

# Thermal Smart IP Camera

## User Manual



Rev: 20.1.43.6

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As the upgrade of the products or other reason, the contents of manual will be upgraded periodically. If you need the latest version of the manual, please contact your dealer.

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- To the maximum extent permitted by applicable law, the product described, with its hardware, software and firmware, is provided "as is", with all faults and errors, and our company makes no warranties, express or implied, including without limitation, merchantability, satisfactory quality, fitness for particular purpose, and non-infringement of third party, nor is it liable for any special, incidental, incidental, or indirect damages resulting from the use of this manual or the use of our products, including but not limited to damages resulting from loss of business profits, loss of data or documentation.
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- In the event of any conflicts between this manual and the applicable law, the legal provisions shall prevail.

## Data Security Statement

- In the process of using the product, you will collect, store and use personal data. In the process of product development, our company implements the principles of personal data protection. For example, if you use a face recognition device, the biometric data will be encrypted and stored on your device.
- As a data controller, when collecting, storing and using personal data, you must comply with applicable laws and regulations concerning the protection of personal data, including but not limited to taking protective measures on personal data. We strongly recommend that you perform reasonable rights management on the device, strengthen the physical security of device application scenarios, and conduct regular security assessments.

## Safety Precautions



### WARNING

- Electrical safety regulations of the nation and the region must be strictly followed during installation or use.
- Do not connect multiple device with one single power adapter (Overload for adapter may lead to over-heat or fire hazard).
- The product must use the recommended wire assembly (power cord) and use it within its rated specifications.
- Shut down the power while connecting or dismantling the device. Do not operate with power on.
- Shut down the power and unplug the power cable immediately when there is smoke, odor or noise rising from the device. Then contact the dealer or service center.
- Please contact the local dealer or latest service center when IPC works abnormally. Do not attempt to disassemble or modify the device yourself. (We shall shoulder no responsibility for problems caused by unauthorized repair or maintenance).



### CAUTION

- Please do not place the device in an environment with corrosive gas, which will damage the device.
- Please do not place the device in places exposed to direct sunlight, poor ventilation, or near heat sources such as a heater (ignoring this item may cause fire hazard).
- Please do not install the device in extremely cold places, such as the air outlet of an

air conditioner.

- Please do not aim the lens at strong light sources, such as the sun, fluorescent lamps and other high-temperature targets; otherwise it will cause damage to the lens or thermal imaging detector. If you must aim the lens at a strong light source, please turn on "Anti-burn Protection".
- Please do not aim the lens at a cold source, such as air conditioning outlets, cold drinks, ice, etc.
- Please keep the device installed in a stable place, taking care to avoid the product falling or being hit by falling objects.
- Please use a very soft dry cloth or other alternatives to wipe the surface, do not use alkaline cleaners, and avoid scratching the device with hard objects.
- Please understand that you are responsible for properly configuring all passwords and other product-related security settings, and keeping your user name and password properly.
- Biometric products cannot be 100% suitable for any anti-counterfeiting environment. For high security level places, please use the combined authentication method.



#### **NOTE**

- After receiving the product, please open the box, take out the equipment, and count the products and accessories according to the packing list.
- If you find that the contents of the box are damaged or any accessories are missing, please contact the dealer in time.

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# 1. Product Introduction

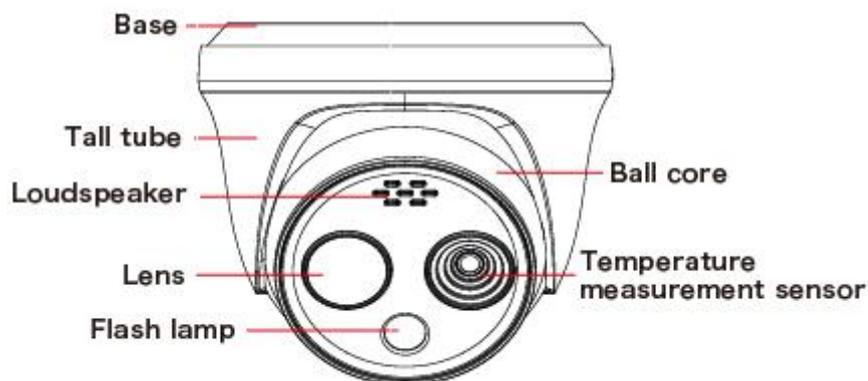
## 1.1. Product description

Thermal imaging binocular intelligent network camera is a new thermal imaging network camera that integrates network remote monitoring functions, face recognition algorithms, video server functions and high-definition camera functions. It supports visible light and thermal imaging dual video output, human body temperature measurement, face recognition capture and other functions.

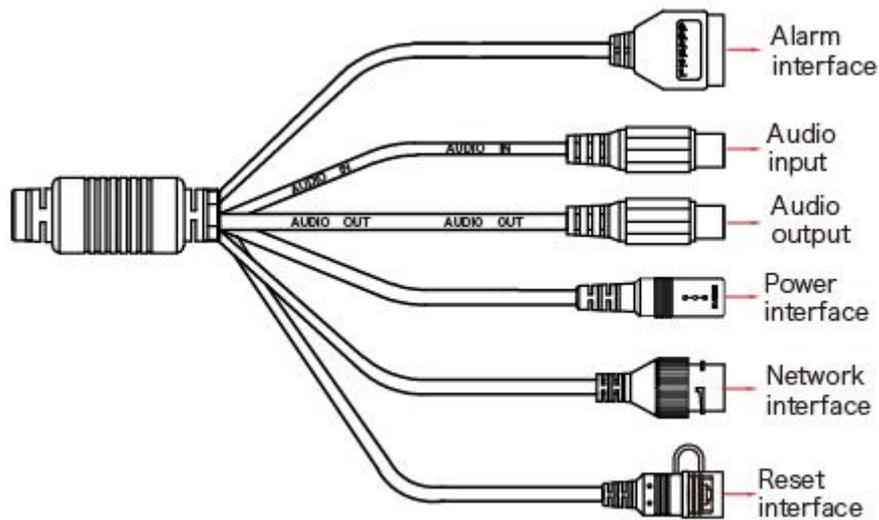
The camera has a built-in temperature sensor, which has the characteristics of temperature measurement with high sensitivity, intuitionistic heat map, fast speed, no interference with the measured target, and safe use. The device can measure the temperature of multiple people at the same time, quickly screen out persons with abnormal temperature, and help users prevent epidemics.

Due to its characteristics, the camera can be widely used in places requiring small-scale thermal imaging monitoring, such as schools, office buildings, museums, shopping malls, banks, stations and entrance flow of a large number of places. The measurable target temperature is 35°C-42°C.

## 1.2. Introduction Of Product Appearance



## 1.3. Cable Description



- Alarm interface: including alarm input and alarm output, a group of inputs, a group of outputs and RS485 (used to connect external devices with RS-485 interface).

Alarm Input		Alarm Output		RS485	
1	2	3	4	5	6
+	-	A	B	485+	485-

- Audio input interface: 1 channel audio input, used to connect audio pickup to collect sound.
- Audio output interface: 1 audio output, used to connect speakers and other equipment to output audio.
- Power interface: support DC12V, POE power supply. If it is DC12V, please connect the positive and negative power supply correctly.
- Network port interface: used to access Ethernet through RJ45 and power the device through POE.
- Reset interface: Long press the reset button for 10 seconds, the device will be restored to the factory default parameters.

## 2. Product Installation

For product installation, please refer to 《Thermal Smart IP Camera Quick Start Guide》 .

### 3. Instructions

After the dome is installed, you need to configure functions and set parameters for it. You can configure related functions through the browser or iVMS330 platform.

#### 3.1. Network Setting

The default IP of all cameras is 192.168.1.168. The IPv4 address of the computer must be in the same network segment as the IP address of the IP camera. To enable the camera to access the network smoothly, plan the available IP network segments based on the actual network environment.

(1) Add the same network segment IP as 192.168.1.168 (camera factory default IP) in the computer, such as 192.168.1.165.

