



HIKMICRO Studio

Legal Information

© Hangzhou Microimage Software Co., Ltd. All rights reserved.

About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the HIKMICRO website (<http://www.hikmicrotech.com>).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

Trademarks



HIKMICRO

and other HIKMICRO's trademarks and logos are the properties of HIKMICRO in various jurisdictions.

Other trademarks and logos mentioned are the properties of their respective owners.

Disclaimer

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS MANUAL AND THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, ARE PROVIDED "AS IS" AND "WITH ALL FAULTS AND ERRORS". HIKMICRO MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE USE OF THE PRODUCT BY YOU IS AT YOUR OWN RISK. IN NO EVENT WILL HIKMICRO BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA, CORRUPTION OF SYSTEMS, OR LOSS OF DOCUMENTATION, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, OR OTHERWISE, IN CONNECTION WITH THE USE OF THE PRODUCT, EVEN IF HIKMICRO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS.

YOU ACKNOWLEDGE THAT THE NATURE OF THE INTERNET PROVIDES FOR INHERENT SECURITY RISKS, AND HIKMICRO SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER-ATTACK, HACKER ATTACK, VIRUS INFECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKMICRO WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED. YOU AGREE TO USE THIS PRODUCT IN COMPLIANCE WITH ALL APPLICABLE LAWS, AND YOU ARE SOLELY RESPONSIBLE FOR ENSURING THAT YOUR USE CONFORMS TO THE APPLICABLE LAW. ESPECIALLY, YOU ARE RESPONSIBLE, FOR USING THIS PRODUCT IN A MANNER THAT DOES NOT INFRINGE ON THE RIGHTS OF THIRD PARTIES, INCLUDING




WITHOUT LIMITATION, RIGHTS OF PUBLICITY, INTELLECTUAL PROPERTY RIGHTS, OR DATA PROTECTION AND OTHER PRIVACY RIGHTS. YOU SHALL NOT USE THIS PRODUCT FOR ANY PROHIBITED END-USES, INCLUDING THE DEVELOPMENT OR PRODUCTION OF WEAPONS OF MASS DESTRUCTION, THE DEVELOPMENT OR PRODUCTION OF CHEMICAL OR BIOLOGICAL WEAPONS, ANY ACTIVITIES IN THE CONTEXT RELATED TO ANY NUCLEAR EXPLOSIVE OR UNSAFE NUCLEAR FUEL-CYCLE, OR IN SUPPORT OF HUMAN RIGHTS ABUSES.

PLEASE FOLLOW ALL THE PROHIBITIONS AND EXCEPTIONAL CAVEATS OF ALL APPLICABLE LAWS AND REGULATIONS, IN PARTICULAR, THE LOCAL FIREARMS AND/OR HUNTING LAWS AND REGULATIONS. PLEASE ALWAYS CHECK NATIONAL PROVISIONS AND REGULATIONS BEFORE PURCHASE OR USE OF THIS PRODUCT. PLEASE NOTE THAT YOU MAY HAVE TO APPLY FOR PERMITS, CERTIFICATES, AND/OR LICENSES BEFORE ANY PURCHASING, SELLING, MARKETING AND/OR USING OF THE PRODUCT. HIKMICRO SHALL NOT BE LIABLE FOR ANY SUCH ILLEGAL OR IMPROPER PURCHASING, SELLING, MARKETING, AND END USES AND ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES ARISING THEREOF.

IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATTER PREVAILS.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 Danger	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 Caution	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 Note	Provides additional information to emphasize or supplement important points of the main text.

Contents

Chapter 1 Introduction	1
Chapter 2 Running Environment	2
Chapter 3 Service Management	3
Chapter 4 Device Management	4
4.1 Activate Devices	4
4.2 Add Device	5
4.2.1 Add Single or Multiple Online Devices	5
4.2.2 Add Device by IP Address or Domain Name	6
4.2.3 Add Devices by IP Segment	7
4.3 Manage Added Devices	8
4.4 Group Management	8
4.4.1 Group Resources	9
4.4.2 Edit Resource Parameters	10
Chapter 5 Live View	12
5.1 Live View Toolbar	12
5.2 Customize Window Division	13
5.3 Start Live View	14
5.4 Measure Real-Time Temperature	14
5.4.1 Configure Measurements	14
5.4.2 Set Measurement Parameters	16
5.4.3 View Real-Time Temperature	17
5.5 PTZ Control	18
5.5.1 PTZ Control Panel	18
5.5.2 PTZ Control in Window	21
5.5.3 Set Preset, Patrol, and Pattern	21
5.6 Manually Record and Capture	22

5.6.1 Manually Record Video	22
5.6.2 View Local Videos	23
5.6.3 Capture Pictures	23
5.6.4 Capture Raw Images	24
5.6.5 View Captured Images	24
5.7 More Functions	25
Chapter 6 Event Center	27
6.1 Enable Receiving Event from Devices	27
6.2 View Real-Time Events	28
6.3 Search Historical Events	29
6.4 View Pop-up Event Information	30
6.5 Other Functions	32
Chapter 7 Search History Temperature	33
Chapter 8 Log Search	35
Chapter 9 User Management	36
9.1 Add User	36
9.2 Change User's Password	37
Chapter 10 System Configuration	38
10.1 Set General Parameters	38
10.2 Set Image Parameters	39
10.3 Set File Saving Path	39
10.4 Set Alarm Picture Storage	40
10.5 Set Alarm Sound	40
Chapter 11 Operation and Maintenance	41

Chapter 1 Introduction

The client is designed to configure and manage devices in a unified and intuitive manner. It provides multiple functionalities, including device management, live view, video recording, real-time temperature information display, history temperature search, device remote configuration, etc.

This user manual describes the functions, configurations and operation steps of the client. To ensure the properness of usage and stability of the client, refer to the contents below and read the manual carefully before installation and operations.

Chapter 2 Running Environment

The followings are the recommended running environments for installing the client.

- Microsoft Windows 7 / Windows 8 / Windows 10 / Windows 11 (64-bit operating system)
- CPU: i5 or above
- RAM: 8G or above
- Graphics Card: Discrete GPU recommended



Note

Previewing multiple videos and high frame rate demands require higher computer specifications.

Chapter 3 Service Management

The Service is mainly applicable for data storage, data management, and data calculation. With continuous running and processing, it can manage the data, such as event records. It also provides management for user permissions, devices, logs, etc.

- You can view the module running status, and click **Edit Port** to edit its ports. You need to restart the Service to take effect.
- Check **Auto-Launch** to enable launching the Service automatically after the PC started up.



Note

- When exiting the client, you can choose to exit the Service at the same time.
 - The Service should run on the same computer with the client.
-

Chapter 4 Device Management

The client supports thermographic automation cameras. After adding devices, you can perform live view, configure temperature measurements, view real-time temperatures, search history temperatures, etc.

4.1 Activate Devices

For the inactive devices, you are required to create a password to activate them before they can be added to the software and work properly.

Before You Start

Make sure the device to be activated is connected to the network and on the same subnet with the PC where the client runs.

Steps

Note

This function should be supported by the device.

1. On the Maintenance and Management panel on the right side of the client, Click **Device Management > Device** .
 2. Click **Online Device** to show the online device list at the bottom of the page.
 3. Select one or more inactive devices and click **Activate**.
-

Note

If multiple devices are selected, only one dialog window will pop up. Usually, the names and passwords of the selected devices are the same.


4. Create a password and confirm the password.
-

Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the service provider and/or end-user.

5. Click **OK** to activate the device.
-

6. **Optional:** In the Operation column, click  to edit the network information (including device name, IP address, port number, etc.) for the online device.

4.2 Add Device

The client provides various device adding modes including IP/domain and IP segment. It also supports adding detected online devices.

