



3 Megapixel Network Camera

User Manual

Please read this manual carefully before use of the products and preserve for reference purposes. Specifications are subject to change without notice*

Notes on Safety

- 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 shock, vibration, and heavy pressure which can cause damage to the product.

- Do not use corrosive detergent to clean the main body of the camera. If necessary, use a 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 the 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 if 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 a product manual **NOT** a 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 waterproof network camera. All pictures and examples used in the manual are for reference only.

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1 Introduction

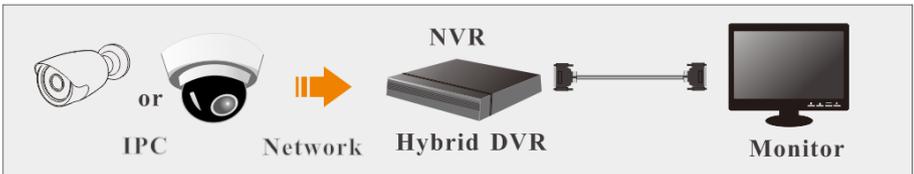
This IP-CAMERA (short for IP-CAM) is designed for high performance CCTV solutions. It adopts state of the art video processing chips. It utilizes most advanced technologies, such as video encoding and decoding technology, complies with the TCP/IP protocol, SoC, etc to ensure this system more stable and 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 smart phone, iPad, remote monitoring

Surveillance Application



2 IE Remote Access

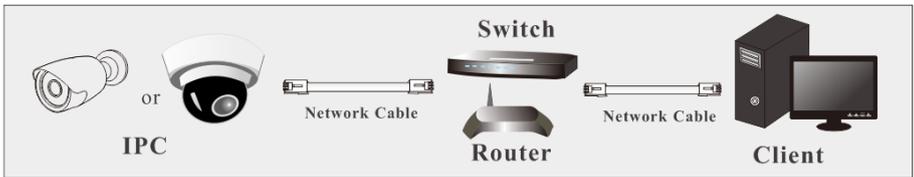
You may connect IP-Cam via LAN or WAN. Here only take IE browser (6.0) for example. The details are as follows:

2.1 LAN

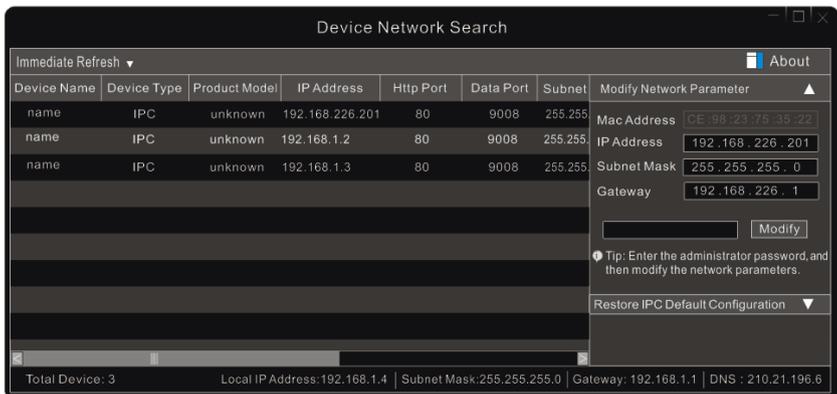
In LAN, there are two ways to access IP-Cam: 1. access through IP-Tool; 2. directly access through IE browser.

2.1.1 Access through IP-Tool

Network connection:

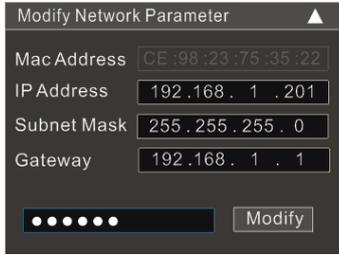


- ① Make sure the PC and IP-Cam are connected to the LAN and the IP-Tool is installed in the PC from the CD.
- ② Double click the IP-Tool icon on the desktop to run this software as shown below:



- 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 the computer's. 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. If you input the wrong password for the first time, you shall wait for 10 seconds and then input the right password.



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**

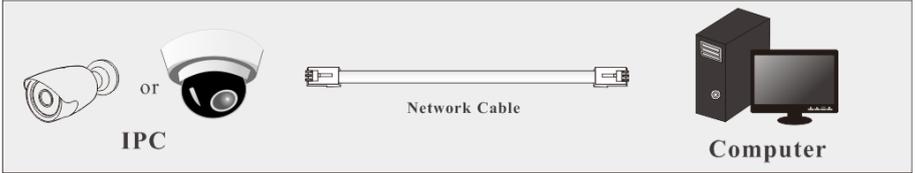
Subnet Mask: **255.255.255.0**

Gateway: **192.168.226.1**

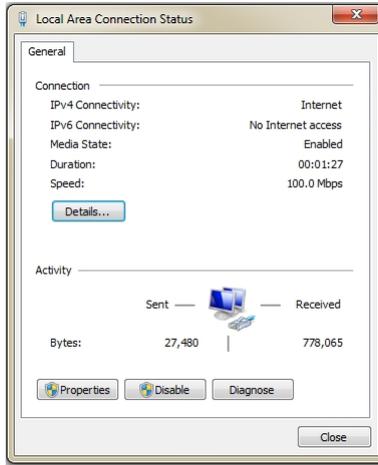
HTTP: **80**

Data port: **9008**

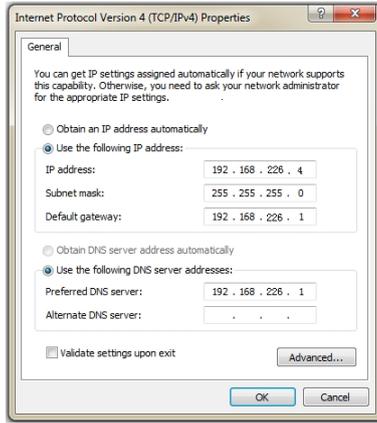
You may use the above default settings when you log in the camera for the first time. You may directly connect the camera to the computer through network cable.