**Steps to add an IP address to the Windows system:**

**Step 1:** Click " Start → "Control Panel" → "Network and Sharing Center" → "Local Network" → "Properties" → "Internet Protocol Version 4 (TCP/IPv4)" → "Advanced" to enter the advanced TCP/IP setting interface.

**Steps 2:** Click "Add" in the IP address (R) position, enter the IP address as 192.168.1.165 and the subnet mask 255.255.255.0, and click "Add" → "OK" → "OK" → "OK".

(2) Connect camera and PC by network cable in the same LAN, power on. Connecting as following (PoE switch, camera, PC connection photo).



**The network configuration steps are as follows:**

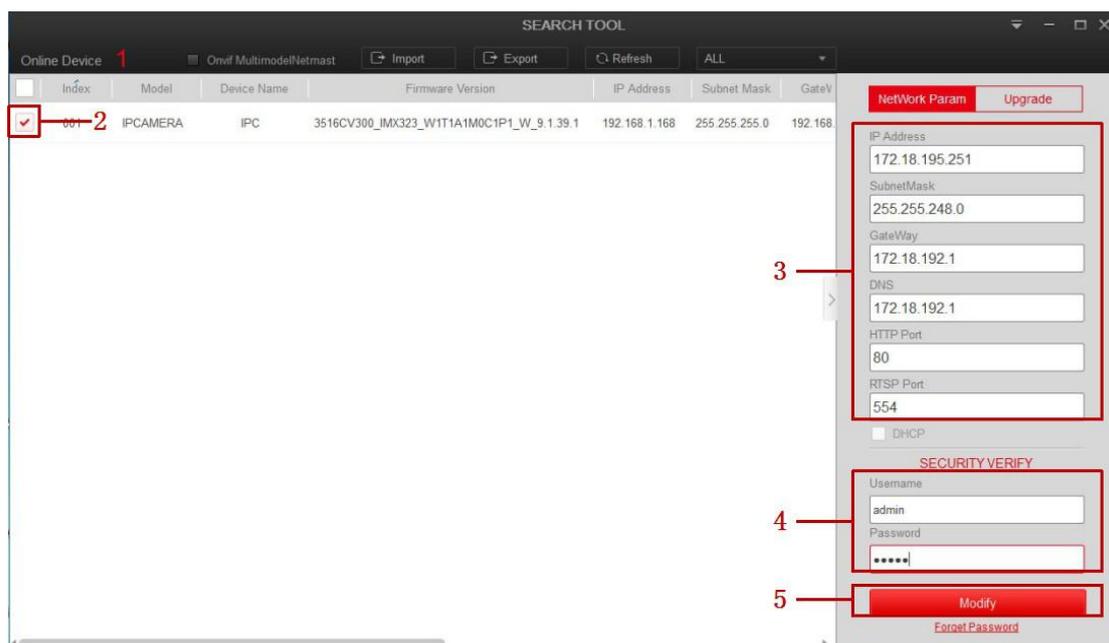
**Step 1:** Open " Search Tool" (Version 7.2.45.6 and above, please install Search Tool from <http://www.herospeed.net>).

**Step 2:** Check 192.168.1.168.

**Step 3:** Modify the relevant network parameters such as IP on the right side of the interface

**Step 4:** Enter the user name (default is admin) and password (default is admin) of the device.

**Step 5:** Click "Modify" → "Confirm".



**Step 6:** Click "Refresh" to find the IP address that has been modified, which means that the network configuration is successful.



#### NOTE

- When configuring network parameters, ensure that the IPC address and the computer's IPv4 address are on the same network segment.

## 3.2. Web Client Access

### 3.2.1. Login

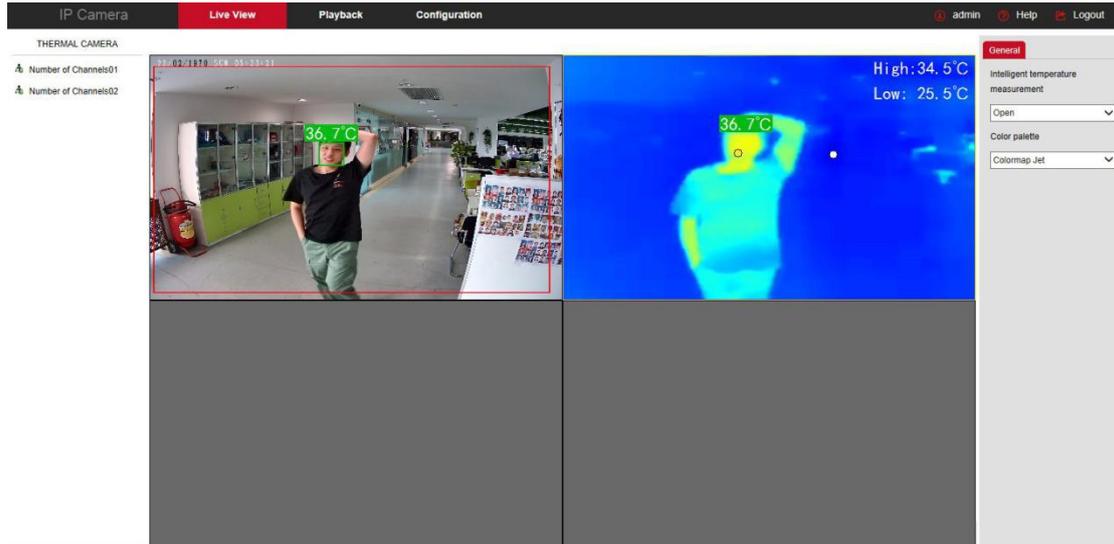
**Step 1:** Open the IE browser, enter the IP address of IP Camera (if the IP has not been modified, please enter the default address <http://192.168.1.168>), and press "Enter".

**Step 2:** Click "Download" to download the plug-in, close the browser, and follow the prompts to install the plug-in.

**Step 3:** Enter the user name (admin) and password (admin) of the device, and click "Login".

### 3.2.2. Real-time Preview

After logging in, enter the real-time preview interface of the device, where you can preview the real-time video of the visible light channel and the thermal imaging channel. It can also realize video recording and capturing functions while previewing.



The operation buttons on the preview interface are shown in the following table:

Icon	Explanation
	The preview screen is closed/ opened. Click the "▶" in the bottom right corner of the page to open the preview, and the button will change to "■" after opening; when you click the button again, the preview will be stopped.
	Click "▶" to start manual recording and save it locally, and the button will change to "▶" after opening; when you click the button again, manual recording will be stopped.
	Click "▶" to save the captured picture to local
Intelligent temperature measurement	Turn on/off temperature measurement function.
Color palette	According to the requirements of the environment, set the color of the displayed image of the thermal imaging channel through the color palette.

### 3.2.3. Parameter configuration

Click "Configuration" to enter the parameter configuration interface of the device, which includes local configuration, system, local network, video, image, event, temperature measure and other functional configurations. Users can selectively set these functions according to actual application scenarios to achieve the best monitoring effect.

The screenshot shows the 'Configuration' tab of an IP camera interface. On the left is a navigation menu with options: Local Configuration, System, Network, Basic Setup, Advance Setup, Video, Image, Events, and Temperature measurement. The 'Network' section is expanded, showing 'TCP/IP' and 'Port' sub-sections. Under 'TCP/IP', there are fields for IPv4 Address (172.18.195.253), IPv4 Subnet Mask (255.255.248.0), and IPv4 Default Gateway (172.18.192.1). A 'Test' button is next to the IPv4 Address field. There is an unchecked checkbox for 'DHCP'. Below these is the 'DNS Server' section with a 'Preferred DNS Server' field containing '172.18.192.1'. A red 'Save' button is at the bottom.

### 3.2.4. Face Recognition Configuration

**Step 1:** Click on the "Configuration → Events → Smart Event" to enter the Face Recognition settings interface.

#### Face Recognition

The screenshot shows the 'Face Recognition' configuration interface. At the top, there is a 'Parameter settings' button. Below it are three configuration fields: 'Face recognition minimum pixels' with a value of 45, 'Capture blur threshold' with a value of 10 and a dropdown arrow, and 'Model Version' with a value of Lg10\_HCR99\_V1.0.1.

