

3210HD Series

Central Management Server (CMS)



Quick Start Guide



youtube.com/CohuHD
LinkedIn.com/company/CohuHD
twitter.com/CohuHD
facebook.com/CohuHD
CohuHD.com

(858) 391-1800

Rev A

Table of Contents

Table of Contents	1
Overview	2
Symbol Conventions	2
Server Names and Acronyms	2
System Requirements	3
Installation.....	4
Login	5
The Main Menu	6
Update System Settings	8
Quick Start.....	9
Add Front-end Devices	9
Add Users	10
Device Management.....	10
Auto Search for Devices	12
Live view	13
Alarm Search.....	16
Image Searching	17
Temperature Configuration.....	17
Temperature Search	18
Temperature Screening	19
Troubleshooting.....	20
Forgot Password.....	20

Overview

This document describes the process to set up the central management software for thermographic cameras. It is intended for professionals in the following fields:

- Technical Support Engineer
- System Manager
- System Operator

Symbol Conventions

The following symbols may appear in this document, and their meaning is as follows:

Symbol	Description
 DANGER	Alert you to a high-risk hazard that could, if not avoided, result in death or serious injury.
 WARNING	Alert you to a medium or low risk hazard that could, if not avoided, result in moderate or minor injury.
 CAUTION	Alert you to a potentially hazardous situation which, if not avoided, result in equipment damage, data loss, performance deterioration, or non-anticipated results.

Server Names and Acronyms

Acronym	Full Name	Note
CMU	Central Manager Unit	Central Management Server
MDU	Media Distribution Unit	Media Distribution Server
IAU	Intelligent Analysis Unit	Intelligent Analysis Server

System Requirements

⚠ CAUTION: Microsoft® Windows® 32-bit is no longer supported. Use only 64-bit operating systems.

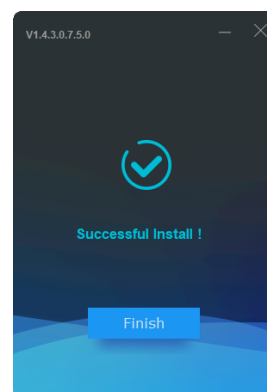
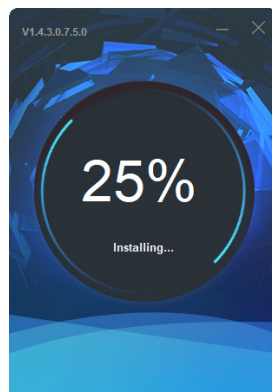
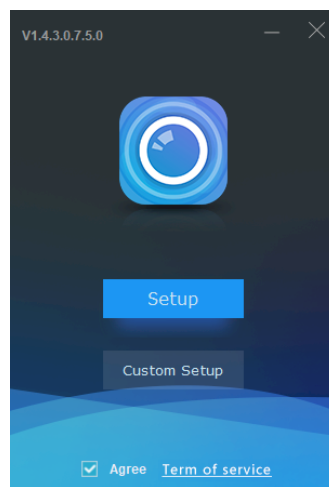
Name	PC Client	Central Management Server	Media Distribution Server	Intelligent Analysis Server (CPU Env.)	Intelligent Analysis Server (GPU Env.)
CPU	Intel® Core™ i5-7500 or better	Intel Core i5-7500 or better	Intel Core i5-7500 or better	Intel Core i7 or better	Intel Core i7 or better
RAM	8GB or more	4GB or more	8GB or more	8GB or more	8GB or more
Network Card	Gigabit/s				
HDD	50GB or above	50GB or above	50GB or above	50GB or above	50GB or above
OS	Microsoft Windows 7 Pro (64-bit) Microsoft Windows 10 Pro (64-bit) Microsoft Windows 10 Enterprise (64-bit) Microsoft Windows Server® 2012 Microsoft Windows Server 2016				
Software	DirectX® 11 or above	N/A	N/A	N/A	N/A
Display Resolution	1600×960 and above, default 1920×1080	N/A	N/A	N/A	N/A
Video Card	N/A	N/A	N/A	N/A	N/A
GPU	N/A	N/A	N/A	N/A	NVIDIA® GTX 1050 or better

Installation

Run the CMS installation executable (.exe) and click **Setup** to perform a simplified install using default settings. Click **Finish** when the program finishes installing.

This installs the CMS platform in the default location on the system drive — *C:\Program Files (x86)\CMS*.