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.



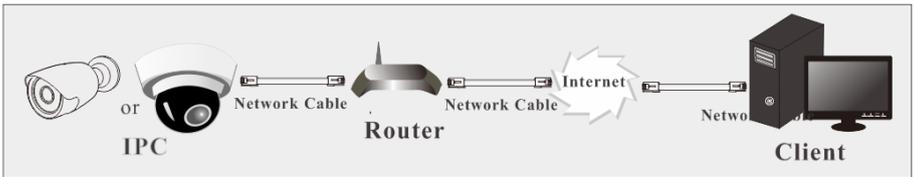
Select “Properties” and then select internet protocol according to the actual situation (for example: IPv4). Next, click “Properties” button to set the network of the PC.



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

HTTP Port	80
Data Port	9008
RTSP Port	554

- ② Go to Config →Network → TCP/IPv4 menu to modify the IP address.

IP Config		PPPoE Config	IP Change Notification Config
<input type="radio"/> Obtain an IP address automatically <input checked="" type="radio"/> Use the following IP address			
IP Address	<input type="text" value="192.168.1.201"/>		
Subnet Mask	<input type="text" value="255.255.255.0"/>		
Gateway	<input type="text" value="192.168.1.1"/>		
<input type="radio"/> Obtain DNS server address automatically <input checked="" type="radio"/> Use the following DNS server			
Preferred DNS Server	<input type="text" value="192.168.1.1"/>		
Alternate DNS Server	<input type="text" value="8.8.8.8"/>		

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”.

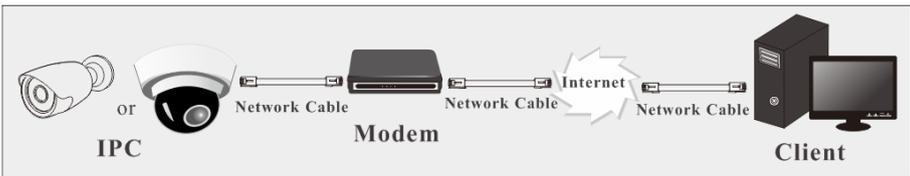
Port Range					
Application	Start	End	Protocol	IP Address	Enable
1	9007	to 9008	Both	192.168.1.201	<input checked="" type="checkbox"/>
2	80	to 81	Both	192.168.1.201	<input checked="" type="checkbox"/>
3	10000	to 10001	Both	192.168.1.166	<input type="checkbox"/>
4	21000	to 21001	Both	192.168.1.166	<input type="checkbox"/>

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:

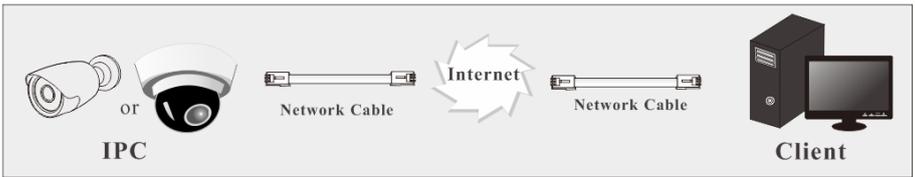
- ① Go to Config→Network →Port menu to set the port number.
- ② Go to Config →Network →TCP/IPv4→PPPoE Config menu. Check “Enable ” and then input the user name and password which you can get from your internet service provider.

IP Config	PPPoE Config	IP Change Notification Config
<input checked="" type="checkbox"/> Enable		
User Name	<input type="text"/>	
Password	<input type="text"/>	