4.2.1 Add Single or Multiple Online Devices

The client can detect online devices which are in the same network as the PC running the client. You can select a detected online device displayed in the online device list and add it to the client. For detected online devices sharing the same user name and password, you can add them to the client in a batch.

Before You Start

- The device(s) to be added are on the same network as the PC running the client.
- The device(s) to be added have been activated.

Steps

1. In the Maintenance and Management area, click **Device Management > Device** .
2. Click **Online Device** to show the online device list at the bottom of the page.
3. In the **Online Device** area, check one or more online device(s), and click **Add** to open the device adding window.
4. Enter the required information.

Name

Create a descriptive name for the device. For example, you can use a nickname that can show the location or feature of the device.

IP Address

Enter the device's IP address. The IP address of the device is obtained automatically in this adding mode.

Port

The port number of the device is obtained automatically in this adding mode and editing is supported.

User Name

Enter the user name of the device(s). By default, the user name is *admin*.

Password

Enter the device password.



Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the service provider and/or end-user.

Import to Group

Check **Import to Group** to create a group by the device name, and import all the channels of the device to the group.

5. Finish adding the device.

- Click **Add** to add the device and back to the device list page.
- Click **Add and New** to save the settings and continue to add other devices.

4.2.2 Add Device by IP Address or Domain Name

If you know the IP address or domain name of the device to add, you can add devices to the client by specifying the IP address (or domain name), user name, password, etc.

Steps

1. In the Maintenance and Management area, click **Device Management > Device**.
2. Click **Add**.
3. Select **IP/Domain** as the adding mode.
4. Enter the required information.

Name

Create a descriptive name for the device. For example, you can use a nickname that can show the location or feature of the device.

IP Address

Enter the device's IP address. The IP address of the device is obtained automatically in this adding mode.

Port

Enter the device port No. The default value is **8000**.

User Name

Enter the user name of the device(s). By default, the user name is **admin**.

Password

Enter the device password.



Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the service provider and/or end-user.

Import to Group

Check **Import to Group** to create a group by the device name, and import all the channels of the device to the group.

5. Finish adding the device.

- Click **Add** to add the device and back to the device list page.
- Click **Add and New** to save the settings and continue to add other devices.

4.2.3 Add Devices by IP Segment

If the devices share the same port No., user name and password, and their IP addresses ranges in the same IP segment, you can add them to the client by specifying information like start IP address and the end IP address, port No., user name, and password of devices.

Steps

1. In the Maintenance and Management area, click **Device Management > Device** .
2. Click **Add**.
3. Select **IP Segment** as the adding mode.
4. Enter the required information.

Start IP

Enter a start IP address.

End IP

Enter an end IP address in the same network segment with the start IP.

Port

Enter the device port No. The default value is **8000**.

User Name

Enter the user name of the device(s). By default, the user name is **admin**.

Password

Enter the device password.



Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.




Proper configuration of all passwords and other security settings is the responsibility of the service provider and/or end-user.

5. **Optional:** Check **Import to Group** to create a group by the device name, and import all the channels of the device to the group.
6. Finish adding the device.
 - Click **Add** to add the device and back to the device list page.
 - Click **Add and New** to save the settings and continue to add other devices.

4.3 Manage Added Devices

After adding devices to device list, you can manage the added devices including editing device parameters, remote configuration, viewing device status, etc.

Table 4-1 Manage Added Devices

Edit Device	Click  to edit device information including device name, address, user name, password, etc.
Delete Device	Check one or more devices, and click Delete to delete the selected devices.
Remote Configuration	On the device list page, click  in the Operation column to perform remote configuration for a device. For details, refer to the user manual of device.
Refresh Device Information	Click  to refresh and get the latest device information.

4.4 Group Management

The client provides groups to manage the added resources in different groups. You can group resources into different groups according to the resources' locations.

Example

For example, on the 1st floor, there are 64 cameras mounted. You can organize these resources into one group (named 1st Floor) for convenient management. You can perform

operations like live view and do other operations of the devices after managing the resources by groups.

4.4.1 Group Resources

The client provides two methods of adding a group: customizing a group or creating a group by device name. After customizing a group, you need to import resources into this group manually. After creating a group by the device name, the resources of the device will be imported into the group automatically. You can choose one method to group your resources according to actual needs.

Steps

1. In the Maintenance and Management area, click **Device Management > Group**.
2. Add a group.
 - **Customize a Group:** Click **Add Group** and create a name for the new group.
 - **Create a Group by Device Name:** Click **Create Group by Device Name** and select an added device to create a new group by the name of the selected device. After creating a group by the device name, the resources (such as encoding channels, alarm inputs, alarm outputs, and access points) of the device will be automatically imported to the group.



Note

Up to 256 groups can be added.

3. After adding a group, you need to import resources into the group.





Note

For one resource, it can be added to different groups.

- 1) Select the type of resources to be imported, and click **Import**.
 - 2) Select the resources to be imported, and click **Import** to import all the selected resources into this group.
4. **Optional:** After adding a group, perform the following operations.

Expand or Fold Resource List



- Click  /  to expand or fold the resource list in the group.
- Right-click a group name and select **Expand All/Collapse All** to delete the group.

Search Resource

Enter the keyword and click  to search target resources.

Remove Resource from Group

Select the resource(s) of a group and click **Delete** to delete the selected resource(s).

- | | |
|---------------------|---|
| Delete Group | <ul style="list-style-type: none">• Select a group and click Delete Group to delete the group.• Hover the cursor over a group and click  to delete the group.• Right-click a group name and select Delete to delete the group. |
| Rename Group | <ul style="list-style-type: none">• Hover the cursor over a group and click  to rename the group.• Right-click a group name and select Rename to rename the group. |


4.4.2 Edit Resource Parameters

You can edit parameters of a resource in a group.

Before You Start

Make sure the resources have been imported to the group.

Steps

1. In the Maintenance and Management area, click **Device Management > Group**.
2. Select a group in the group list and click **Encoding Channel**.
The resources imported to the group will be displayed.
3. In the Operation column, click .
4. Edit the camera information, including the camera name, the stream type, etc.

Stream Type

If **Auto-Change Stream Type** is selected, camera will select a stream type according to its display window size. When the window division number is smaller than 9, the stream type will be main stream, otherwise sub stream.

Rotation Type

Select the rotate type for the live view or playback of the camera as desired.


Protocol Type

Select the transmission protocol for the camera. You should start live view again to take effect.

Streaming Protocol

Select the protocol as RTSP or private for getting stream when live view. You should start live view again to take effect.

5. Click **OK**.
6. **Optional:** Click **Copy to...** to copy the configured parameters to other cameras.
7. **Optional:** Perform the following operations.

- | | |
|-----------------------------|---|
| Remote Configuration | In the Operation column, click  to perform remote configuration for a device. For details, refer to the user manual of device. |
| Update Resource Name | You can update the resource names in a channel.
Select the resource(s) and click Update Camera Name to update the selected camera names. |



Note

This function should be supported by the device.

Chapter 5 Live View

You can view the live video of the added network cameras on the Main View page. And some basic operations are supported, including picture capturing, manual recording, window division, PTZ control, real-time temperature measurement.

5.1 Live View Toolbar

The live-view toolbar can help you operate and manage the live-view window more conveniently. For example, you can capture picture, record the audio, adjust the volume, and split the window by the one-click of the tools on the toolbar.

Table 5-1 Descriptions of Toolbar



















Icon	Function Name	Function Description and Operation
	Stop Live View	Stop all the live view cameras.
	Mute/Cancel Mute	Click  to pop up the volume bar, and click  to cancel the mute and you can adjust the volume. Click  to pop up the volume bar, and click  again to set the live-view cameras as mute.
	Window Division	Select the different window division mode for live view. Click  to select one window division mode (e.g. 9 window division). You can also click Add to customize a window division mode.
	Full Screen	Display the live view in full screen. Press Esc key to exit full screen mode.