**Step 2:** Set related parameters(Face recognition minimum pixels, Capture blur threshold.etc).  
 [Face recognition minimum pixels]It means that a face larger than the pixel in the monitor screen will be recognized.

[Capture blur threshold]Sets the capture face sharpness value. When the device recognizes that the face reaches the resolution, the device performs a snap action.

**Step 3:** Click "Save" to complete the configuration.

### 3.2.5. Temperature Measurement Configuration

**Step 1:** Click on the "Configuration →Temperature measurement →Temperature measurement" to enter Basic Setup interface.

Channel name	Camera 02
<input checked="" type="checkbox"/> Turn on the temperature measurement function	
<input checked="" type="checkbox"/> Highest temperature	
<input checked="" type="checkbox"/> Lowest temperature	
<input checked="" type="checkbox"/> Reference point	
Temperature measurement information location display	Upper right corner of image
Temperature measurement unit	Celsius temperature(°C)
Temperature measurement range	35.0-42.0 °C
Target temperature measurement parameters	
Emissivity	0.98
distance	0.25 Meter

**Save**

**Step 2:** Turn on the temperature measurement function, and configure the relevant temperature measurement parameters of camera 02, then click "Save".

[Channel name] Configure channel.

[Turn on the temperature measurement function] Turn on/off the temperature measurement function.

[Highest temperature] Turn on/off the highest temperature detected on the thermal imaging screen.

[Lowest temperature] Turn on/off the lowest temperature detected on the thermal imaging screen.

[Reference point] Turn on/off the temperature of the detected reference point displayed on the thermal imaging screen.

[Temperature measurement information location display] Temperature measurement information location display has "Upper right corner of image" and "Upper left corner of image" options.

[Emissivity] The default target emissivity is 0.98, and the adjustable range is 0.01-1.

[distance] The default distance between the device and personnel is 0.25 meters.

**Step 3:** Click "Temperature measurement config" to configure the related temperature measurement parameters of camera 01, and click "Save".

Channel name

Enable face detection

Display temperature information

High temperature alarm temperature  °C (30-45)



[Enable face detection] Turn on/off the face detection function.

[Display temperature information] Turn on/off the temperature information display on the video preview interface.

[High temperature alarm temperature] When the detected temperature exceeds the temperature alarm threshold, the device will linkage alarm.

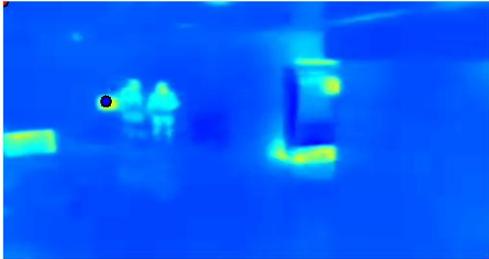
[Drawing Area] Click "Drawing Area", move the mouse to the red frame of the preview screen, click the left mouse button to select the detection area, release the left mouse button, and click "Stop Drawing" to finish drawing the area.

[Clear All] Clear all drawing areas.

**Step 4:** Select "Camera 02", draw the bold point (if there is a black body) and reference point, configure related parameters (shutter parameters, temperature compensation, etc.), and click "Save".

Basic Setup **Temperature measurement config** Linkage Method

Channel name: Camera 02



**Shutter parameter setting**

Bulb setting Bulb setting Shutter parameter reset

Data readout

Minimum shutter time:  S

Maximum shutter time:  S

Manual shutter status:

Data write

Vtemp Change threshold:

Minimum shutter time:  S

Maximum shutter time:  S

**Blackbody parameters**

**Temperature compensation**

**Detector anti-burn setting**

[Draw bold points] When the black body is being corrected, draw at the position of the black body.

[Reference point] When the thermal imaging camera is used to detecting the temperature, it is not recommended to use it in scenes where the ambient temperature changes drastically, such as wind and sunlight reflections. If you must use it in a scene where the ambient temperature changes drastically, you can select a position with a relatively stable temperature as the reference point of the ambient temperature to reduce the equipment misjudgment rate.

**Draw a reference point to be prepared as follows before:**

- 1) A person controls the computer terminal and the other selects the reference point.
- 2) A computer can log in to the camera web.
- 3) Black foam marked with "temperature measurement reference point" in the carton.

**The steps to set the reference point are as follows :**

Step 1: Select the position of the reference point

The position of the reference point must meet the following conditions:

- 1) Within the camera's field of view.
- 2) Within 1-3 meters from the camera.
- 3) Not being blocked.
- 4) Close to the ambient temperature.

Step 2: Place the hand on the selected reference point.

Step 3: Open the camera web terminal (or iVMS client), and preview the thermal imaging channel to check whether the channel (palm) is clear. If it is clear, it indicates that the selected reference point is at the correct position, and stick the black foam marked "temperature measurement reference point" on this position.

If the initially selected position "hand (palm)" is not clear in the thermal imaging channel, please make adjustments until it is clear and then stick black foam (on palm position).

Step 4: Point your finger to the center of the foam. (Try to overlap the palm position and the foam position or align the center point).

Step 5: Click "Configuration" on the computer web interface → "Temperature Measurement" → "Temperature Measurement Configuration" to enter the temperature measurement configuration interface, and select "Channel 02".

Step 6: Click "Draw Reference Point", and select the foam center point in the video screen, then click "Save" to finish.



### Attention

- After the foam is drawn as a reference point, if the position of the foam moves, the reference point needs to be redrawn, otherwise the equipment may misjudge.
- If you cannot stick the foam due to environmental constraints, you can draw a reference point directly at the selected position.

[Shutter parameter setting] The shutter parameter setting can be checked to enable Bulb setting, set manual shutter, data writing and data reading, and reset shutter parameter.

#### Shutter parameter setting

Bulb setting           

**Data readout**

Minimum shutter time	<input type="text" value="10"/>	S
Maximum shutter time	<input type="text" value="90"/>	S
Manual shutter status	<input type="text" value="Auto"/>	

**Data write**

Vtemp Change threshold	<input type="text" value="20"/>	
Minimum shutter time	<input type="text" value="10"/>	S
Maximum shutter time	<input type="text" value="90"/>	S

[Temperature compensation] In the case of harsh environment, increase the compensation temperature to improve the accuracy of temperature measurement. Check enable temperature compensation, and set Compensation method, Compensation temperature, Manual calibration, Environmental mode, Ambient temperature according to the actual environment.

## Temperature compensation

Enable

Environmental parameter reset

Compensation method

automatic

Compensation temperature

0.01 °C

Manual calibration

0.01 °C (-23.0-227.0)

Environmental mode

automatic

Ambient temperature

25.78 °C (-23.0-227.0)

- The compensation mode is automatic: the device will automatically calculate the compensation temperature. If the detected temperature deviates from the actual temperature of the target person, you can set "Manual" or "Blackbody" for temperature calibration.
- The compensation method is manual: manually set the compensation temperature according to the ambient temperature, that is, manually calibrate the temperature. When the compensation temperature is "0", it means the surface temperature of the target human body is measured.
- The compensation method is black body: when black body correction is enabled, select "black body" as the temperature compensation method. The device will calibrate the temperature with reference to the temperature of the black body.

[Detector anti-burn setting] Select anti-burning protection, and set related parameters.

## Detector anti-burn setting

Anti-burn protection open

Parameter writing

Overheated pixel threshold

0

Number of overheated pixels

0

Shutter closing time

1 S

Parameter reading

Overheated pixel threshold

0

Number of overheated pixels

0

Shutter closing time

5 S



### CAUTION

- Please try to avoid aiming the lens at strong light sources, such as the sun, fluorescent lamps and other high-temperature targets. If you must aim the lens at strong light sources, be sure

to enable this function and set relevant parameters to protect the thermal imaging detector.