Figure 1: One click installation

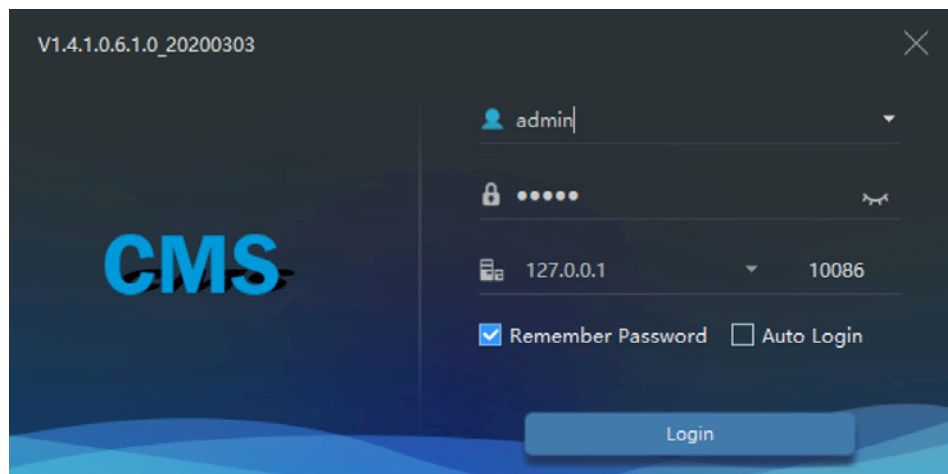


Login

The default username and password are both **admin**. This user has all system permissions. You should update your username and password after you log in to secure your system.

1. Double-click the  desktop icon.
2. Enter your username, password, and the IP address of your CMU. If you installed the CMU on your computer, this is the IP address of your computer.
3. Click **Login**.

Figure 2: Login interface



The Main Menu

Click + to open a new tab. The main menu appears on any new tab you open.

Figure 3: Main menu page

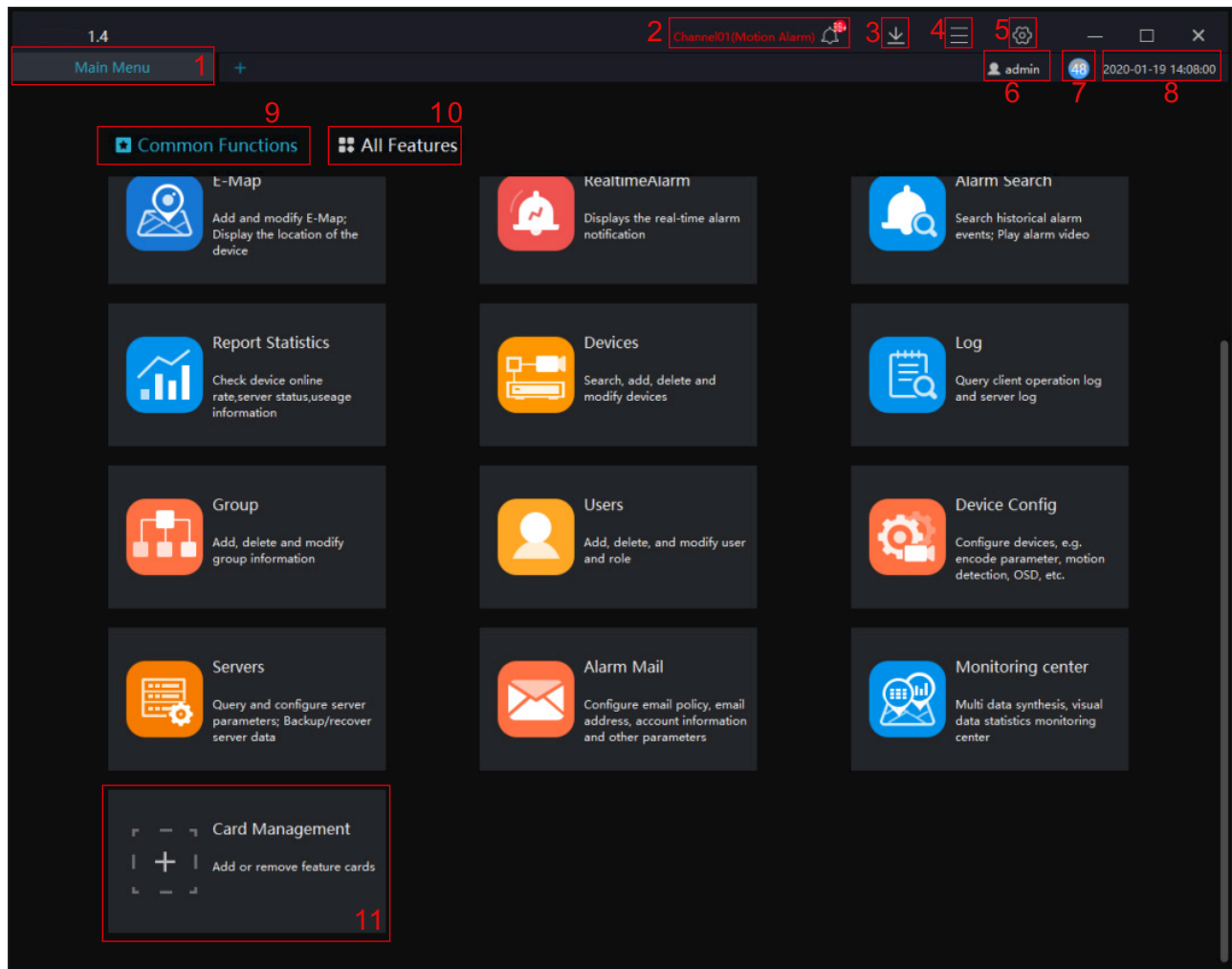
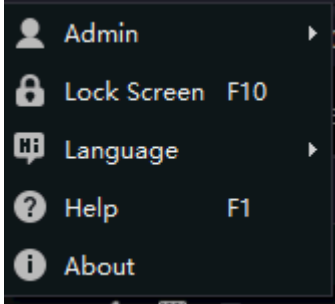