Table 5-2 Description of Icons on Live View Window

Icon	Function Name	Function Description and Operation
	Stop Live View	Stop the live view of the current window.
	Capture	Manually capture the pictures for the live view window.
	Capture Raw Image	Manually capture a radiometric image during live view.

Icon	Function Name	Function Description and Operation
	Start Recording/ Stop Recording	Click the first time to start recording and click again to stop recording, and automatically save the recording files to the path you have set.
	Manual Temperature Measurement	Click on the live view image to show the temperature of the selected point. The temperature of the clicked points is displayed on the image, and the display duration is dependent on the device's configuration.
	PTZ Control	Start PTZ mode for speed dome. Click and drag in the view to perform the PTZ control. For details, refer to <i>PTZ Control</i> .
	Two-Way Audio	Start the two-way audio with the device in live view.
	Digital Zoom	Enable the digital zoom function. Scroll the wheel to enlarge the live view image.
	Stream	Select a stream type as needed.


Note

You can also right-click the live video image to enable the functions corresponding to the icons on the live view window.

5.2 Customize Window Division

The client provides multiple kinds of predefined window divisions. You can also customize window divisions as desired.

Steps

1. On the Home page, click **Main View**.
2. At the bottom of the page, click .
3. Click **Add**.
4. Create a name for the custom division.
5. Enter the window numbers in both horizontal and vertical dimensions.
6. **Optional:** Drag your mouse to select the adjacent windows, and click **Joint** to joint them as a whole window.
7. **Optional:** Select the joint window and click **Restore** to cancel the joint.
8. Click **Save**.

Note

Up to 5 window divisions can be customized.

9. **Optional:** After customizing the window division, perform the following operation.



Edit Custom Division Click  > **Edit** to edit the division.

Delete Custom Division Click  > **Edit** > **Delete** to delete the division.

5.3 Start Live View

You can start live view after adding the device(s) to the client so that you can get to know the monitored area well. You can start the live view of one camera or all cameras in a group.

Click **Main View > Device** . On the left resource list, select the resource(s) and start live view by the following methods.

Method	Description	Operation
Start Live View for One Camera	Start the live view of only one camera in a group.	<ul style="list-style-type: none"> Select a camera and drag it to the window. Double-click the camera in a group. Move your cursor over the camera name, and click  .
Start Live View for Camera Group	Start the live view of all cameras in one group synchronously.	<ul style="list-style-type: none"> Select a group and drag it to the window. Double-click the group. Move your cursor over the group name, and click  .

Note

- The client automatically saves the current preview state when exiting and allows you to restore it after restarting.
 - If the device supports stream encryption, and the stream of its live view is encrypted, you are required to enter a stream key for double verification.
-

5.4 Measure Real-Time Temperature

During the live view, you can monitor real-time temperatures. By configuring measurements and measurement parameters, you can also monitor temperatures of specific areas and spot.

5.4.1 Configure Measurements

The measurements include point measurement, line measurement, and area measurement to meet the requirements of different temperature measurement scenes.

1. Start the live view.
2. Right-click a live view window and select **Edit Measurement** to open the configuration window.
3. Switch on **Enable ROI Thermometry** or select the detection mode as **Expert Mode** to measure temperature of interested areas or spots.

Note

- The parameters displayed may vary with different devices.
- This function is not supported by handheld devices.
- When the mode is **Normal Mode**, configuring measurements is not supported.

4. Create a name for the measurement.
5. Perform one of the following operations to draw measurements.


Note

The maximum number of measurements is determined by the device capability.




Figure 5-1 Measurements

Point Measurement



You can customize a measurement point to view the temperature of this point. Click , and click on the live view image to select a point to be monitored. The customized point will be added.

Line Measurement


Click , and then draw a line on the live view image.


Area Measurement

Supports drawing areas (including rectangle, circle, ellipse, and polygon) for measurement. You can draw different area shapes as needed. For example, for an irregular area, you can choose to draw a polygon for measurement.


- Click  and left-click the mouse to draw the area, which will be displayed as a rectangle, circle, or ellipse automatically. Right-click the mouse to finish drawing the area.
- Click  left-click the mouse to draw the first line of the polygon, left-click the mouse again to draw the next line. Right-click the mouse to finish drawing the polygon.

Delete Measurement

Click  to delete the selected measurement.

Click  to delete all measurements.

Edit Measurement

Click , and then select a measurement to adjust. For example, you can drag the end of the measurement line to stretch or shorten it. For the rectangle measurement, you can click the angle of the rectangle to enlarge or narrow it.

5.4.2 Set Measurement Parameters

You can set different measurement parameters for better temperature monitoring.

Open the measurement configuration window.

Set parameters as needed and click **OK**.

Alarm Type

When the max. temperature / avg. temperature / min. temperature is above or below the alarm temperature or pre-alarm temperature, the alarm will be triggered.

Pre-Alarm Temperature

When the max. temperature / avg. temperature / min. temperature is above or below the pre-alarm temperature, the alarm will be triggered.

Alarm Temperature

When the max. temperature / avg. temperature / min. temperature is above or below the alarm temperature, the alarm will be triggered.

Distance

The distance between the object and the thermal device.

Emissivity

Every object has emissivity, which can be affected by surface temperature, surface roughness, degree of oxidation, coating, etc. $\text{Emissivity} = \text{Measured Value} / \text{Standard Value}$. The measured value refers to the temperature measured by infrared measurement devices, and the standard value is measured by contact measurement devices. Since any object is impossible to have no reflection at all, this value is generally less than 1.

Reflected Temperature

When objects with low emissivity are monitored, the reflected temperature can be significantly affected. The way of measuring reflected temperature: first select the location of the measurement target, and then find the reflecting surface according to your position and the measurement target (referring to the optical light path diagram), and measure its temperature by setting the emissivity as 1. The average temperature of the reflecting surface is the reflected temperature.

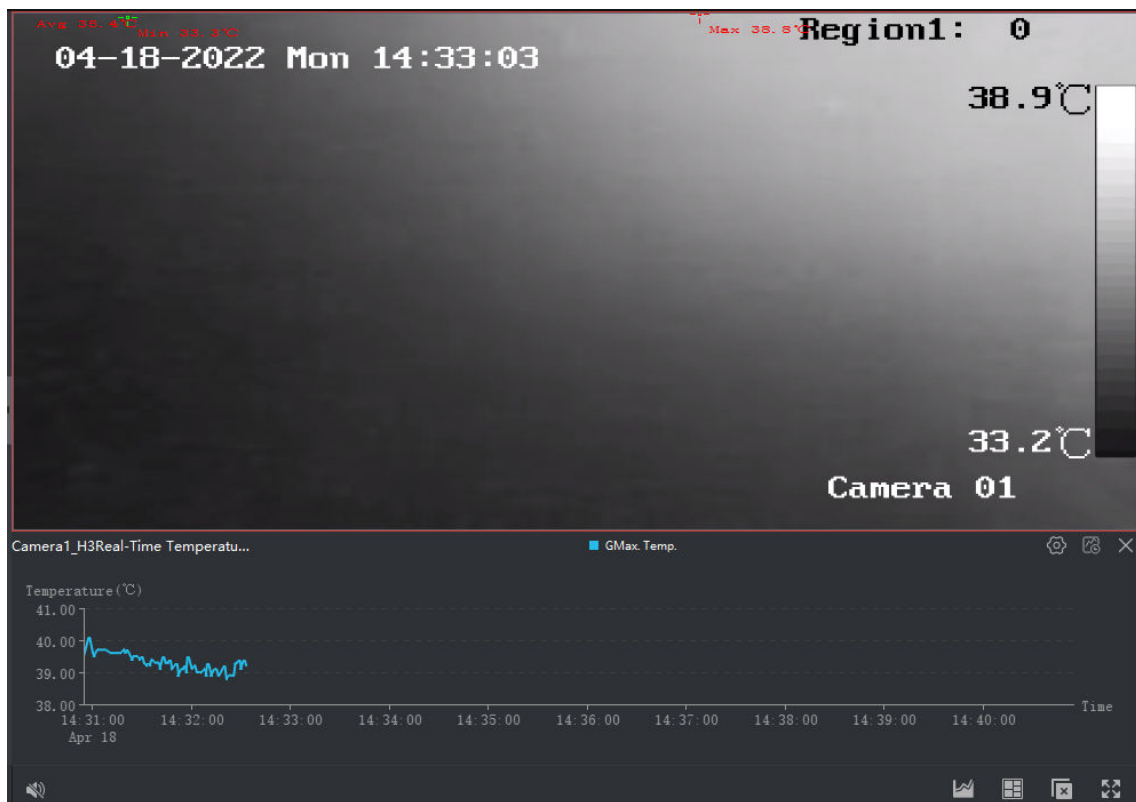
Note

Click **Remote Configuration** to perform remote configuration for a device. For details, refer to the user manual of device.