**Step 5:** Select "Camera 01", and click "Linkage Method" → "Arming Schedule" to set the arming time.

- Method 1: Click the arming time period, manually fill in the start time and end time, and click "Save" after setting. If you need to delete the time period, click the "Delete" button and then reset the time period.
- Method 2: Click the arming time period, the time period will display two circles at both ends, the mouse moves to the circle, will show the left and right direction of the adjustment arrow, and move the adjustment arrow to adjust the arming time.

Basic Setup   Temperature measurement config   **Linkage Method**

---

Channel name

**Arming Schedule**   Linkage Method

Delete    Del All    Select All

Mon	0	2	4	6	8	10	12	14	16	18	20	22	24
Tue	0	2	4	6	8	10	12	14	16	18	20	22	24
Wed	0	2	4	6	8	10	12	14	16	18	20	22	24
Thu	0	2	4	6	8	10	12	14	16	18	20	22	24
Fri	0	2	4	6	8	10	12	14	16	18	20	22	24
Sat	0	2	4	6	8	10	12	14	16	18	20	22	24
Sun	0	2	4	6	8	10	12	14	16	18	20	22	24

**Step 6:** Click "Linkage Mode" and set the linkage mode as required.

Channel name Arming Schedule > **Linkage Method**

<input type="checkbox"/> General Linkage	<input type="checkbox"/> Linkage Alarm Output
<input type="checkbox"/> Upload Via SMTP	<input type="checkbox"/> IO Output
<input type="checkbox"/> Upload Via FTP	
<input type="checkbox"/> Upload Via Cloud	
<input type="checkbox"/> Record Via SDCard	
<input type="checkbox"/> Flash alarm	
<input type="checkbox"/> Sound Alarm	

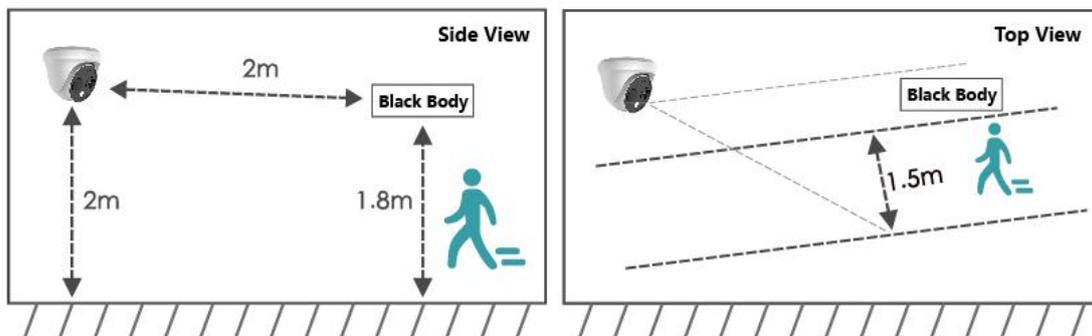
**Step 7:** Click "Save" to complete the configuration.

### 3.2.6. Blackbody Correction

The black body is used to calibrate the temperature measurement accuracy. If there is a black body in the scene, please follow the steps below to place the black body and set the parameters. If there is no black body in the scene, there is no need to configure a black body to avoid affecting the accuracy of temperature measurement.

**1:** Set up the thermal imaging blackbody correction environment as shown in the figure below:

- (1) Install the camera and the blackbody on the same side of the channel.
- (2) Install the camera at 2m from the ground and the blackbody at 1.8m from the ground.
- (3) Align the radiating surface of the black body with the camera lens, and ensure that the distance between the device and the radiating surface of the black body is 2 meters, and the black body is within the video range of the camera.



**Step 2:** Power on the blackbody and set the temperature according to the environment, such as 35°C.

**Step 3:** Log in to the web terminal of the device, and click "Configuration" → "Temperature

measurement" → "Temperature measurement config", then select "Camera 02".

Basic Setup **Temperature measurement config** Linkage Method

Channel name: Camera 02

Shutter parameter setting

**Blackbody parameters**

Enable black body correction

distance: 2 Meter

temperature: 35 °C (30-50)

Emissivity: 0.97

Temperature compensation

Detector anti-burn setting

Draw bold points Draw reference point Clear All

Save

**Step 4:** Draw the position of the blackbody in the video window on the left, and click "Blackbody Parameters".

**Step 5:** Check to enable black body correction, then enter 2 meters for the distance and "35°C" for the temperature.

**Step 6:** Click "Save" to complete the configuration..

## 3.2.7. Device Program Upgrade

**Step 1:** In the main interface click "Configuration→System→System Configuration→Maintenance".

IP Camera Live View Playback **Configuration** admin Help Logout

Local Configuration Device Information Time Settings Dst **Maintenance**

System

System Configuration

Scheduled Reboot

Log Search

Security

Storage

Network

Video

Image

Events

Temperature measurement

Reboot System

Reboot System Reboot

Default

Restore factory settings Fully restore the device parameters to the factory settings

Upgrade

Firmware Browse Upgrade

Connection Status

Note The upgrade process will take about 1-8 minutes, please do not turn off the power. The device reboots automatically after upgrading.

Online Upgrade

Current Version 3516DV300\_IMX335\_AR\_EM\_MTI\_BD\_W\_20.1.42.3 Check

Progress

Connection Status

Note The upgrade process will take about 1-8 minutes, please do not turn off the power. The device reboots automatically after upgrading.

**Step 2:** Clicking "Browse" to add upgrade file package, and upgrading the IPC program. Please do not cut off the power supply during the upgrade process, and wait patiently for the upgrade progress to be completed (Please careful operation, the error of upgrade file will cause

equipment system operate abnormally).