Table 1: Main interface introduction

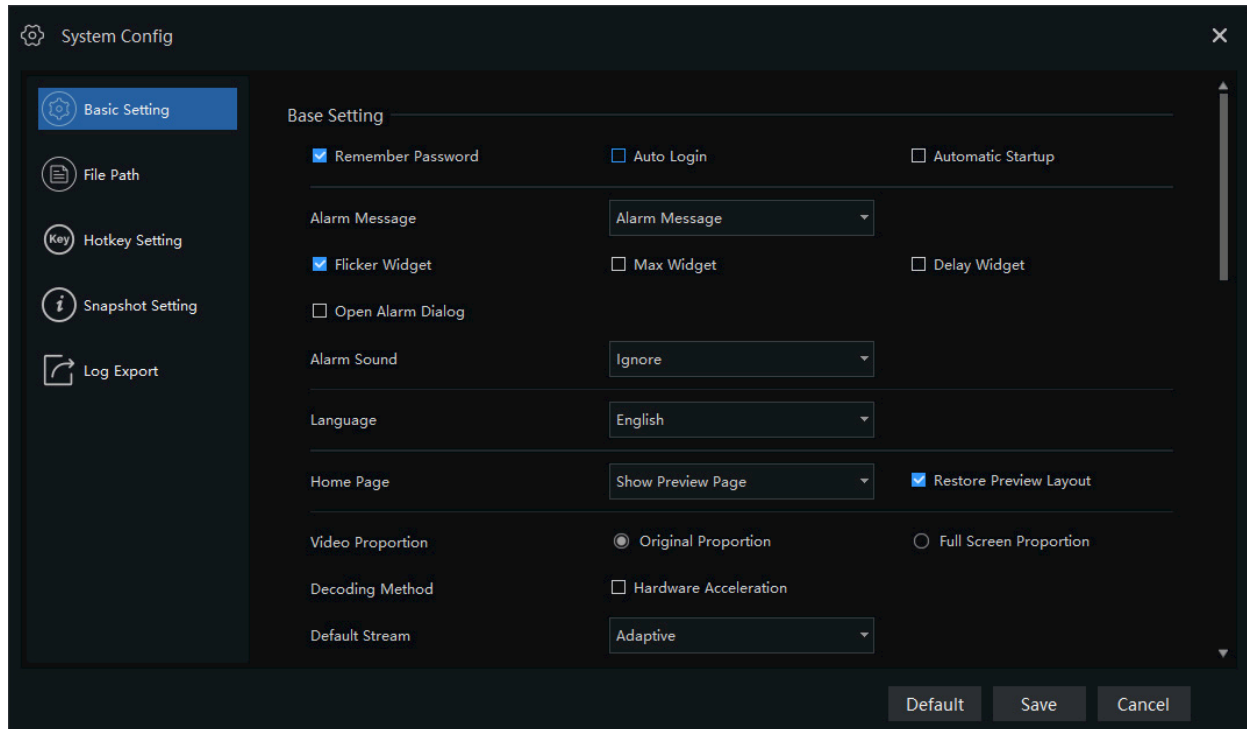
No.	Function	Description
1	Main menu	Open a new tab to see the main menu.
2	New	Build a custom menu page.
3	Alarm Message	Click to set up and see real time alarms. See [Real-time Alarms] for more information.
4	Backup	Click to display a list of backup tasks and backup history.
5	System Settings	See and set application settings, file paths, hotkeys, snapshot settings, and export logs. Click the drop-down menu to select a specific setting. Click Save to save the relevant settings.
6	Operator Settings	 User: Switch users and modify passwords. Lock screen: Click to lock the screen, enter the password to unlock the lock screen, and the password is the login password. Language: there are nine languages can be chosen. Help: Click to go to the help page for instructions. About: Platform version information.
7	Run status	Show CPU and RAM utilization.
8	Date and Time	Current Date and Time.
9	Common Functions	Shows common system features.
10	All Features	Click to show all features. You can drag the function cards around to change the order and placement of features.
11	Card management	Click to add a function to your menu.