5.4.3 View Real-Time Temperature

During the live view, you can view global temperature information. If you have configured measurements, you can also view temperature information of specific areas or spots.

Enter the **Main View** module and start the live view of the device(s). The real-time temperature line chart will be displayed.



Note



- If no measurement is configured, the temperature information is global. Under the live view windows, click  to view the global temperature line chart.
- If measurements have been configured, under the live view windows, click  to view the temperature line chart of the measurement(s).
- Move the cursor over the chart to view temperature details.

Figure 5-2 Real-Time Temperature Line Chart

You can perform the following operations as needed.

- Right-click a live view window, and select **Hide Measurement** to hide measurements on the live view image.
- Right-click a live view window, select **Display Temperature Info.**, and select **Max. Temp.**, **Min. Temp.** or **Avg. Temp.** to display the selected temperature type on the live view image.
- Right-click a live view window and select the **Display Mode**.

Live View Mode

The window only display the live view.



Temperature Mode

The widow display only display real-time temperature information.



Note

For the same resource, you can display the content under the two modes in two windows respectively at the same time.

- In the lower right corner of the client, click  to hide or display the temperature line chart.
- Click  to enter **Search History Temperature** module and search history temperature information. For details, refer to [*Search History Temperature*](#).

5.5 PTZ Control

The software provides PTZ control for cameras with pan/tilt/zoom functionality. During the PTZ control, you can set preset, patrol, and pattern, and you can also open a new window for controlling the PTZ.



Note

Some functions should be supported by the device.














5.5.1 PTZ Control Panel









The software provides PTZ control operations via control panel, such as detection, speed, zoom in, zoom out, etc.

Enter the **Main View** module, and select **PTZ Control** to open the PTZ control panel.

The following icons are available on the PTZ control panel.

Table 5-3 Icons on PTZ Control Panel

Icon	Name	Description
	PTZ	Click or hold the left mouse button to turn the PTZ around. Click  to turn around the PTZ horizontally and continuously; click again to stop turning.
	Speed Control	Drag the slider to adjust the PTZ moving speed.
	Zoom In/Out	Zoom in to view close image for details; zoom out to view a panoramic image.
	Focus +/-	Click Focus + to move the focal point forward, and click Focus - to move the focal point backward.
	Iris +/-	Used for adjusting the luminance of the image. The larger the iris is, the more the light enters, and the brighter the image will be.
	3D Positioning	Use the left key of mouse to click on the desired position in the video image and drag a rectangle area in the lower right direction, then the dome system will move the position to the center and allow the rectangle area to zoom in. Use the left key of mouse to drag a rectangle area in the upper left direction to move the position to the center and allow the rectangle area to zoom out.
	Auxiliary Focus	Click to focus automatically.
	Lens Initialization	Initialize the lens and focus again for a clear image.
	Light	Click to fill light.
	Wiper	Use the wiper to clear the dust on the camera lens.
	Manual Tracking	For speed dome with auto-tracking function, enable the auto-tracking (via right-click menu) for it and click the icon to manually track the target by clicking on the video.
	Menu	For analog speed dome, click the icon to display its local menu. For detailed operation of the menu, refer to user manual of the speed dome.

Icon	Name	Description
	One-Touch Patrol	For speed dome with one-touch patrol function, click the icon and the speed dome starts patrol from the predefined preset No.1 to preset No.32 in order after a period of inactivity (park time). For setting the park time, refer to user manual of the speed dome.
	One-Touch Park	For the speed dome with one-touch park function, click the icon and the speed dome saves the current view to the preset No.32. The device starts to park at preset No. 32 automatically after a period of inactivity (park time). For setting the park time, refer to user manual of the speed dome.
	Enable Manual Lens De-Icing Heater	<p>Enable this function to ensure the camera performance by heating.</p> <p> Note</p> <p>We suggest you enable this function when the environment temperature is under 0 °C, otherwise the high temperature may affect the camera work.</p>
	Manual Face Capture	Click this button, and hold the left mouse button to select a face in the image to capture it. The picture will be uploaded to the server for viewing.
	Synchronize FOV	For thermal cameras, click the icon to synchronize the optical channel's field of view with that of the thermal channel.
	Regional Focus	For speed domes, click the icon and draw a rectangle on the image to optimize the focus effect in this region.
	Regional Exposure	For speed domes, click the icon and draw a rectangle on the image to optimize the exposure effect in this region.

5.5.2 PTZ Control in Window

With the PTZ control direction icons in the live view window, you can make the PTZ scan automatically and move to the direction of the icon.

Right-click a live view window, and select **Open PTZ Control**. The live view window will be divided into 3×3 virtual areas which will not be displayed on the interface. Move the cursor over different areas, the PTZ control icons will be displayed.

Click the central area, the PTZ will scan automatically; click the other areas, the PTZ will move to the direction of the icon, and will move quickly via long pressing the mouse.

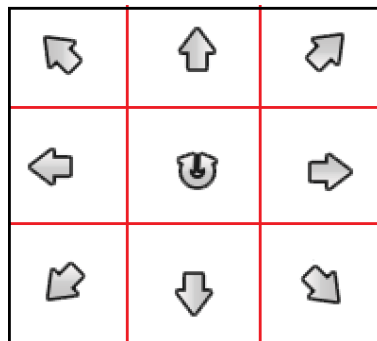
















Figure 5-3 PTZ Control in Window

5.5.3 Set Preset, Patrol, and Pattern

PTZ control supports setting and calling a preset, patrol, and pattern.

On the Home Page, click **Main View > PTZ Control** to show the PTZ Control panel.

Task	Definition	Operation
Preset	A preset links the key regions to mobile PTZ position and status. Monitoring people uses it to positioning to key regions rapidly. By sending setting preset command, mobile PTZ records the position and status of zoom, focus, and iris. When executing calling preset command, mobile PTZ rapidly rolls to the set	Click  . How to Set: select a preset from the preset list→turn the camera to a desired position→click  . Move the cursor over a preset and click  to delete it.
		How to Call: click  .

Task	Definition	Operation
	position and resume to set status.	
Pattern	By recording pattern, the movement path and the dwell time in a certain position can be recorded precisely. By calling pattern, mobile PTZ starts move totally according to the recorded path.	Click  . How to Set: click  to start recording a pattern→click the direction buttons to shape the pattern→click  . Move the cursor over a pattern and click  to delete it.
		How to Call: click  .
Patrol	Patrol is the function that users specify a scan track with a group of defined presets. The patrol between two presets is performed with the set speed and time.	 Note Make sure at least two presets have been set. Click  . How to Set: click  →select presets, and set speed and time→click OK . Move the cursor over a patrol and click  to delete it.
		How to Call: click  .

5.6 Manually Record and Capture

During live view, you can manually record videos, and capture normal/raw images, and then view the recorded videos and captured images on the local PC.

5.6.1 Manually Record Video

You can record the live video on the Main View page manually, and store the video files in the local PC.