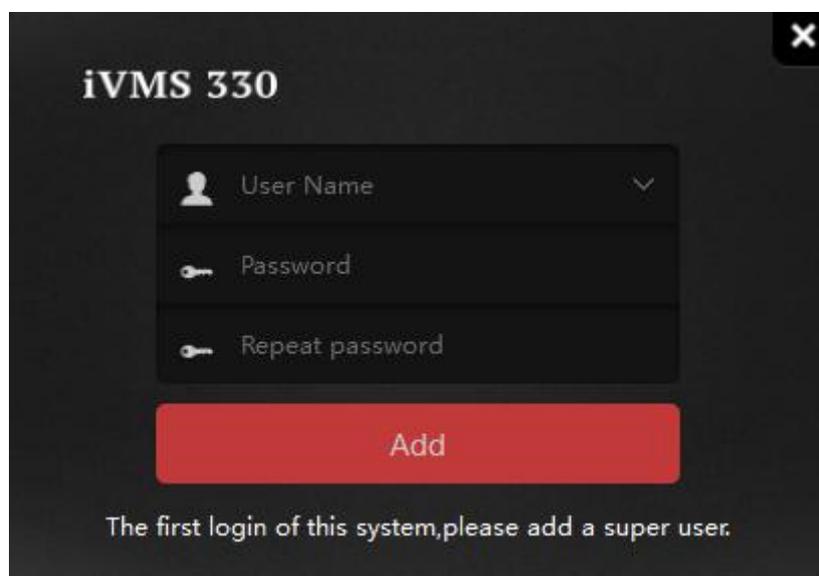
## 3.3. iVMS330 Client Access

### 3.3.1. Download and Login

**Step 1:** Open your browser and visit <http://www.herospeed.net/>.

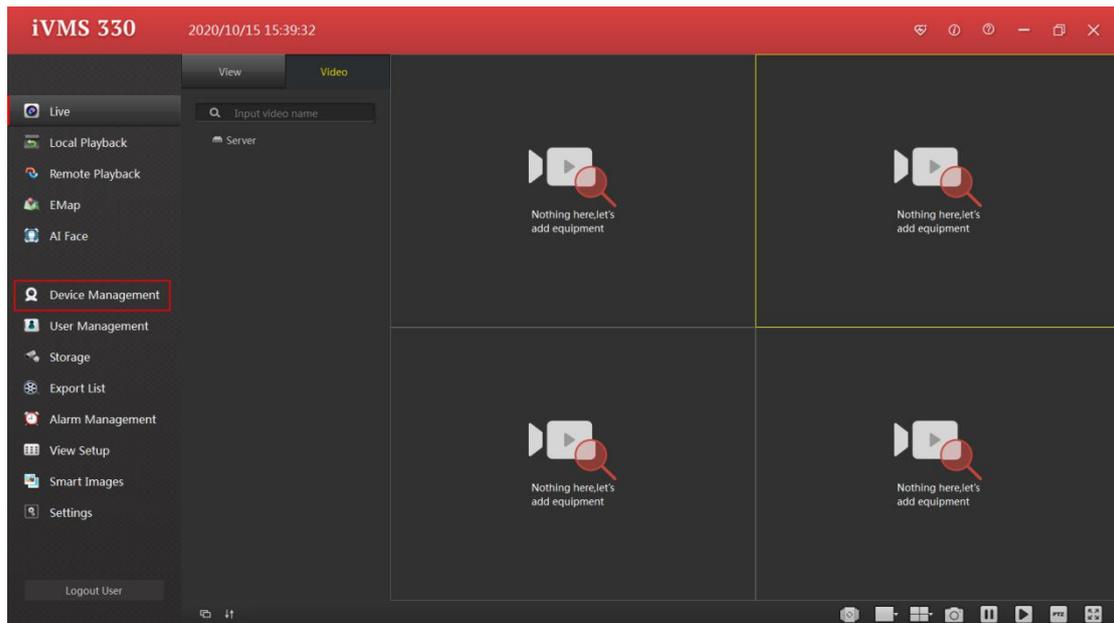
**Step 2:** Click "PC Client" → "iVMS330 (Windows)" to download the latest version of the video management system [iVMS330].

**Step 3:** Follow the prompts to install and add super user to login.

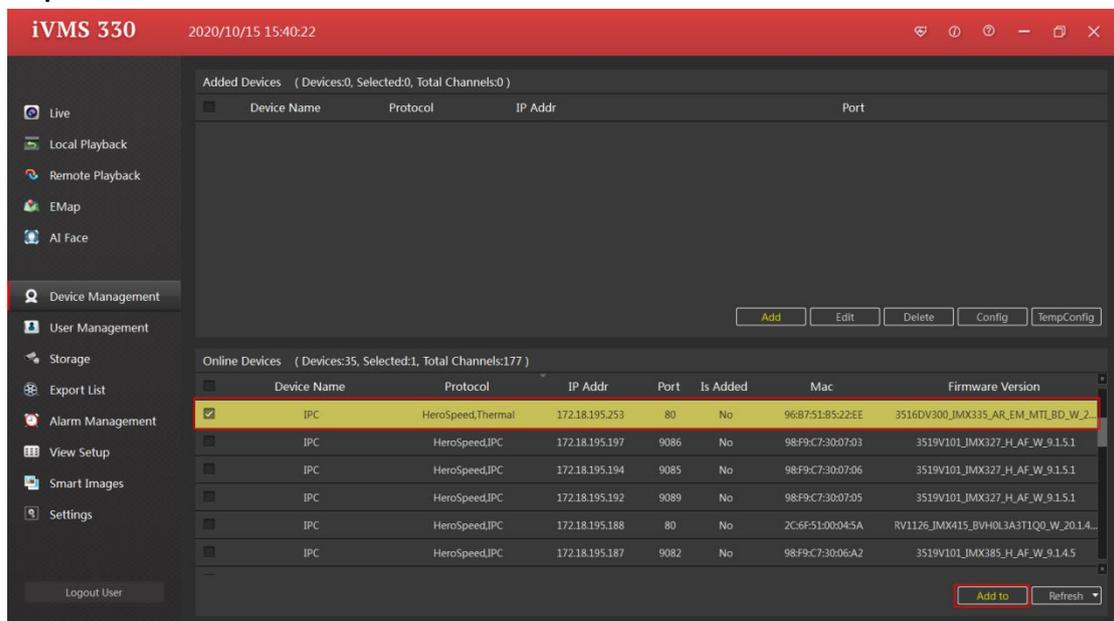


### 3.3.2. Add device

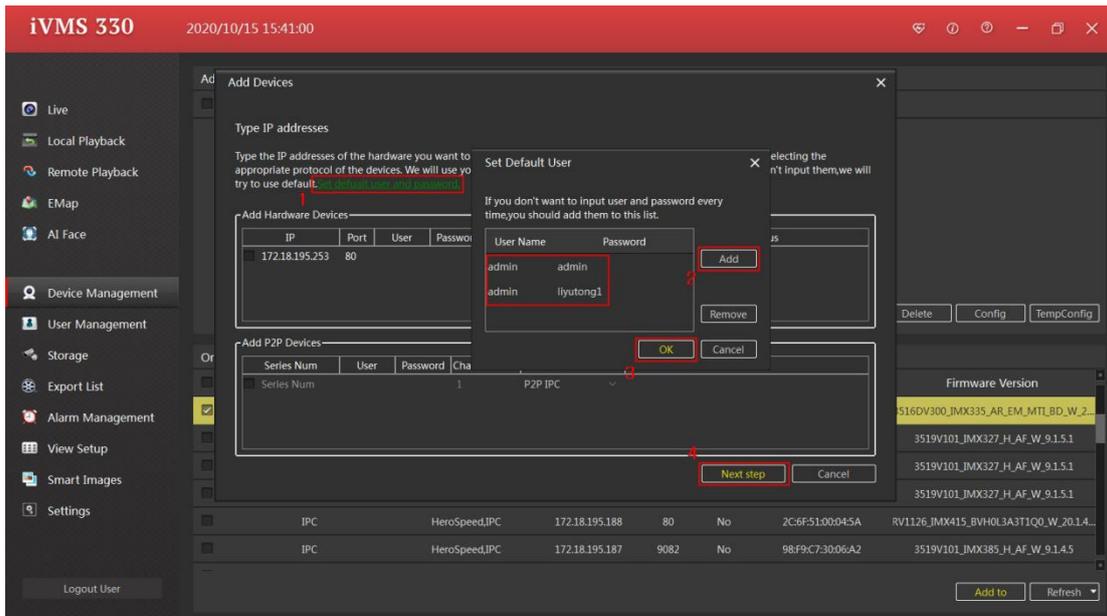
**Step 1:** After logging in to the iVMS330 platform, click "Device Management".



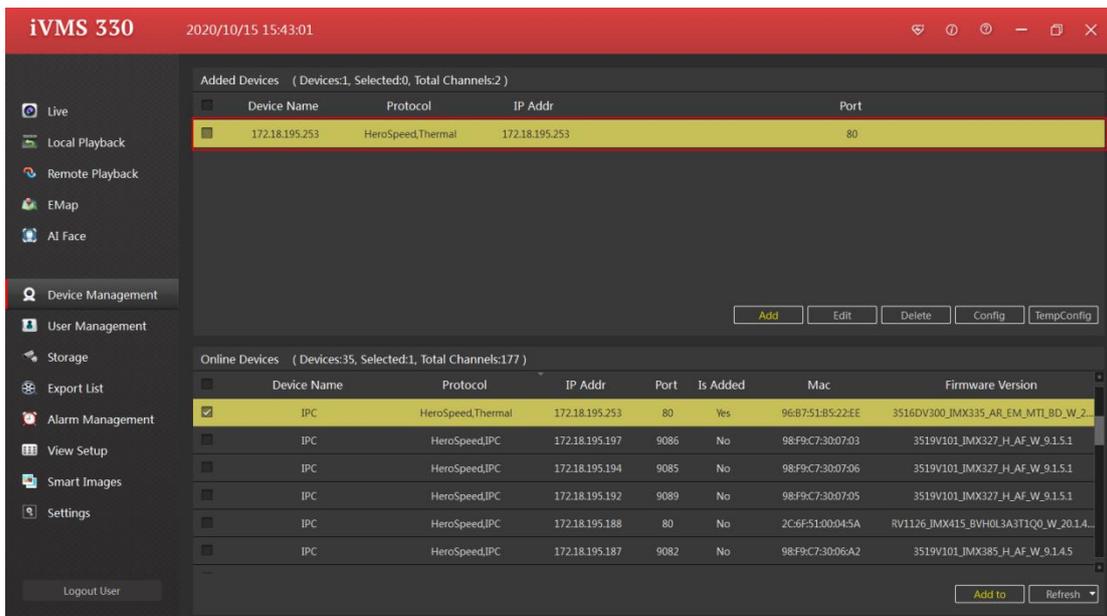
**Step 2:** Select the searched device and click "Add to".