- 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

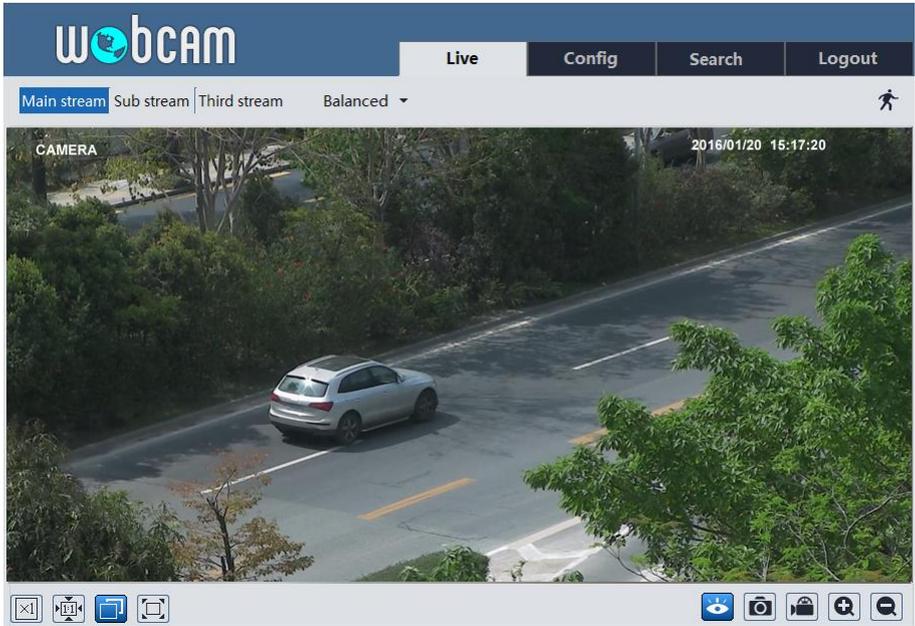


The setting steps are as follow:

- ① Go to Config→Network Config→Port menu to set the port number.
- ② Go to Config →Network Config→IP Address menu to set the IP address. Check “Use the following IP address” and then input the static IP address and other parameters.
- ③ Open the IE browser and input its WAN IP and http port to access.

3.1 The Remote Preview Interface

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
	Motion alarm indicator icon		Start/stop live view
	Original size		Snap
	Appropriate size		Start/stop record
	Auto		Zoom in
	Full screen		Zoom out

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

4 Remote Live Surveillance

4.1 System Configuration

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

4.1.1 Basic Information

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

Device Type	xxxx
Brand	xxxx
Software Version	4.0.2.0
Software Build Date	2016-01-14
Kernel Version	20160109
Hardware Version	1.3
Onvif Version	2.3
OCX Version	1.0.6.7
MAC	00:94:34:43:0f:69

4.1.2 Date & Time

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

Zone	Date and Time
Time Zone:	GMT (Dublin, Lisbon, London, Reykjavik) ▼
	<input type="checkbox"/> DST

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

Zone	Date and Time
Time Mode:	
<input checked="" type="radio"/> Synchronize with NTP server	
NTP server: <input type="text" value="time.windows.com"/>	
<input type="radio"/> Synchronize with computer time	
Date: <input type="text" value="2016-01-25"/>	Time: <input type="text" value="15:26:07"/>
<input type="radio"/> Set manually	
Date: <input type="text" value="2016-01-25"/>	Time: <input type="text" value="11:25:49"/>

4.1.3 Local Configuration

Go to Config→System→Local Config. You can set the storage path of the captured pictures and video records.

Picture Path	<input type="text" value="D:\Favorites"/>	Browse
Record Path	<input type="text" value="D:\Favorites"/>	Browse

4.2 Image Configuration

Image Configuration includes five submenus: Display, Video/Audio, OSD, Video Mask and ROI Config.

4.2.1 Display Configuration

Many parameters of the camera can be set in display configuration interface such as brightness, contrast, chroma, saturation wide dynamic, etc.

	Brightness	<input type="range" value="25"/>	<input type="text" value="25"/>
	Contrast	<input type="range" value="50"/>	<input type="text" value="50"/>
	Chroma	<input type="range" value="50"/>	<input type="text" value="50"/>
	Saturation	<input type="range" value="13"/>	<input type="text" value="13"/>
	Wide Dynamic	<input type="checkbox"/> <input type="range" value="128"/>	<input type="text" value="128"/>
	Sharpness	<input type="checkbox"/> <input type="range" value="50"/>	<input type="text" value="50"/>
	Denoise	<input type="checkbox"/> <input type="range" value="30"/>	<input type="text" value="30"/>
	White Balance	<input type="text" value="Auto"/>	<input type="text" value="Auto"/>
	Frequency	<input type="text" value="60HZ"/>	<input type="text" value="60HZ"/>
	Day-night Mode	<input type="text" value="Auto"/>	<input type="text" value="Auto"/>
	Sensitivity	<input type="text" value="Mid"/>	<input type="text" value="Mid"/>
	Infrared Mode	<input type="text" value="Auto"/>	<input type="text" value="Auto"/>
	Image Mirror	<input type="radio"/> Open <input checked="" type="radio"/> Close	
	Image Flip	<input type="radio"/> Open <input checked="" type="radio"/> Close	
		<input type="button" value="Default"/> <input type="button" value="Reset"/>	

- Brightness:** Set the brightness level of the camera’s image.
- Contrast:** Set the color difference between the brightest and darkest parts.
- Chroma:** 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.
- Wide Dynamic:** It helps the camera provide clear images even under back light circumstances. When there are both very bright and very dark areas simultaneously in the field of view, WDR balances the brightness level of the whole image and provide clear images with details.
- Sharpness:** Set the resolution level of the image plane and the sharpness level of the image edge.
- Denoise:** 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.
- 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.
- Image Mirror:** Reverse the current video image right and left.
- Image Flip:** Turn the current video image upside down.

4.2.2 Video Stream

The following interface will be displayed by clicking Config→Image→Video/Audio.

Video

Index	Stream	Resolution	Frame	Bitrate	Bitrate(Kbps)	Video	I Frame	Encode	Profile
1	Main stre...	2048x1536	25	CBR	3072	Highes	100	H264	Main Profile
2	Sub strea...	704x576	25	CBR	768	Highes	100	H264	High Profile
3	Third stre...	704x576	25	CBR	768	Higher	100	H264	Base Line

Stream of snapping photos 1 Size: (1280x960)

Video encode slice split

Watermark Watermark theme: asdasdasdasd

- 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.