Steps


1. Open the **Main View** page.
2. Start the live view.

Note

See ***Start Live View*** for details.


3. Perform one of the following operations to start manual recording.

- Move the cursor to the live view window to show the toolbar and click  on the toolbar.
- Right-click on the live video and click **Start Recording** on the right-click menu.

4. Click  to stop the manual recording.



Note


- During the manual recording, the icon of the camera turns to .
 - The saving path of the recorded video files can be set on the **System Configuration > File** page.
-

The recorded video file is automatically saved to the local PC, and a small window with the saving path information pops up in the lower-right corner of desktop. Click **Open Folder** to open the folder of the recorded file on the local PC.

5.6.2 View Local Videos

You can view the recorded videos stored on your local PC.

Steps

1. Click  > **File > Open Video File** in the upper-right corner.
2. Select the camera to search the recorded video files.
3. Specify the start time and end time in the lower-left corner for the searching.
4. Click **Search**.

The video files recorded between the start time and end time displays in the thumbnail format on the page.

5. **Optional:** Perform the following operations after the search.

Playback	Double-click a normal video file to start local playback. During the playback, operations including pause, stop, speed, single frame, digital zoom, volume control, capture, and opening file are supported.
Delete Video File(s)	Select one or multiple video files, and click Delete .
Save Video File(s)	Select one or multiple video files, and click Save as .

5.6.3 Capture Pictures


You can capture pictures during the live view.

Steps

1. Open the **Main View** page.
2. Start the live view.

Note

See [*Start Live View*](#) for details.

3. Perform one of the following operations to capture pictures.
 - Move the cursor to the live view window to show the toolbar and click  on the toolbar.
 - Right-click the live video and click **Capture** on the right-click menu.

The captured picture is automatically saved to the local PC, and a small window with the picture thumbnail and saving path information pops up in the lower-right corner of the desktop. Click **Open Folder** to open the folder of the captured image on the local PC.

Note

The saving path of the captured pictures can be set on the **System Configuration > File** page.

5.6.4 Capture Raw Images


You can capture raw images during the live view.

Steps

1. Open the **Main View** page.
 2. Start the live view.
-

Note

See [*Start Live View*](#) for details.

3. Perform one of the following operations to capture raw images.
 - Move the cursor to the live view window to show the toolbar and click  on the toolbar.
 - Right-click the live video and select **Capture Raw Image**.

The captured picture is automatically saved to the local PC, and a small window with the picture thumbnail and saving path information pops up in the lower-right corner of the desktop. Click **Open Folder** to open the folder of the captured image on the local PC.


Note

The saving path of the captured pictures can be set on the **System Configuration > File** page.

5.6.5 View Captured Images

The normal/raw images captured during the live view are stored on the PC running the software. You can view the captured images if needed.

Steps

1. Click  > **File** > **Open Captured Image** in the upper-right corner.
2. Select the camera to search the captured images.
3. Specify the start time and end time in the lower-left corner for the searching.
4. Click **Search**.

The images captured between the start time and end time display in thumbnail format on the page.

5. Perform the following operations after the search.

Only Display Normal/Raw Images	Select Image/Raw Image .
Preview Image	Double-click a normal image thumbnail to enlarge it for a better view.
Delete Image(s)	Select one or multiple captured image(s), and click Delete .
Save Image(s)	Select one or multiple captured images, and click Save as to save a new copy of the selected image(s).

5.7 More Functions

There are some more functions supported in the live view, including two-way audio, setting stream type, and locking the client.

Two-Way Audio

Two-way audio function enables the voice talk of the camera. You can get not only the live video but also the real-time audio from the camera. If the device has multiple two-way audio channels, you can select a channel to start two-way audio.



Note

- The two-way audio can be used for only one camera at one time.
 - When a device (channel) has started two-way audio with a client, the new request for two-way audio will be failed.
-

Adjust Volume

Right-click a live view window and select **Audio On** to adjust the volume. Right-click again and select **Mute** to disable the audio of the live view.

Full Screen


Right-click a live view window and select **Full Screen** to enter the full-screen mode. Right-click again and select **Quit Full Screen** or press **Esc** to exit.

Lock/Unlock Client


At the top of the client, click  to lock the client.

Click **Unlock** to enter the login password and click **Unlock** to unlock the client.

Edit Resource Name

In the resource list, move the cursor over a camera name, and click  > **Modify Camera Name** to edit the name.

Remote Configuration



In the resource list, move the cursor over a camera name, and click  > **Remote Configuration** to perform remote configuration for a device. For details, refer to the user manual of device.

Set Stream Type

Auto-Change Stream Type

Camera selects stream type according to its display window size. When the window division number is smaller than 9, the stream type will be main stream, otherwise sub stream.

Three ways are provided for setting stream type:

- In the resource list, hover the cursor on a camera's name and click  > **Stream** to select a stream type, or click **Auto-Change Stream Type**.
- Click  in the live view tool bar and select a stream type.
- Right-click a live view window and click **Stream** to select a stream type for the camera.



Note

This function needs to be supported by device.

Lock Client in Full Screen Mode

Press **Ctrl** and **L** on your keyboard to lock the client after entering the full screen mode.

After locking the client, you will be unable to operate the client including the other windows in the current window division mode. Click **Unlock** on the top and enter the login password for the client and click **Unlock** to unlock the client.

Chapter 6 Event Center

The event information received by the client displays in Event Center. In the Event Center, you can check the detailed information of the real-time and historical events, view the event related video, and so on.

Note

The client will receive alarms (temperature measurement alarm, temperature sudden change alarm, temperature difference alarm, and device offline alarm) uploaded by the device. For details about alarm configuration, refer to the user manual of the device.

6.1 Enable Receiving Event from Devices

Before the client can receive event notifications from the device, you need to arm the device first.

Steps

1. Click  > Tool > Device Arming Control .

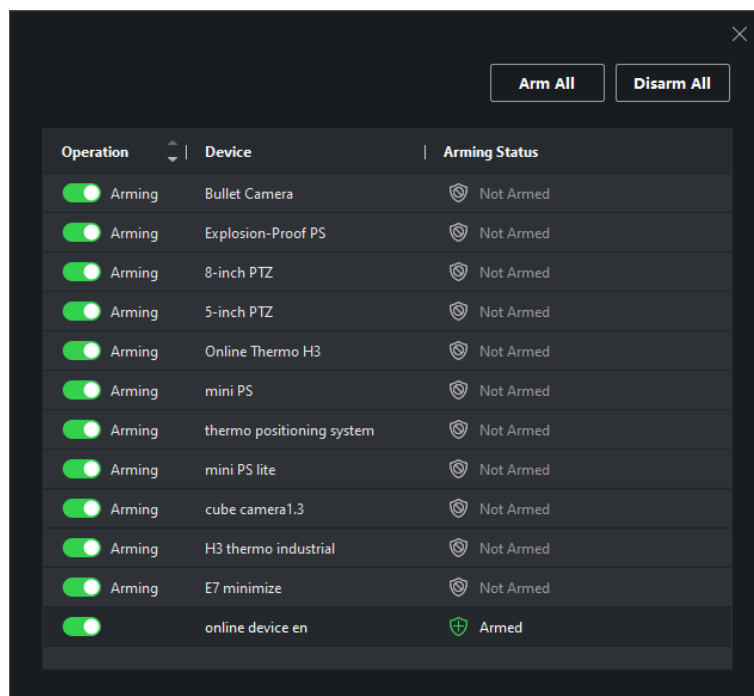


Figure 6-1 Device Arming Control

2. Perform the following operations as needed.

Arm All / Disarm All	Click Arm All to arm all the added devices; click Disarm All to disarm all the added devices.
Arm/Disarm One Device	Turn on the switch in the Operation column to arm the device; turn off the switch to disarm the device.

Note

The device will be automatically disarmed once it is deleted or disconnected.