**Step 3:** Click "Set default user and password" → "Add", and enter the user name and password of the added device in the user name and password fields (the default user name of the device is "admin"). Click "OK".

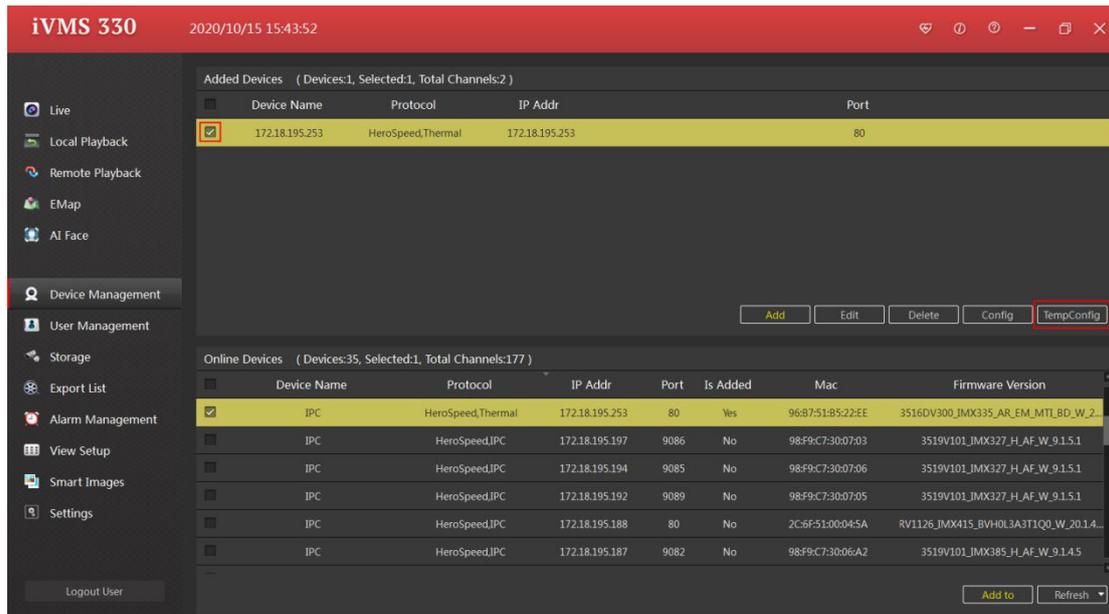


**Step 4:** Click "Next step" → "Add", then the device is added.

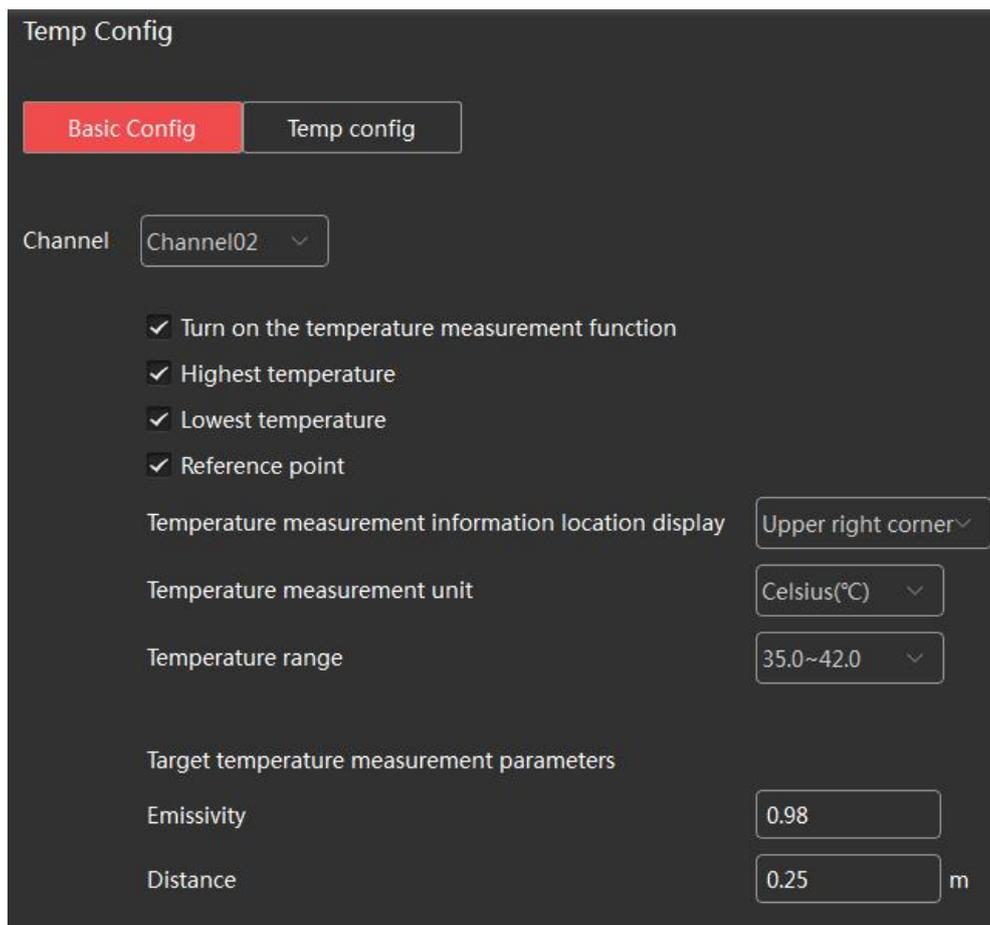


### 3.3.3. Temperature Measurement Configuration

**Step 1:** Select the device to be configured in the device management interface, and click "Temp Config".

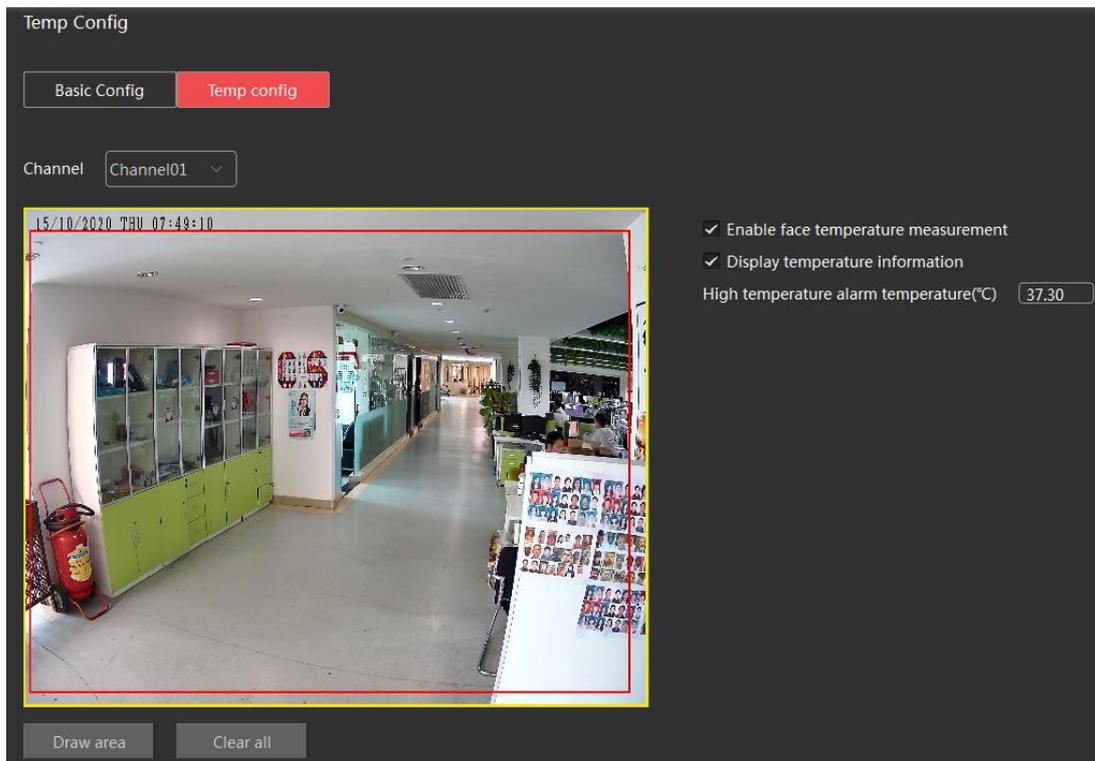


**Step 2:** Select the configuration channel to set the relevant parameters of the basic configuration interface as required, and click "Save".