Update System Settings

Click  to access system settings.

From here you can set your system units (Temperature in C/F, distance in meters/feet) *File Path*, *Hotkey* and *Snapshot* settings. You can also export a system log.

Figure 4: System Settings



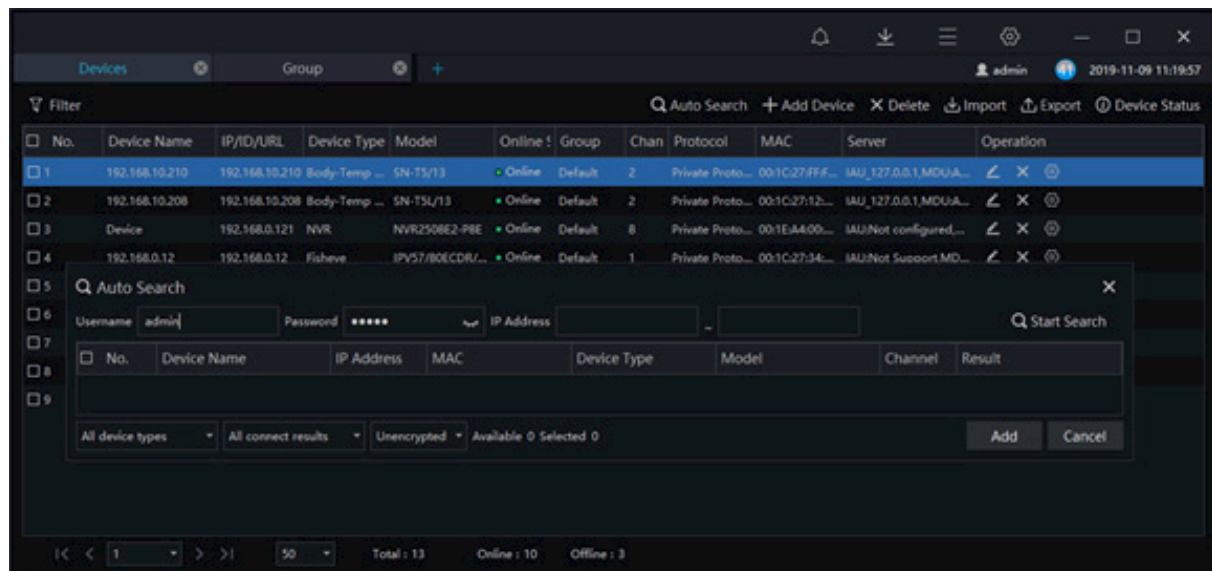
Quick Start

To get started, you need to add front end devices (thermographic cameras and capture devices) and add users with privileges to access those devices. After you add your devices, you can configure more advanced features, like face capture and temperature alarms.

Add Front-end Devices

1. Click **+** to open a new tab and select **Devices**.
2. If your thermographic device and CMS are on the same network, you can click **Auto Search** to find and add your device. Otherwise, click **Add Device**.
3. Enter details for your device. In most cases, your device is a **Thermal Camera**:
 - **Device Name**: a friendly name to help you recognize the camera in the CMS.
 - **Username/Password**: Credentials allowing the CMS to manage settings for, and get images/video from, the device.
 - **Group**: Add cameras to a group to make them easier to find in the CMS and to record multiple cameras together.
 - **IAU**: The IP address of the Intelligence Analysis Unit, where applicable.
 - **MDU**: The IP address of the Media Distribution Unit, where applicable

Figure 5: Device management



Add Users

The system has *administrator* and *operator* roles with a default set of privileges. When you create users, you can assign them default roles, or grant each user a unique set of permissions.