6.2 View Real-Time Events

You can view the real-time event information (including event source, event type, event time, event details, etc.) received by the client.

Before You Start

Enable receiving events from devices so that the client can receive events from the device, see [*Enable Receiving Event from Devices*](#) for details.

Steps

1. Click **Event Center > Real-Time Event** .

The real-time event information (including event source, event type, event time, event details, etc.) will be displayed on the table.

Note

- Right-click the table header of the event list to customize the event related items to be displayed on the event list.
 - Up to 1,000 events can be displayed on the event list.
-

Event Source

The resource that triggers the event, such as the device and channel.

Event Time

The time when the platform receives the event.

2. **Optional:** Enter keywords in the search box on the upper right to filter the events.
3. Select an event in the event list to view the event details.

Note

- The event details include the captured picture, live video, and other event information.
 - To view the captured pictures, you need to configure picture storage in the system configuration. See [*Set Alarm Picture Storage*](#) for details.
-

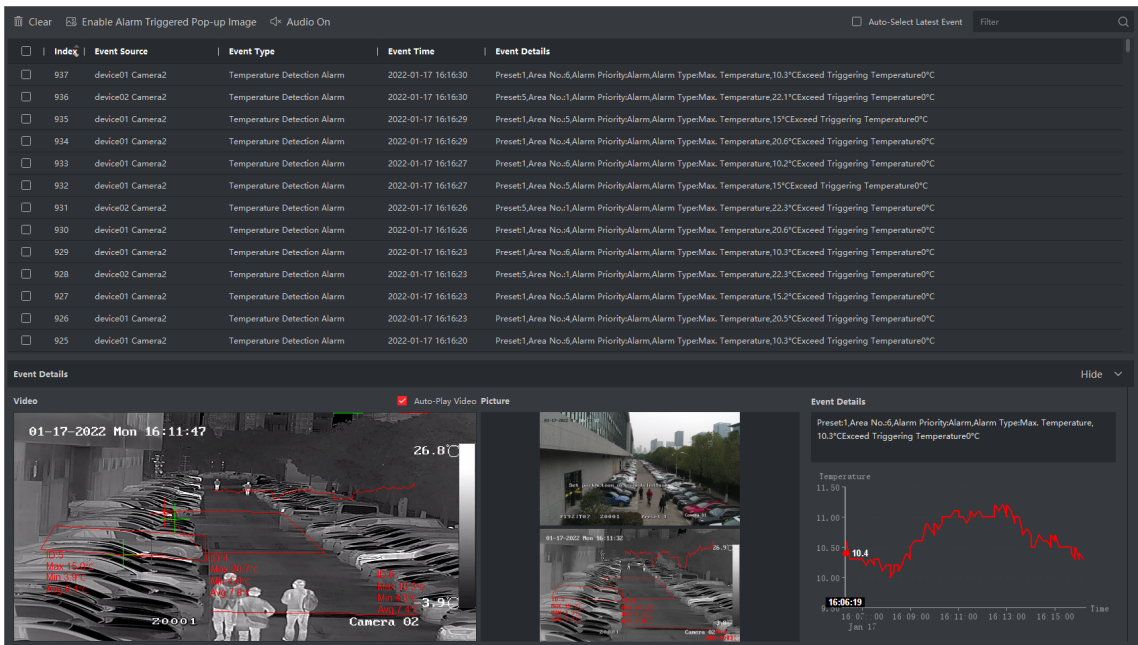


Figure 6-2 View Real-Time Events

4. Optional: Perform the following operations if necessary.

- Auto-Play Video**

Check **Auto-Play Video** to automatically play video when displaying event details.
- Select the Latest Event Automatically**

Check **Auto-Select Latest Event** to select the latest event automatically and the event details will be displayed.
- Clear Events**

Click **Clear** to clear the all the events in the event list.
- Enable/Disable Alarm Audio**

Click **Audio On/Mute** to enable/disable the audio of the event.

6.3 Search Historical Events

You can search and view historical events by setting search conditions including time, resource, etc. and export the searched events.

Steps

1. Click **Event Center > Search Alarm Event** or **Event Center > Search Event Diagnosis** to enter the event search page.
2. Set the filter conditions.

Time

The time when the client receives the event.

Resource

The root nodes are the group names, and the child nodes are the channels.

Type

The type refers to the cause of the diagnosis event.

3. Click **Search** to search the events according the set conditions.

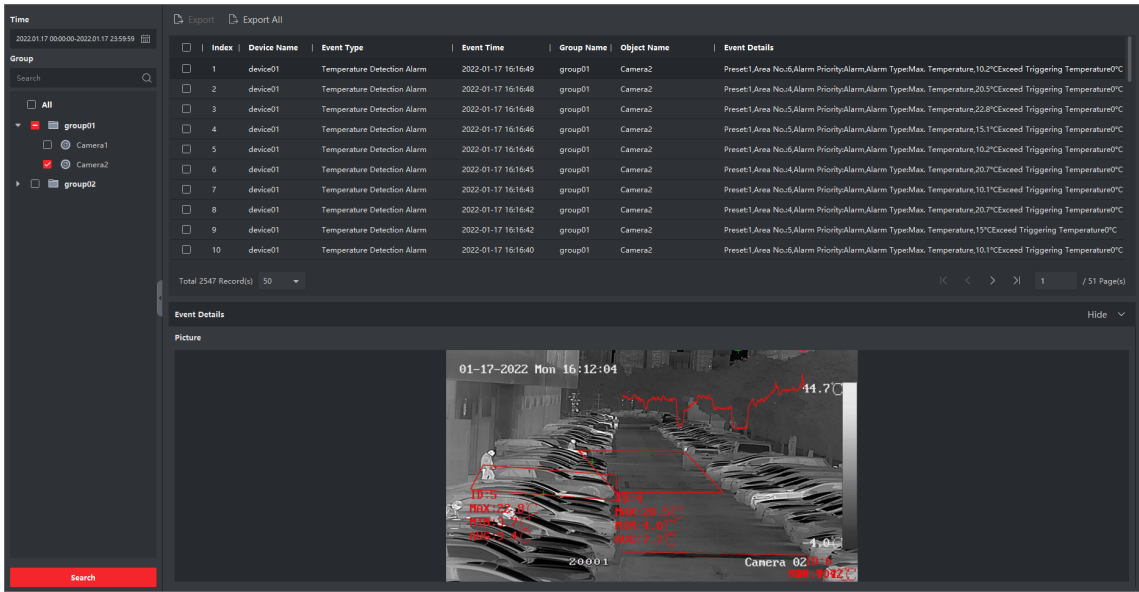


Figure 6-3 Search Historical Alarm Events



Note

Right-click the table header of the event list to customize the event related items to be displayed in the event list.

4. **Optional:** Select an event in alarm event list to view the captured picture(s).



Note

To view the captured picture(s), you need to configure picture storage in the System Configuration.

5. **Optional:** Click **Export** or **Export All** to export selected or all events to the local PC.



Note

You can choose to export all, only logs, or only pictures of the searched alarm events.

6.4 View Pop-up Event Information

If you have enabled event notification and set Alarm Triggered Pop-up Image as its linkage action, a window will pop up when the event happens, showing the event information, related pictures, and related videos.

Go to **Event Center > Real-Time Event** , and then click **Enable Alarm Triggered Pop-up Image** to enable the function.