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.

Bitrate: Please choose it according to the actual network situation.

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 encoding profile: Baseline and main profile are optional. Baseline profile is mainly used in interactive application with low complexity and delay. Main profile is mainly used for higher coding requirement.

Stream of snapping photos: 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 selected, you can input the watermark theme. 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

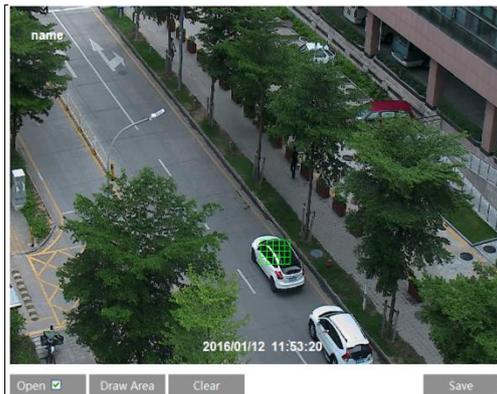
Go to Config→Image→OSD menu to display the interface as shown below:



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

4.2.4 Video Mask

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



To set up video mask

1. Open 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 menu and then click “Clear” button to delete the current video mask area.

4.2.5 ROI Configuration

To set up ROI

1. Go to Video Config→ROI Config menu.



2. Check “Open” and then click “Draw Area” button.
3. Drag the mouse to set the ROI area.
4. Set the level.
5. 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.



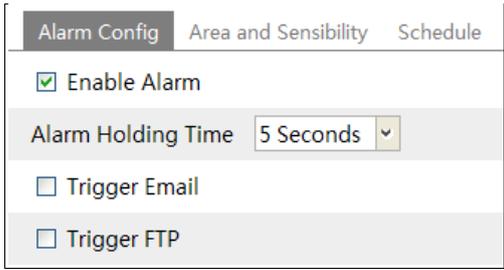
4.3 Alarm Configuration

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

4.3.1 Motion Detection

To set motion detection:

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

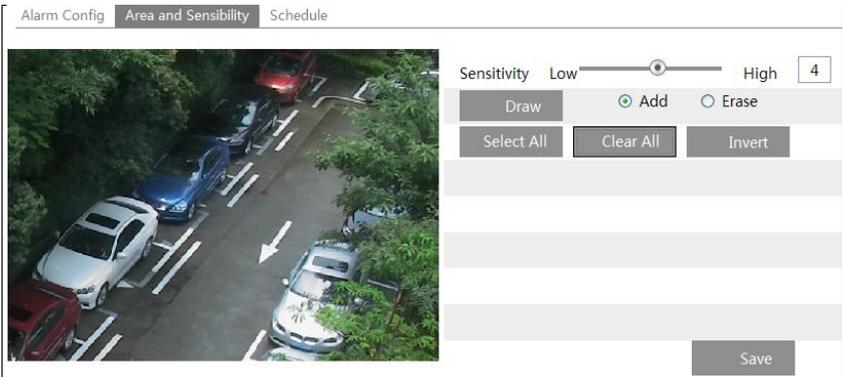


Check “Enable Alarm” check box to activate motion based alarm, choose alarm holding time and set alarm trigger options.

Trigger Email: If the email and attach picture checkbox is checked (Email address shall be set first in the Mail config interface), the triggered snap pictures and event will be sent into those addresses.

Trigger FTP: If “Uploading picture” is checked, the triggered snap 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 Sensibility” tab to see the following sub-menu.



Move the “Sensitivity” scroll bar to set the sensitivity.

Check “Add” and click “Draw” button and move mouse to select the motion detection area; Select “Erase” and move 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 set the schedule of the motion detection.

Alarm Config Area and Sensibility **Schedule**

Erase Add

Week Schedule

Sun. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0
Manual Input

Mon. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0
Manual Input

Tues. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0
Manual Input

Wed. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0
Manual Input

Thur. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0
Manual Input

Fri. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0
Manual Input

Sat. 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0
Manual Input

Holiday Schedule

Date

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0
00:00-23:59 Manual Input

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.

Select a date at the “Date” pull down list, press “Add” button to add that date to the list box on the right side and then move the scroll bar to set the schedule of that day.

Select a date in the list box on the right side, and press “Delete” to remove the schedule on that day.

Press the “Save” button to save the settings.

Note: Holiday schedule is prior to Week schedule.

4.3.2 Alarm Server

Go to “Alarm configuration”→ “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.

Server Address	<input type="text"/>
Port	<input type="text" value="0"/>

4.4 Network Configuration

4.4.1 TCP/IPv4

Go to Config→Network→TCP/IPv4. There are two ways for network connection.

IP Config	PPPoE Config	IP Change Notification Config
<input checked="" type="radio"/> Obtain an IP address automatically		
<input type="radio"/> Use the following IP address		
IP Address	<input type="text" value="192.168.226.201"/>	
Subnet Mask	<input type="text" value="255.255.255.0"/>	
Gateway	<input type="text" value="192.168.226.1"/>	
<input type="radio"/> Obtain DNS server address automatically		
<input checked="" type="radio"/> Use the following DNS server		
Preferred DNS Server	<input type="text" value="192.168.226.1"/>	
Alternate DNS Server	<input type="text" value="8.8.8.8"/>	

- Use IP address. There are two options for IP setup: obtain an IP address auto by DHCP protocol and use the following IP address. Please choose one of options for your requirements.
- Use PPPoE: Enter the user name and password from your ISP.