Users do not need file permissions for facial recognition features.

1. Click **+** to open a new tab and select **Users**.
2. Click **+ Add**.
3. Enter a **Username** and **Password** for the new user.
4. Select the **Role** for the user. By default, roles come with set permissions, but you can select or deselect privileges to override the role's default privileges.
5. (Optional) Select the user's **Group**. The group can help you organize and find users in the system.
6. Enter a description for the user in the **Remark** field.
7. (Optional) Modify privileges for the user.
8. Click **Add** or click **Save and New** to add more users.

Figure 6: Add user

+ Add User ×

Username

Password

Role Name Administrator

Group Default

Remark

Menu Privilege Channel Privilege Face Lib Privilege

- ☒ Select All
- ☒ Live View
- ☒ Log
- ☒ Users
- ☒ Device Config
- ☒ Health Archives
- ☒ License plate manage
- ☒ Face match config
- ☒ Thermal image config
- ☒ Playback
- ☒ E-Map
- ☒ Alarm Search
- ☒ Servers
- ☒ Vehicle identify
- ☒ Face search
- ☒ License match config
- ☒ Thermal image search
- ☒ Devices
- ☒ Real-time alarm
- ☒ Report Statistics
- ☒ Temperature Search
- ☒ Entrance Guard
- ☒ License plate search
- ☒ Temperature config
- ☒ Thermal image history
- ☒ Layout
- ☒ Group
- ☒ Face Recognition
- ☒ AI Recognition
- ☒ Face Lib manage
- ☒ Person and car search
- ☒ Alarm mail
- ☒ Attendance preview

Save and New **Add** **Cancel**

Device Management

Use the Device Management page to add and manage video devices. You can automatically search the network, or manually add devices. The CMU supports IP Camera, DVR, NVR, thermal imaging camera, face capture camera and thermometric camera devices.

Contact AV Costar Sales for information about supported devices and model numbers.

Click **+** to open a new tab, and then click **Devices** to manage devices.

Figure 7: Device management interface

No.	Device Name	IP/ID/URL	Device Type	Model	Online	Group	Chan	Protocol	MAC	Server	Operation
1	192.168.10.189	192.168.10.189	Speed Dome	IP557/30BDR/Z...	Offline	Default	1	Private Proto...	00:1C:27:57:...	IAU:Not Support,MD...	⚙️ ✖️
2	Device	192.168.10.209	NVR	NVR2504E1-P4E	Online	Develop...	4	Private Proto...	00:1C:27:0E:...	IAU:not configured,M...	⚙️ ✖️
3	192.168.10.208	192.168.10.208	Body-Temp ...	SN-T5/13	Offline	Default	2	Private Proto...	00:1C:27:FF:F...	IAU_127.0.0.1,MDU:A...	⚙️ ✖️
4	192.168.10.210	192.168.10.210	Body-Temp ...	SN-T5/13	Offline	Default	2	Private Proto...	00:1C:27:FF:F...	IAU_127.0.0.1,MDU:A...	⚙️ ✖️
5	123	192.168.0.151	Thermal Ca...	SN-TPC4201KT/...	Offline	Default	1	Private Proto...	00:1C:27:45:...	IAU:Not Support,MD...	⚙️ ✖️
6	192.168.2.201	192.168.2.201	Thermal Ca...	SN-TPC6401AT/...	Offline	Default	1	Private Proto...	00:1C:27:FF:F...	IAU:Not Support,MD...	⚙️ ✖️

Table 2: Device management

No.	Function	Description
1	Operation	Search, add, delete, export, import devices.
2	Device information display	Details of devices; select devices to edit configurations.
3	Filter	Filter the devices by type, online status, and name.
4	Page	Move to the next page of devices, see total number of devices and cumulative status.

Auto Search for Devices

You can automatically discover edge devices on the same network as your CMU.

1. Click **+** to open a new tab, and then click **Devices**.
2. Click Auto Search.
3. Enter a **Username** and **Password** for the devices you want to add. The system can still find devices without the username and password, but you may not be able to change settings or access video for these devices until you enter valid credentials.
4. (Optional) Enter the IP range you want to search for new devices. The wider the IP range, the longer the discovery process can take.
5. Click **Start Search** to find new devices.
6. When the search completes, select the devices you want to add and click **Add**.
7. If you cannot connect to some devices in the list, right click the device and try a different set of credentials.