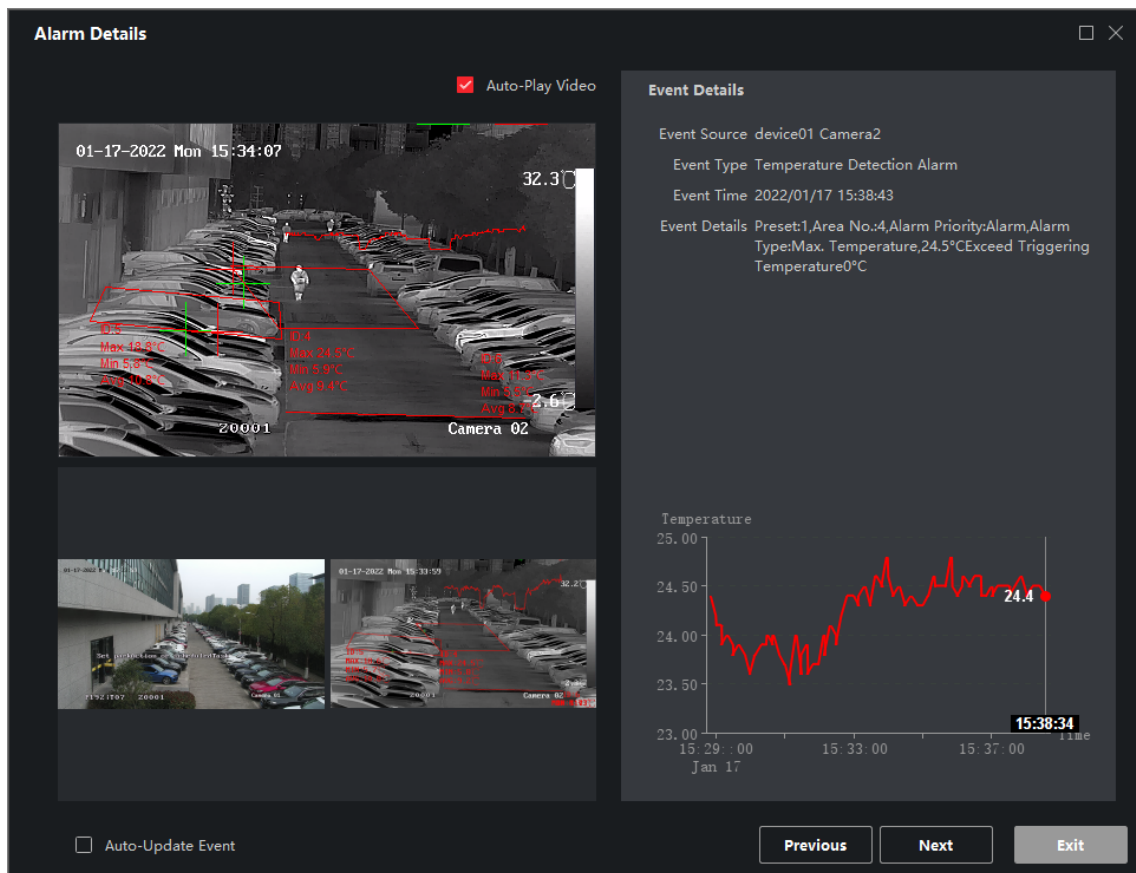


Figure 6-4 The Pop-up Event Information

You can view the event related video footage (from 30 s before the event to the end of the event), the picture captured when the event happens, as well as the event details such as event source, event type, event time, etc.

Note

- When the window is not closed, you should click **Next** to view the new event information if a new event is triggered.
- If you have exited the window, when a new event is triggered, the new event information will pop up; if you haven't clear the event information, you can click **Previous** to view the previous event information.

You can check **Auto-Update Event** to enable the window to automatically switch to the latest event information when a new event is triggered.

6.5 Other Functions

You can enable the alarm output function for specific resource.

After the alarm output is enabled, when an alarm or pre-alarm is triggered, the client will caution the user.

Operation: click  > **Tool > Alarm Output Control** . Select a resource and switch on  in the Operation column.

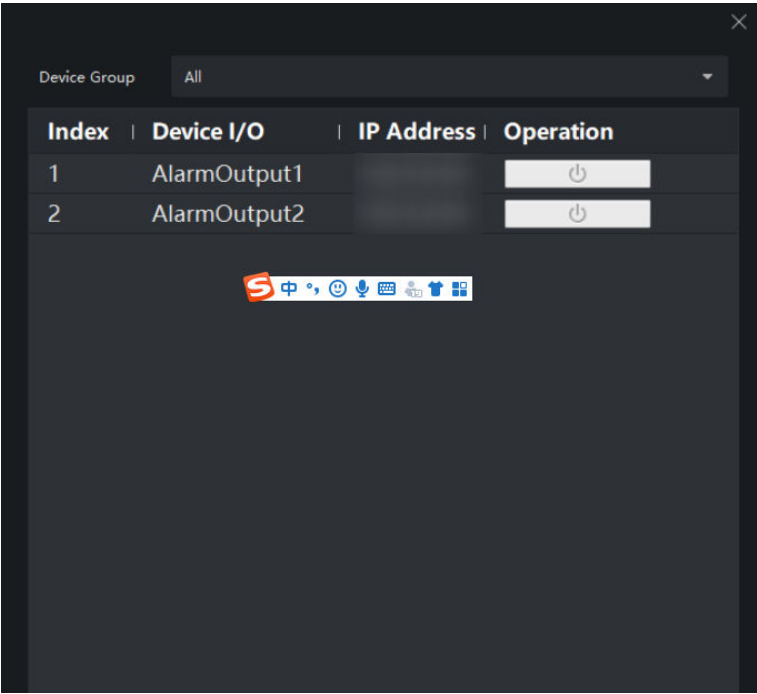


Figure 6-5 Alarm Output

Chapter 7 Search History Temperature

You can search history temperatures according to the comparing variable, camera, temperature type, report type, and temperature measuring time.

Before You Start

Make sure that you have enabled the temperature storage in the system configuration. See [Set General Parameters](#) for details.

Steps

1. Open the **Search History Temp.** page.
2. Set the search conditions.

Comparing Variable

The variable for temperature comparing.

Time

Select a measurement under one camera, and temperature data collected via the selected measurement during two specified time periods will be displayed and compared.

Measurement

Select two measurements under one or two cameras, and temperature data collected via the two measurements during the same time period will be displayed and compared.

Camera

The root nodes are the group names, and the child nodes are the cameras. Under the cameras you can select the measurements, and under the measurements you can select the temperature types to be displayed (max. temperature, min. temperature, and average temperature).

Report Type

You can select the daily/weekly/monthly/annual report where the temperature data collected every minute/hour/day/month will be shown.

Measurement Time

The temperature data collected during this period will be displayed and compared.



Note

When the comparing variable is set as **Time**, two time periods need to be specified.