IP Config	PPPoE Config	IP Change Notification Config
<input checked="" type="checkbox"/> Enable		
User Name	<input type="text"/>	
Password	<input type="text"/>	

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.

IP Config	PPPoE Config	IP Change Notification Config
<input type="checkbox"/> Trigger Email		
<input type="checkbox"/> Trigger FTP		

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.

4.4.2 Port

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

HTTP Port	80
Data Port	9008
RTSP Port	554

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.

4.4.3 Central Server

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

<input type="checkbox"/> Enable	
Server Port	0
Server Address	
Device ID	1

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.

4.4.4 DDNS Configuration

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.

<input checked="" type="checkbox"/> Enable	
Server Type	mintdns
Server Address	www.dvrdydns.com
User Name	
Password	
Domain	

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

NEW USER REGISTRATION	
USER NAME	XXXX
PASSWORD	•••••• ?
PASSWORD CONFIRM	••••••
FIRST NAME	xxx
LAST NAME	xxx
SECURITY QUESTION.	My first phone number. ▾
ANSWER	xxxxxxx
CONFIRM YOU'RE HUMAN	 New Captcha Enter the text you see above
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

Create domain name.

You must create a domain name to continue.

Domain name must start with (a-z, 0-9). Cannot end or start, but may contain a hyphen and is not case-sensitive.

<input type="text"/>	dvrdydns.com ▾	<input type="button" value="Request Domain"/>
----------------------	----------------	---

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

Search by Domain. <input type="button" value="Search"/>		
<i>Click a name to edit your domain settings.</i>		
NAME	STATUS	DOMAIN
654321ABC	✓	654321abc.dvrdydns.com
Last Update: <i>Not yet updated</i> IP Address: 210.21.229.138		
Create additional domain names		

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

4.4.5 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.

SNMP v1/v2	
<input type="checkbox"/> Enable SNMPv1	
<input type="checkbox"/> Enable SNMPv2	
Read SNMP Community	<input type="text"/>
Write SNMP Community	<input type="text"/>
Trap Address	<input type="text" value="..."/>
Trap Port	<input type="text" value="0"/>
Trap community	<input type="text"/>
SNMP v3	
<input type="checkbox"/> Enable SNMPv3	
Read User Name	<input type="text"/>
Security Level	<input type="text" value="auth, priv"/>
Authentication Algorithm	<input checked="" type="radio"/> MD5 <input type="radio"/> SHA
Authentication Password	<input type="text"/>
Private-key Algorithm	<input checked="" type="radio"/> DES <input type="radio"/> AES
Private-key Algorithm	<input type="text"/>
Write User Name	<input type="text"/>
Security Level	<input type="text" value="auth, priv"/>
Authentication Algorithm	<input checked="" type="radio"/> MD5 <input type="radio"/> SHA
Authentication Password	<input type="text"/>
Private-key Algorithm	<input checked="" type="radio"/> DES <input type="radio"/> AES
Private-key Algorithm	<input type="text"/>
Other Settings	
SNMP Port	<input type="text" value="0"/>

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.

4.4.6 RTSP

Go to Config→Network→RTSP.

<input checked="" type="checkbox"/> Enable	
Port	<input type="text" value="554"/>
Address	<input type="text" value="rtsp://IP or domain name:port/profile1"/>
	<input type="text" value="rtsp://IP or domain name:port/profile2"/>
	<input type="text" value="rtsp://IP or domain name:port/profile3"/>
<input type="checkbox"/> Allow anonymous viewer login (No user name or password required)	

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 “Enable anonymous viewer login...”.

4.4.7 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:

Select “Enable UPNP” and then input friendly name.

<input type="checkbox"/> Enable	
UPnP Name	<input type="text"/>

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.

4.4.8 Mail configuration

If you need to trigger E-mail when an alarm happens or IP address is changed, please set the E-mail here first.

Go to Config→Network → Email.

The screenshot displays the SMTP configuration interface, divided into two main sections: 'Sender' and 'Receiver'.
Sender Section:
- Sender Address: [Redacted]@126.com
- User Name: [Redacted]@126.com
- Password: [Redacted]
- Server Address: smtp.126.com
- Secure Connection: Unnecessary (dropdown menu)
- SMTP Port: 25 (input field) and Default (button)
- Send Interval(S): 0 (input field) (0-3600)
- Clear and Test buttons are located below the Send Interval field.
Receiver Section:
- A large empty text area for listing receiver addresses.
- Receiver Address: [Input field]
- Delete and Add buttons are located below the Receiver Address field.

Sender Address: sender’s e-mail address;

User name and password: sender’s user name and password;

SMTP Address: The SMTP IP address or host name.

Select the secure connection type at the Secure Connection pull down list according to user’s actual needs;

SMTP Port: The SMTP port.

Send Intervals: Set it as needed.

Click “Test Account Setting” to test the effectiveness of the account.

