430g
	Installation	Pendent mounting (wall mounting available with the juction box and bracket)	

Specification /Model		**30m IR Water-proof Dome Camera**
Camera	Image Sensor	1/3 " CMOS
	Image Size	2592 ×1520
	Electronic Shutter	1/25s~1/100000s
	Iris Type	Fixed Iris
	Min. llumination	0.05lux@F1.2, AGC ON: 0lux with IR
	Lens	3.3-12mm @ F1.4; horizontal field of view: 80~38 °
	Lens Mount	Ø14
	Day&Night	ICR
	Digital NR	3D DNR
	WDR	Digital WDR
	Angle Adjustment	Any angle
Image	Video Compression	H.265/H.264/MJPEG
	H.265 Type	Main Profile @Leve4.1 High Tier
	Video Bit Rate	128Kbps~8Mbps
	Resolution	4MP (2592 ×1520), 2K(2560×1440), 3MP(2304×1296), 2048×1536 1080P, 720P, D1, CIF, 480×240
	Main Stream	60Hz: 4MP(1~20fps)/ 2K(1~20fps)/3MP(1~30fps)/ 1920×1080(1~30fps)/ 1280×720(1~30fps) 50Hz: 4MP (1~20fps)/ 2K (1~20fps)/3MP(1~25fps)/1920×1080(1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, Anti-flicker, etc. adjustable through client or web browser
	ROI	Support
Interface	Network	RJ45
Fucntion	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to10 users and multi-stream transmission
	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP
	Interface Protocol	ONVIF
	Storge	Network remote storage
	Smart Alarm	Motion alarm
Others	IR Distance	20~30m
	Ingress Protection	IP66
	Power	DC12V/PoE
	Power Consumption	<2.5W(ICR OFF); < 5.5W(ICR ON)
	Opterating Environment	Temperature: -20 ℃~50 ℃; Relative humidity: 10%~90%
	Dimension (mm)	Ø 109mm×130mm
	Weight（net）	675g
	Installation	Pendent mounting (wall mounting available with the juction box and bracket)

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