3. Click **Search** to display the temperature report on the right.

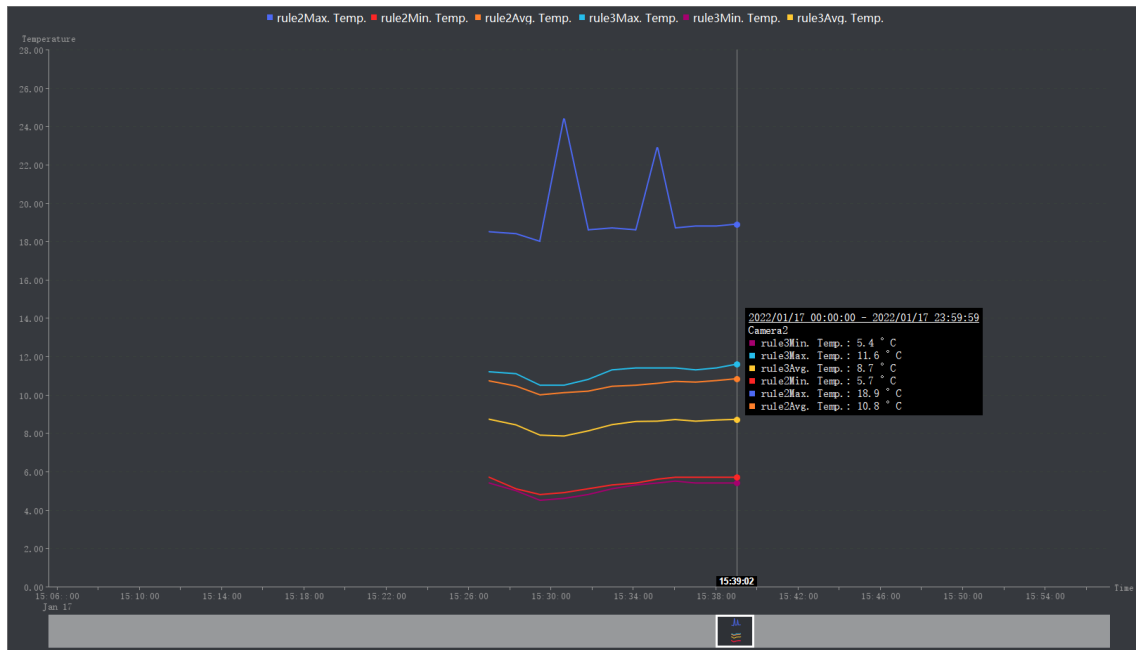


Figure 7-1 History Temperature Report

Note


Up to six temperature curves can be shown. The x coordinates represent the time when the temperature data is collected, and the y coordinates represent the temperatures. Move the cursor along the temperature curve, the corresponding temperature will be shown.

4. **Optional:** Drag the two vertical edges of the white rectangular frame left/right to adjust the time range of the report.
5. **Optional:** Click **Export** to export the report in CSV format, or click **Export Original Record** to export the original data in CSV format.

Chapter 8 Log Search

Two log types are provided: operation log and system log. The operation logs refer to the normal operations that the user did on the client, such as adding device, resetting password, etc.; and the system logs record the system information, such as login, logout, locking and unlocking, etc. You can search the log files by conditions including the time and user, and view the log details.


Steps

1. Enter the **Log Management** page.
2. Click  to set the start time and end time.



Note

The time period should not be longer than 1 month.

3. Select a user to search the log files which are generated when this user operate on the client.
4. Select **Operation Log** and/or **System Log** as the log type(s).
5. Click **Search**.
6. **Optional:** Click  on each table header and select to filter the logs.
7. **Optional:** Click **Back Up Logs** to save the searched logs to the local PC in XML format.

Chapter 9 User Management

To improve the system security, the administrator should create different accounts for different users, and assign different permissions to the users. To avoid multiple people sharing one user account, managing the user accounts periodically is recommended.

9.1 Add User

The super user and administrator can add new users, and assign different permissions for different users if needed.

Steps

1. Enter the **Account Management** page.
2. Click **Add**.
3. Set the account information.

User Type

Administrator

The administrator account has all permissions by default, and can modify the passwords and permissions of all operators and its own.

Operator

The operator account has no permission by default and you can assign the permissions manually. An operator can only change the passwords of its own account and the accounts which are added by it.

User Name

The maximum length is 16 bytes.

Password

Enter the password and confirm.



Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (8 to 16 characters, including at least two kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

4. Check to set permissions for the account.

Function Permission

The added user will have permissions to the checked functions.

Resource Permission

Select a function permission, and check the corresponding resources on the right; the added user will have permissions to the selected function of the checked resources.

5. **Optional:** Click **Default** to restore the default permission settings of this user.

6. Click **Save**.



Note

Up to 50 user accounts can be added for the client software.

9.2 Change User's Password

The administrator can change the operator's password without entering the old password, while the administrator should enter the old password when changing the password of itself.

Before You Start

The user has been added.

Steps

1. Enter the **Account Management** page.

2. Select the user to change the password, and click **Change Password**.



Note

3. **Optional:** Enter the old password.

4. Enter the password and confirm the password.



Caution

The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (8 to 16 characters, including at least two kinds of following categories: upper case letters, lower case letters, numbers, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system, changing the password monthly or weekly can better protect your product.

Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

5. Click **OK**.

Chapter 10 System Configuration

You can configure system settings including the alarm sound, file saving path, etc.

10.1 Set General Parameters

You can configure the frequently used parameters, including the maximum mode, network performance, etc.

Steps

1. Select **System Configuration > General**.
2. Set the general parameters.

Save Data for

The time for keeping the data. Once exceeded the time, the data will be deleted.

Save Temperature Data

After it is enabled and the interval is set, the temperature data collected via the devices will be automatically saved according to the set interval.



Note

Temperature data collected via one device and one measurement every day will occupy about 0.78 MB of storage space on your disk.

Temperature Unit

Select the temperature unit to be displayed on the Client as needed.



Note

The new setting will take effect for other modules after restarting the client, but it will take effect immediately in the Event Details column on the Real-Time Event page.

Maximum Mode

Select **Maximize** or **Full Screen** as the maximum mode. **Maximize** mode can maximize the display and show the task bar. **Full Screen** mode can display the client in full-screen mode.

Network Performance

Set the network conditions to **Normal**, **Better** or **Best**.


3. Click **Save**.
4. Click **Default** to restore the default settings.

10.2 Set Image Parameters

The image parameters that can be configured include the picture type, view scale, play performance, etc.

Steps

1. Click **System Configuration > Image**.
2. Configure the image parameters.


Parameter	Description
Picture Type	The format of the captured picture file. It is JPEG by default.
View Scale	The view scale of the video in live view or playback. It can be set as Full Screen, 4:3, 16:9, or Original Resolution .
Play Performance	The play performance of the live video. It can be set as Shortest Delay, Balanced, or Fluency , and is set as Balanced by default.
Hardware Decoding	<p>Enable or disable the hardware decoding as needed.</p> <p> Note When the graphics card memory is insufficient or the graphics card performance is poor, it is not recommended to enable the hardware decoding.</p>

3. Click **Save**.
4. Click **Default** to restore the default settings.

10.3 Set File Saving Path

The video (manually recorded during live view) and captured normal/raw images are stored on the local PC. The saving path of these files can be set.

Steps

1. Click **System Configuration > File**.
2. Click  and select a local saving path for the files.
3. Click **Save**.

Note

The client must restart for the changes of saving paths to take effect.

4. Click **Default** to restore the default settings.

10.4 Set Alarm Picture Storage

The captured pictures triggered by the events on the devices can be saved on the local PC. You can set the picture storage location here manually.


Steps

1. Enter the **System Configuration** page.
2. Click **Storage**.
3. Switch on **Alarm Picture Storage**.
4. Select a disk to save the pictures.
5. Click **Save**.

10.5 Set Alarm Sound


When the event is triggered, the client can give an audible warning to notify the security personnel. You can set the sound of the audible warning in this section.

Steps

1. Click **System Configuration > Alarm**.
2. Click  and select the audio file from the local PC.
3. Click **Save**.
4. **Optional:** Click **Default** to restore the default settings.

Chapter 11 Operation and Maintenance

You can perform operations in the menu, such as device arming control and alarm output control, to ensure a smooth and convenient usage of the client.

In the upper-right corner of the client, click  and select different items on the menu to perform the following operations.

Open Files

You can open files of captured pictures, videos, and logs saved on the local PC, and search or filter the files.



Note

The files of captured pictures and videos can be saved as new copies on the local PC for backup.

Broadcast

Select one or multiple devices to enable the broadcast function of the devices.

Device Arming Control


You can arm and disarm the devices, and view the arming status of devices. See [*Enable Receiving Event from Devices*](#) for details.

Alarm Output Control

You can enable the alarm output function for devices. After the alarm output is enabled, when an alarm or pre-alarm is triggered, the client will caution the user. See [*Other Functions*](#) for details.

Play Videos via Player

You can use the player to play the recorded videos stored on the local PC.

Click  on the lower right of the player, and select the video file stored on the local PC to play. During the playback, operations including pause, stop, speed, single frame, digital zoom, volume control, capture, and opening file are supported.

View Help Information

You can view the client user manual, client name, client version, and open source software licenses.



HIKMICRO

See the World in a New Way