Receiver email address: receiver’s e-mail address;

4.4.9 FTP Setting

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

Go to Config→Network →FTP.

Server Name	Server Address	Port	User Name	Upload Path
<div style="border: 1px solid gray; padding: 5px; margin: 10px auto; width: 80%;"> <div style="border: 1px solid gray; padding: 5px;"> <div style="text-align: right; font-weight: bold; font-size: small;">Add FTP ×</div> <div style="margin-top: 5px;"> <p>Server Name <input style="width: 100%;" type="text"/></p> <p>Server Address <input style="width: 100%;" type="text"/></p> <p>Upload Path <input style="width: 100%;" type="text"/></p> <p>Port <input style="width: 100%;" type="text" value="21"/></p> <p>User Name <input style="width: 100%;" type="text"/> <input type="checkbox"/> Anonymous</p> <p>Password <input style="width: 100%;" type="text"/></p> <div style="text-align: right; margin-top: 5px;"> <input type="button" value="OK"/> <input type="button" value="Cancel"/> </div> </div> </div> </div>				
<input type="button" value="Add"/> <input type="button" value="Modify"/> <input type="button" value="Delete"/> <input type="button" value="Test"/>				<input type="button" value="Save"/>

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.

User Name and Password: The username and password are used to login the FTP.

4.5 Security Configuration

4.5.1 User Configuration

Go to Config→Security.

<input type="button" value="Add"/> <input type="button" value="Modify"/> <input type="button" value="Delete"/>			
Index	User Name	User Type	Binding MAC
1	admin	Administrator	

Add user:

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

The 'Add User' dialog box features a title bar with a close button (X). The main area contains the following fields: 'User Name' with an empty text box; 'Password' with an empty text box; 'Confirm Password' with an empty text box; 'User Type' with a dropdown menu currently showing 'Administrator'; and 'Binding MAC' with a text box containing '00:00:00:00:00:00' and an unchecked checkbox. At the bottom, there are two buttons: 'OK' and 'Cancel'.

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 “Binding MAC address” 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.

The 'Edit User' dialog box has a title bar with a close button (X). A checkbox labeled 'Modify Password' is checked. Below it, the 'User Name' field contains the text 'admin'. There are three empty text boxes for 'Old Password', 'New Password', and 'Confirm Password'. The 'Binding MAC' field contains '00:00:00:00:00:00' and has an unchecked checkbox. At the bottom, there are 'OK' and 'Cancel' buttons.

3. Input old password of this user in the “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 modify user’s password.

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.

4.5.2 Online Video User

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

4.5.3 Block and Allow List

Go to Config→Security→Block and Allow Lists.

The screenshot shows two configuration sections. The top section, titled "IP Address Filter Setting", has a checked box for "Enable IP address filtering". Below it are two radio buttons: "Block the following IP address" (selected) and "Allow the following IP address". There is a large empty list box on the left, and on the right, "Add" and "Delete" buttons above a text input field containing "0.0.0.0". The bottom section, titled "Block the Following MAC Address", has a checked box for "Enable MAC address filtering". It also has two radio buttons: "Block the following MAC address" (selected) and "Allow the following MAC address". It features a large empty list box on the left, and on the right, "Add" and "Delete" buttons above a text input field containing "00:00:00:00:00:00", and a "Save" button below the input field.

Setting steps are as follows:

Check “Enable IP address filtering” check box.

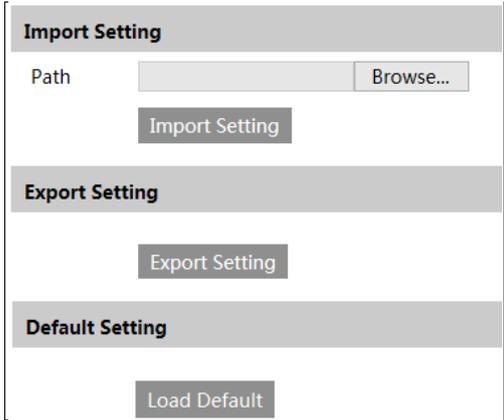
Select “Block the following IP address”, input IP address in the IP address list box and click “Add” button. The operation step of “Allow the following IP address” and MAC address filter settings are the same with “Block the following IP address”.

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.

4.6 Maintenance

4.6.1 Backup & Restore

Go to Config→Maintenance→Backup & Restore.



● **Import & Export Setting:**

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 Setting**

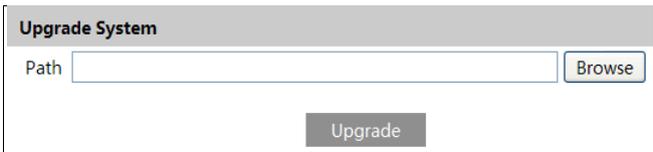
Click “Load default” button to restore all system settings to default status.

4.6.2 Reboot Device

Go to Config→Maintenance→Reboot.
Click “Reboot” button to reboot the device.

4.6.3 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.