Figure 8: Auto search page

The screenshot shows a web interface titled "Auto Search" with a close button (X) in the top right corner. Below the title bar, there are input fields for "Username" (containing "admin"), "Password" (masked with dots), and "IP Address" (with a range separator "~"). A "Start Search" button is located to the right of the IP Address field. Below these fields is a table with the following columns: "No.", "Device Name", "IP Address", "MAC", "Device Type", "Model", "Channel", and "Result". The table is currently empty. At the bottom of the interface, there are two dropdown menus: "All device types" and "All connect results", followed by the text "Available 0 Selected 0". To the right of this text are "Add" and "Cancel" buttons.

Live view

Click **+** to open a new tab, and then click **Live View** to watch video and PTZ-control your cameras. You can right-click cameras in the live view to select the video stream(s) you want to see and modify settings. You can open up to 4 live view tabs at a time. Drag tabs across monitors to set up a monitoring workstation.

Figure 9: Live view UI

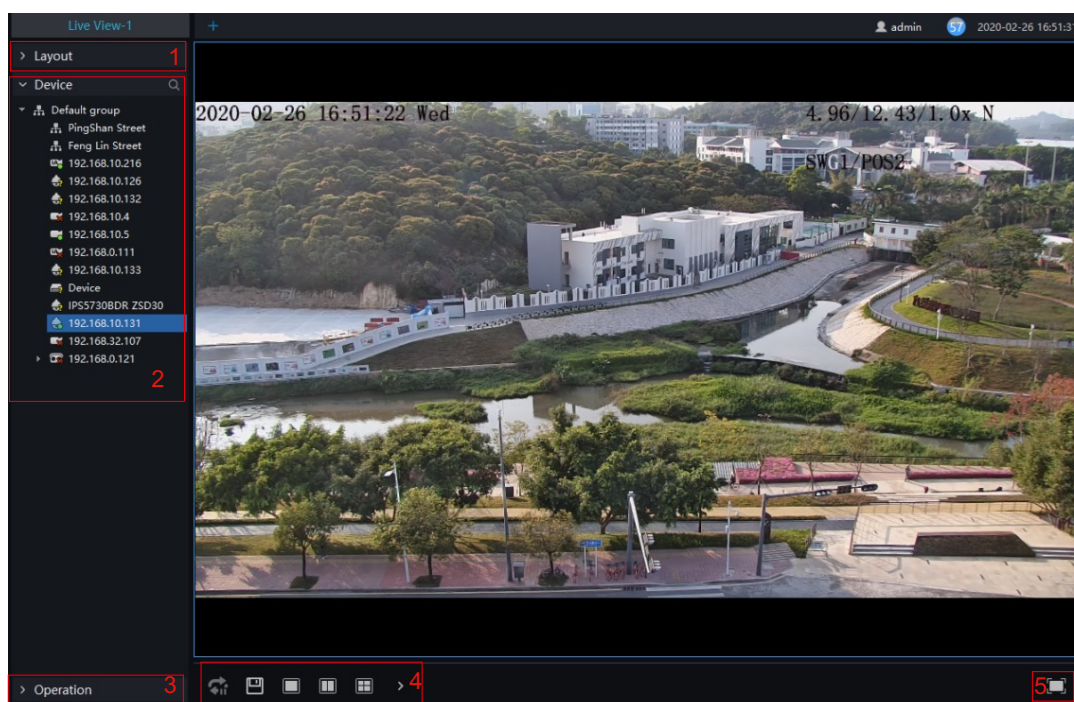
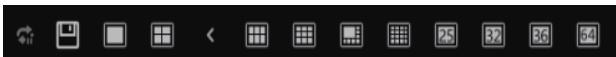