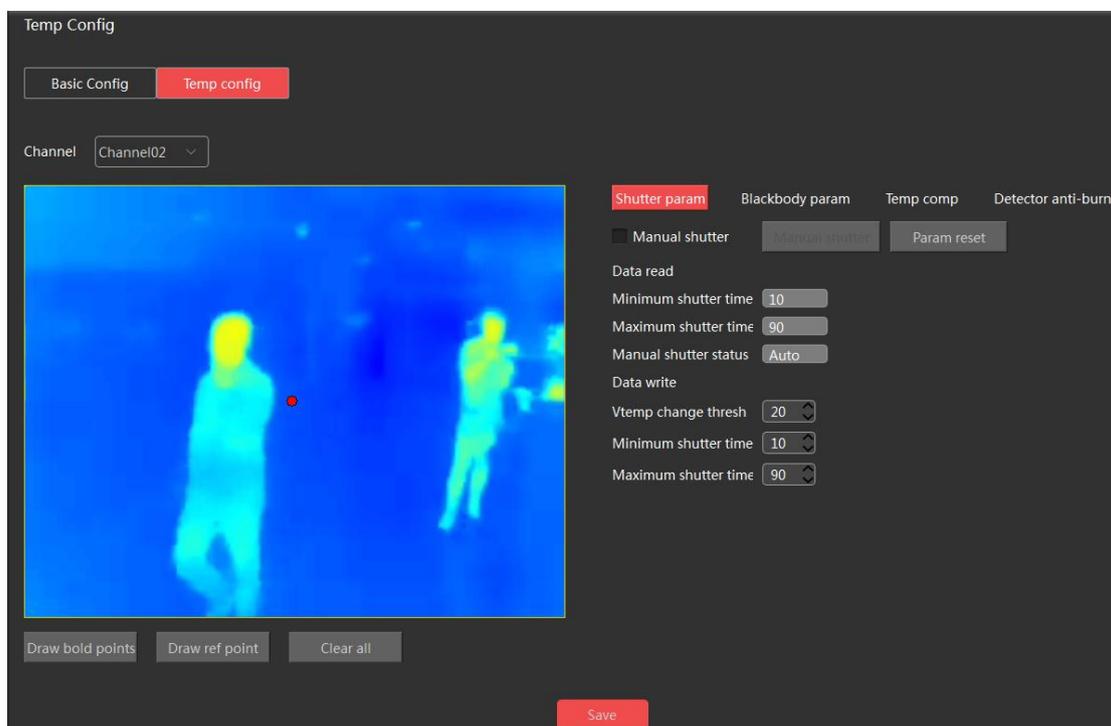


**Step 3:** Click "Temp config" to configure "channel 01" related parameters, and check to enable

"Enable face temperature measurement" and "Display temperature information". Set high temperature alarm, then click "Save".

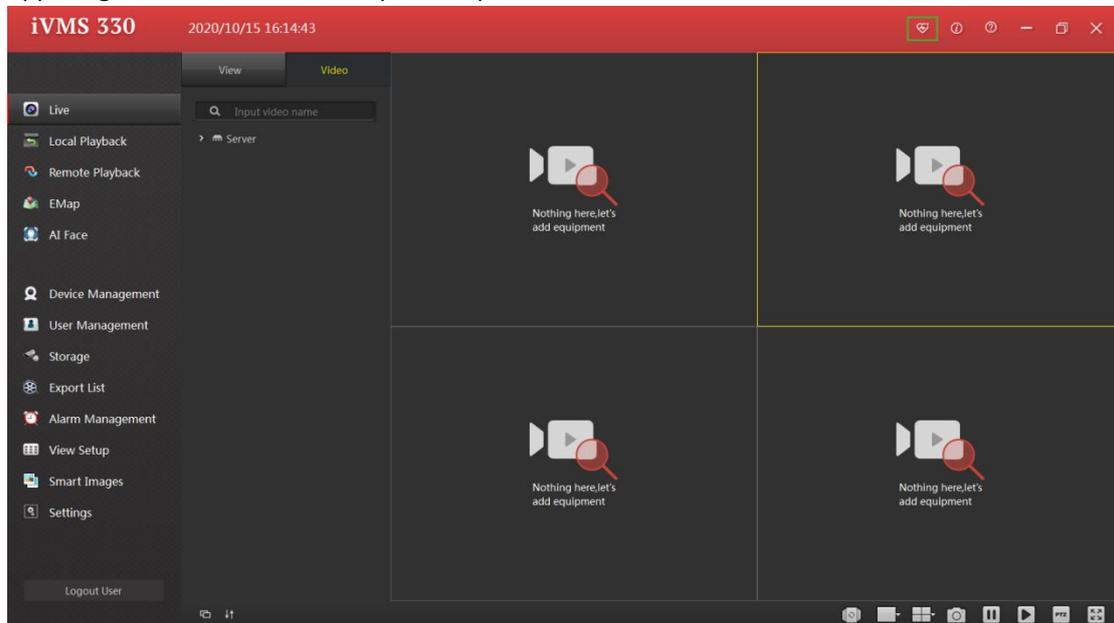


**Step 4:** Select "Channel 02", draw blackbody (if any) points and reference points, configure "shutter parameters", "black body parameters", "temperature compensation parameters" and "detector anti-burn settings", click "Save" Complete the configuration.