4.6.4 Log

To query and export log

1. Go to Config→Maintenance→Operation Log.

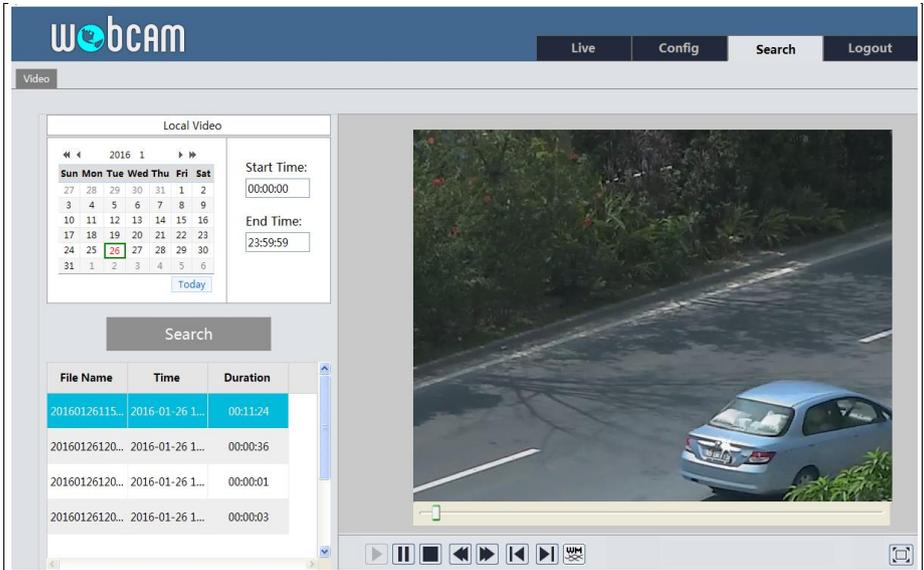
Main Type: Sub Type:
 Start Time: End Time:

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 “Query” to view the operation log.
4. Click “Export” to export the operation log.

You can export and view the run log by clicking Config→Maintenance→Run Log.

You can play the local video record through search interface. Before playing, please set the storage path of the video record in the local configuration interface and make sure there are record files. After that, click “Search” tab on the menu toolbar. The following interface will be seen.



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.

Button	Description
	Play button. After pausing the video, click this button to continue playing.
	Pause button.
	Stop button.
	Speed down.
	Speed up.
	Open/close watermark.
	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. Please 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.

Note: Default IP: 192.168.226.201, mask number: 255.255.255.0

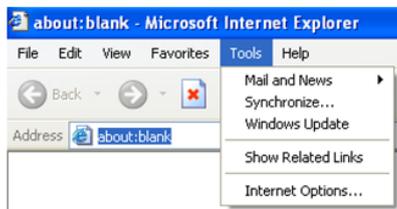
Q: IP tool cannot search devices, why?

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?

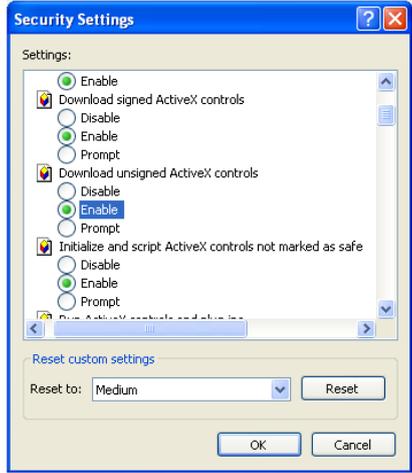
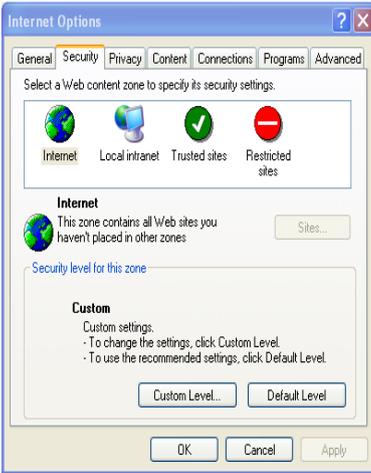
a. IE browser blocks ActiveX. Please try as below.

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.

Appendix 2 Specifications

Specification /Model		20m IR Water-proof Bullet Network Camera
Camera	Image Sensor	1/3 " CMOS
	Image Size	2048×1536
	Electronic Shutter	1/25s~1/100000s
	Auto Iris	Fixed Iris
	Min. Illumination	0.07lux@F1.2, AGC ON; 0 lux with IR
	Lens	3.6mm@F2.0, angle of view: 70 ° (2.8mm optional)
	Lens Mount	M12
	Day&Night	ICR
	WDR	Digital WDR
	Digital NR	3D DNR
	Angle Adjustment	Any angle
Image	Video Compression	H.264/MJPEG
	H.264 Type	Baseline profile/main profile/high profile
	Video Bit Rate	128Kbps~6Mbps
	Resolution	3MP (2048×1536),1080P, 720P, D1, CIF, 480×240
	Main Stream	60Hz: 3MP(1~20fps)/1080P (1~30fps)/1280×720(1~30fps) 50Hz: 3MP(1~20fps)/1080P (1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable through client or web browser
	ROI	Support
Interfaces	Network	RJ45
Fuction	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to 4 users and multi-stream transmission
	Network Protocol	TCP/IP, UDP, DHCP, NTP, RTSP, PPPoE, DDNS, SMTP, FTP
	Interface Protocol	ONVIF
	Storage	Network remote storage
	Smart Alarm	Motion alarm
Others	IR Distance	10~20 m
	Protection Grade	IP66
	Power	DC12V / PoE
	Power Consumption	< 2W(ICR OFF); <4.5W(ICR ON)
	Operating Environment	Temperature: -20 °C~50 °C; Humidity: 10%~90%
	Dimension (mm)	Ø64mm×183mm
	Weight (net)	337g
Installation	Wall mounting; pendent mounting	