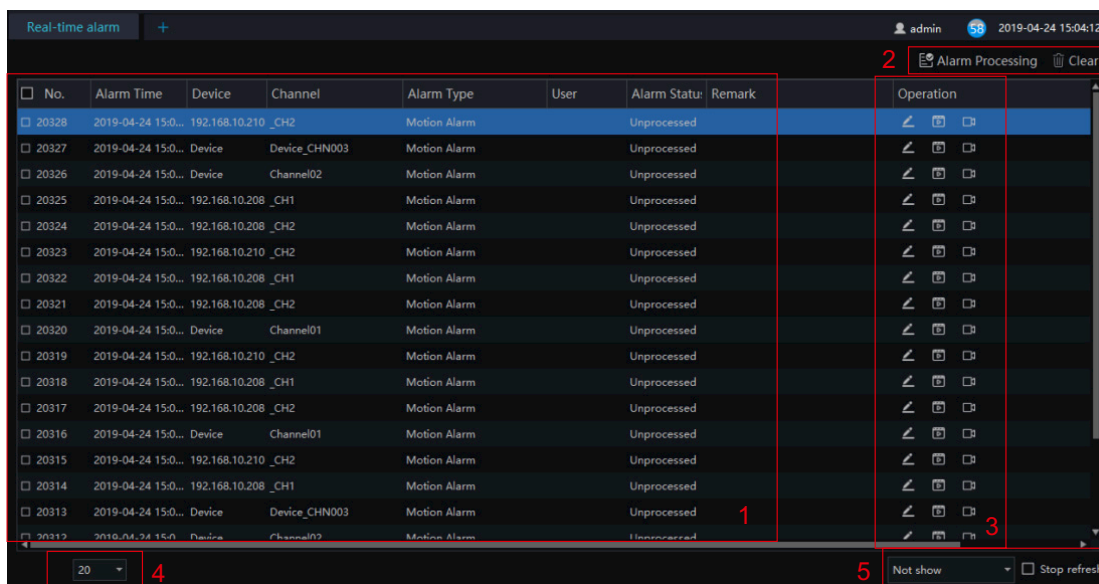
Table 3: Live view

No.	Function	Description
1	Layout	Video display format, add the layout.
2	Operation	Set dome device PTZ/ Image parameter.
3	Video display layout	Start the cruise, save the current layout, single screen, four screens, support maximum 64 screens 
4	Operation	Set dome device PTZ/ Image parameter.
5	Full screen	Full screen

Realtime Alarms

Click  to see alarms from your edge devices. By default, this page shows alarms from newest to oldest. From here, you can acknowledge alarms, access video relating to alarms, or go to the live view for an edge device that issued an alarm.

Figure 10: Real-time alarm interface



No.	Alarm Time	Device	Channel	Alarm Type	User	Alarm Status	Remark	Operation
20328	2019-04-24 15:0...	192.168.10.210	_CH2	Motion Alarm		Unprocessed		
20327	2019-04-24 15:0...	Device	Device_CHIN003	Motion Alarm		Unprocessed		
20326	2019-04-24 15:0...	Device	Channel02	Motion Alarm		Unprocessed		
20325	2019-04-24 15:0...	192.168.10.208	_CH1	Motion Alarm		Unprocessed		
20324	2019-04-24 15:0...	192.168.10.208	_CH2	Motion Alarm		Unprocessed		
20323	2019-04-24 15:0...	192.168.10.210	_CH2	Motion Alarm		Unprocessed		
20322	2019-04-24 15:0...	192.168.10.208	_CH1	Motion Alarm		Unprocessed		
20321	2019-04-24 15:0...	192.168.10.208	_CH2	Motion Alarm		Unprocessed		
20320	2019-04-24 15:0...	Device	Channel01	Motion Alarm		Unprocessed		
20319	2019-04-24 15:0...	192.168.10.210	_CH2	Motion Alarm		Unprocessed		
20318	2019-04-24 15:0...	192.168.10.208	_CH1	Motion Alarm		Unprocessed		
20317	2019-04-24 15:0...	192.168.10.208	_CH2	Motion Alarm		Unprocessed		
20316	2019-04-24 15:0...	Device	Channel01	Motion Alarm		Unprocessed		
20315	2019-04-24 15:0...	192.168.10.210	_CH2	Motion Alarm		Unprocessed		
20314	2019-04-24 15:0...	192.168.10.208	_CH1	Motion Alarm		Unprocessed		
20313	2019-04-24 15:0...	Device	Device_CHIN003	Motion Alarm		Unprocessed		
20312	2019-04-24 15:0...	Device	Channel02	Motion Alarm		Unprocessed		