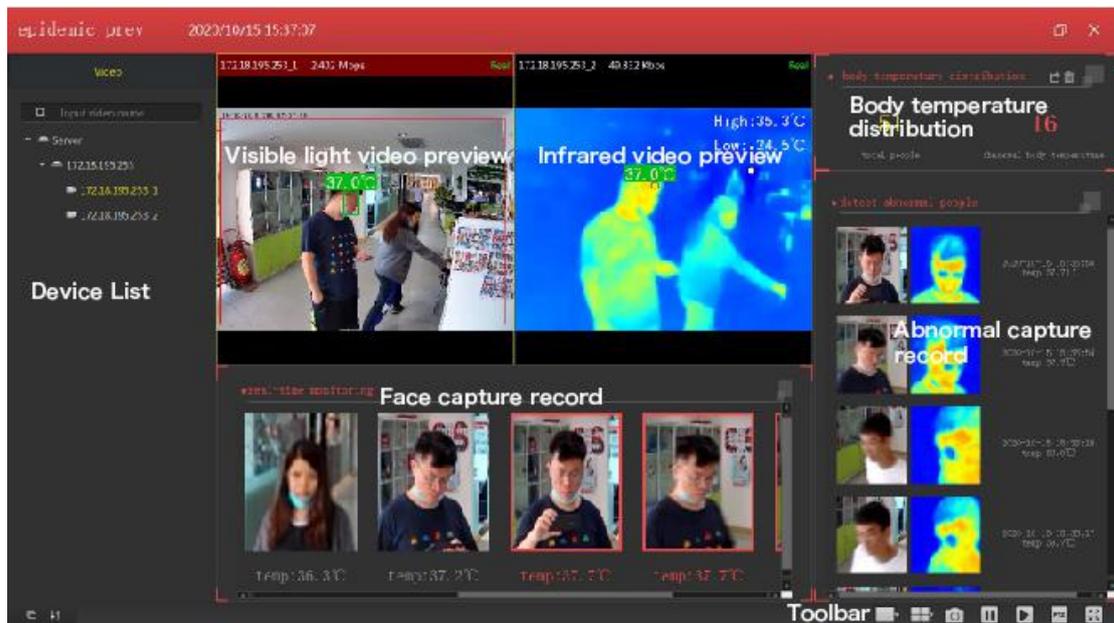


### 3.3.4. Epidemic Prevention and Control

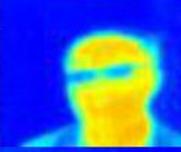
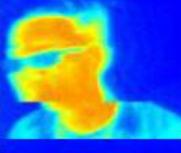
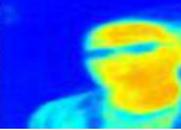
**Step 1:** Enter the main interface after logging in to the iVMS330 platform and click "  " in the upper right corner to enter the epidemic prevention and control interface.



**Step 2:** Expand the device list on the left and drag the preview channel to the middle playback window. The functions of the epidemic prevention and control interface are shown in the figure below.



[Export Capturing Record] Click "  " in the upper right corner, and select the export folder, then click "OK" , as shown in the figure below:

device name	temperature	alarm	time	visible light	Infra-red
172.18.195.253	36.5°C	no	2020-10-15 16:23:12		
172.18.195.253	36.7°C	no	2020-10-15 16:23:13		
172.18.195.253	37.2°C	no	2020-10-15 16:23:13		
172.18.195.253	36.7°C	no	2020-10-15 16:23:13		

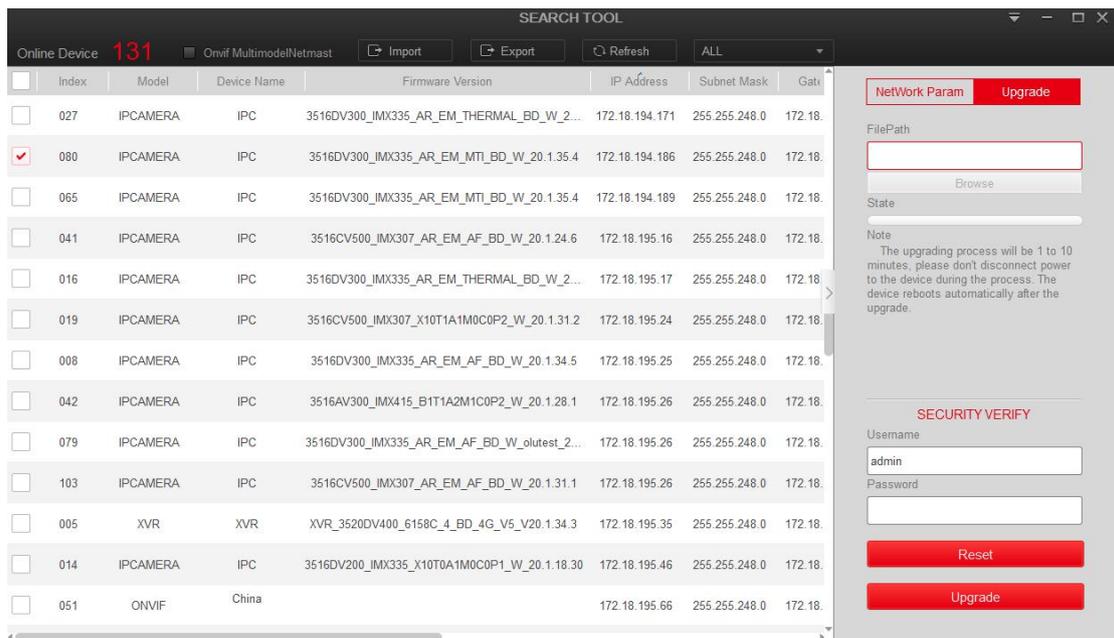
### 3.4. Device Program Upgrade

The device can be upgraded through the web page and "Search Tool". Please refer to "3.2.7. Device Program Upgrade" for details of web page upgrade. The upgrade steps of "Search Tool" are as follows:



**Step 1:** Double-click "Search Tool" to open "Search Tool".

**Step 2:** Select the file to be upgraded and click "Upgrade" on the right side of the interface.



The screenshot shows the "SEARCH TOOL" interface. On the left, there is a table of online devices. The table has columns for Index, Model, Device Name, Firmware Version, IP Address, Subnet Mask, and Gate. The device at index 080 is selected. On the right, there is a "NetWork Param" panel with an "Upgrade" button. Below this, there is a "File Path" field with a "Browse" button. A "State" dropdown is also present. A "Note" section states: "The upgrading process will be 1 to 10 minutes, please don't disconnect power to the device during the process. The device reboots automatically after the upgrade." Below the note is a "SECURITY VERIFY" section with "Username" (admin) and "Password" fields, and "Reset" and "Upgrade" buttons.

Index	Model	Device Name	Firmware Version	IP Address	Subnet Mask	Gate
<input type="checkbox"/>	027	IPCAMERA	IPC	3516DV300_IMX335_AR_EM_THERMAL_BD_W_2...	172.18.194.171	255.255.248.0 172.18.
<input checked="" type="checkbox"/>	080	IPCAMERA	IPC	3516DV300_IMX335_AR_EM_MTI_BD_W_20.1.35.4	172.18.194.186	255.255.248.0 172.18.
<input type="checkbox"/>	065	IPCAMERA	IPC	3516DV300_IMX335_AR_EM_MTI_BD_W_20.1.35.4	172.18.194.189	255.255.248.0 172.18.
<input type="checkbox"/>	041	IPCAMERA	IPC	3516CV500_IMX307_AR_EM_AF_BD_W_20.1.24.6	172.18.195.16	255.255.248.0 172.18.
<input type="checkbox"/>	016	IPCAMERA	IPC	3516DV300_IMX335_AR_EM_THERMAL_BD_W_2...	172.18.195.17	255.255.248.0 172.18.
<input type="checkbox"/>	019	IPCAMERA	IPC	3516CV500_IMX307_X10T1A1M0C0P2_W_20.1.31.2	172.18.195.24	255.255.248.0 172.18.
<input type="checkbox"/>	008	IPCAMERA	IPC	3516DV300_IMX335_AR_EM_AF_BD_W_20.1.34.5	172.18.195.25	255.255.248.0 172.18.
<input type="checkbox"/>	042	IPCAMERA	IPC	3516AV300_IMX415_B1T1A2M1C0P2_W_20.1.28.1	172.18.195.26	255.255.248.0 172.18.
<input type="checkbox"/>	079	IPCAMERA	IPC	3516DV300_IMX335_AR_EM_AF_BD_W_olutes2...	172.18.195.26	255.255.248.0 172.18.
<input type="checkbox"/>	103	IPCAMERA	IPC	3516CV500_IMX307_AR_EM_AF_BD_W_20.1.31.1	172.18.195.26	255.255.248.0 172.18.
<input type="checkbox"/>	005	XVR	XVR	XVR_3520DV400_6158C_4_BD_4G_V5_V20.1.34.3	172.18.195.35	255.255.248.0 172.18.
<input type="checkbox"/>	014	IPCAMERA	IPC	3516DV200_IMX335_X10T0A1M0C0P1_W_20.1.18.30	172.18.195.46	255.255.248.0 172.18.
<input type="checkbox"/>	051	ONVIF	China		172.18.195.66	255.255.248.0 172.18.

**Step 3:** Click "Browse", and select the upgrade file. Click "Open" → "Upgrade", and wait for the device to be upgraded. It will take about 1-8 minutes, then the device will automatically restart after the upgrade.



**CAUTION**

- Please do not power off or disconnect the network during the upgrade process.