Specification /Model		 30m IR Water-proof Bullet Network Camera
Camera	Image Sensor	1/3 " CMOS
	Image Size	2048×1536
	Electronic Shutter	1/25s~1/100000s
	Auto Iris	Fixed Iris
	Min. Illumination	0.07lux@F1.2, AGC ON: 0 lux with IR
	Lens	2.8~12mm@F1.4, angle of view: 84 °~27 °
	Lens Mount	Ø14
	Day&Night	ICR
	WDR	Digital WDR
	Digital NR	3D DNR
	Angle Adjustment	Any angle
Image	Video Compression	H.264/MJPEG
	H.264 Type	Baseline profile/main profile/high profile
	Video Bit Rate	128Kbps~6Mbps
	Resolution	3MP (2048×1536),1080P, 720P, D1, CIF, 480×240
	Main Stream	60Hz: 3MP(1~20fps)/1080P (1~30fps)/1280×720(1~30fps) 50Hz: 3MP(1~20fps)/1080P (1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable through client or web browser
	ROI	Support
Interfaces	Network	RJ45
Fuction	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to 4 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
	Protection Grade	IP66
	Power	DC12V/PoE
	Power Consumption	< 2W(ICR OFF); < 5.5W(ICR ON)
	Operating Environment	Temperature: -20 °C~50 °C; Humidity: 10%~90%
	Dimension (mm)	Ø87mm×219mm
	Weight (net)	636g
Installation	Wall mounting; pendent mounting	

Specification /Model		 30m IR Water-proof Bullet Network Camera	 50m IR Water-proof Bullet Network Camera	
Camera	Image Sensor	1/3 " CMOS		
	Image Size	2048×1536		
	Electronic Shutter	1/25s~1/100000s		
	Auto Iris	Fixed Iris		
	Min. Illumination	0.07lux@F1.2, AGC ON: 0 lux with IR		
	Lens	6mm@F1.6, angle of view: 43°(3.6mm, 8mm optional)		
	Lens Mount	M12		
	Day&Night	ICR		
	WDR	Digital WDR		
	Digital NR	3D DNR		
Angle Adjustment	Any angle			
Image	Video Compression	H.264/MJPEG		
	H.264 Type	Baseline profile/main profile/high profile		
	Video Bit Rate	128Kbps~6Mbps		
	Resolution	3MP (2048×1536),1080P, 720P, D1, CIF, 480×240		
	Main Stream	60Hz: 3MP(1~20fps)/1080P (1~30fps)/1280×720(1~30fps) 50Hz: 3MP(1~20fps)/1080P (1~25fps)/ 1280×720(1~25fps)		
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable through client or web browser		
	ROI	Support		
Interfaces	Network	RJ45		
Fuction	Remote Monitoring	IE browser, CMS remote control		
	Online Connection	Support simultaneous monitoring for up to 4 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	30~50 m	
	Protection Grade	IP66		
	Power	DC12V		
	Power Consumption	< 2W(ICR OFF); < 3.5W(ICR ON)	< 2W(ICR OFF); < 5W(ICR ON)	
	Operating Environment	Temperature: -20℃~50℃; Humidity: 10%~90%		
	Dimension (mm)	99×188×86 (W×D×H)		
	Weight (net)	488g		
Installation	Wall mounting			

Specification /Model		 20m IR Water-proof Dome Network Camera
Camera	Image Sensor	1/3 " CMOS
	Image Size	2048×1536
	Electronic Shutter	1/25s~1/10000s
	Auto Iris	Fixed Iris
	Min. Illumination	0.07lux@F1.2, AGC ON: 0 lux with IR
	Lens	3.6mm@F2.0, angle of view: 70 ° (2.8mm optional)
	Lens Mount	M12
	Day&Night	ICR
	WDR	Digital WDR
	Digital NR	3D DNR
	Angle Adjustment	Any angle
Image	Video Compression	H.264/MJPEG
	H.264 Type	Baseline profile/main profile/high profile
	Video Bit Rate	128Kbps~6Mbps
	Resolution	3MP (2048×1536),1080P, 720P, D1, CIF, 480×240
	Main Stream	60Hz: 3MP(1~20fps)/1080P (1~30fps)/1280×720(1~30fps) 50Hz: 3MP(1~20fps)/1080P (1~25fps)/ 1280×720(1~25fps)
	Image Settings	Saturation, Brightness, Chroma, Contrast, Wide Dynamic, Sharpen, NR, etc. adjustable through client or web browser
	ROI	Support
Interfaces	Network	RJ45
Fuction	Remote Monitoring	IE browser, CMS remote control
	Online Connection	Support simultaneous monitoring for up to 4 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
	Protection Grade	IP66
	Power	DC12V (PoE power supply optional)
	Power Consumption	< 2W(ICR OFF); <4W(ICR ON)
	Operating Environment	Temperature: -20 °C~50 °C; Humidity: 10%~90%
	Dimension (mm)	Ø87mm×108mm
	Weight (net)	400g
	Installation	Pendent mounting (wall mounting available with junction box and bracket)