Table 4: Real-time alarm

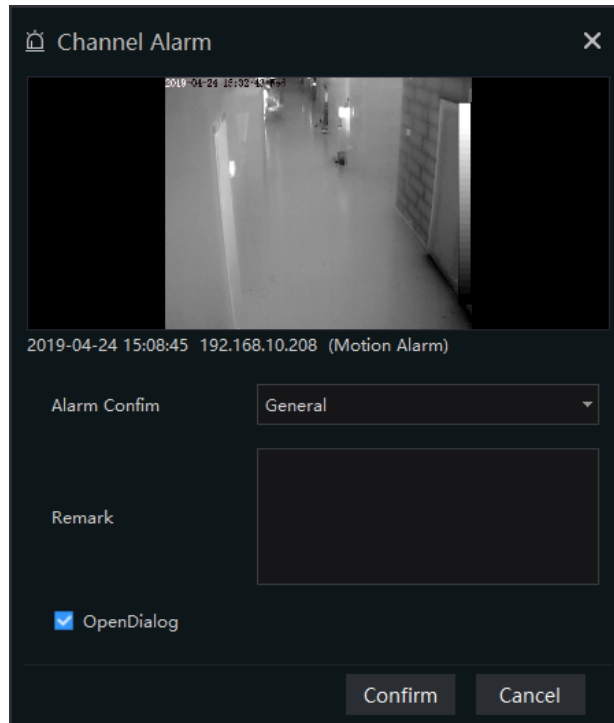
No.	Function	Description
1	Alarm display area	Display alarm related information
2	Alarm processing	Acknowledge/process alarms
3	Alarm operation	Alarm, video playback, live video.
4	Interface display	Quantity of the current page's alarms

Acknowledging Alarms

Acknowledging alarms tells the system and other users that you properly responded to the alarm. For each alarm, you can click  to playback 30 seconds of video for the alarm or  to view live video from the device that reported the alarm.

1. Click  to go to the alarm page.
2. Select the alarm(s) you want to acknowledge.
3. Click .
4. For **Alarm Confirm**, set the seriousness of the alarm.
5. For **Remark**, enter a description/resolution for the alarm, if applicable.
6. Click **Confirm** to close the dialog. Acknowledged alarms status changes to processed.

Figure 11: Alarm process



Alarm Search

Use the alarm search to find individual alarms, including historical dates, types, status, and video. By searching for a particular type of alarm, you might be able to find the same alarm occurrence from multiple angles.

Click **+** to open a new tab, and then click **Alarm Search** to search alarms.

Figure 12: Alarm search interface

No.	Alarm Time	Device	Channel	Alarm Type	User	Alarm Status	Remark	Operation
1	2019-04-24 15:3...	192.168.10.208	_CH1	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
2	2019-04-24 15:3...	192.168.10.208	_CH2	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
3	2019-04-24 15:3...	192.168.10.210	_CH2	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
4	2019-04-24 15:3...	Device	Channel01	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
5	2019-04-24 15:3...	192.168.10.208	_CH2	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
6	2019-04-24 15:3...	192.168.10.210	_CH2	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
7	2019-04-24 15:3...	Device	Device_CHN003	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
8	2019-04-24 15:3...	Device	Channel02	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
9	2019-04-24 15:3...	192.168.10.208	_CH1	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
10	2019-04-24 15:3...	192.168.10.208	_CH2	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
11	2019-04-24 15:3...	192.168.10.208	_CH1	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
12	2019-04-24 15:3...	192.168.10.210	_CH2	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
13	2019-04-24 15:3...	192.168.10.208	_CH2	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
14	2019-04-24 15:3...	Device	Device_CHN003	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
15	2019-04-24 15:3...	Device	Channel02	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
16	2019-04-24 15:3...	Device	Channel01	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
17	2019-04-24 15:3...	192.168.10.208	_CH1	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
18	2019-04-24 15:3...	192.168.10.210	_CH2	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
19	2019-04-24 15:3...	Device	Device_CHN003	Motion Alarm		Unprocessed		⏏ ⏮ ⏭
20	2019-04-24 15:3...	Device	Channel02	Motion Alarm		Unprocessed		⏏ ⏮ ⏭

Navigation: 1 20 Total: 7053

Table 5: Alarm search

No.	Function	Description
1	Search condition	Determine the alarm type, alarm status, and time of alarms you want to see
2	Search/Process	Search for or process alarms
3	Search results	Shows alarms fitting your search criteria
4	Operation	Acknowledge, alarm playback, or live view.
5	Interface display	Access additional pages of alarms, shows total number of unacknowledged alarms.

Image Searching

1. Click  to select an image.
2. Set the **Similarity** threshold.
3. Set the **Time** you want to search. The system returns images matching images between the start and end times you set.
4. Set the person **Type** you want to match images for.
5. Select the capture **Devices** you want to search from.
6. Click **Search**.

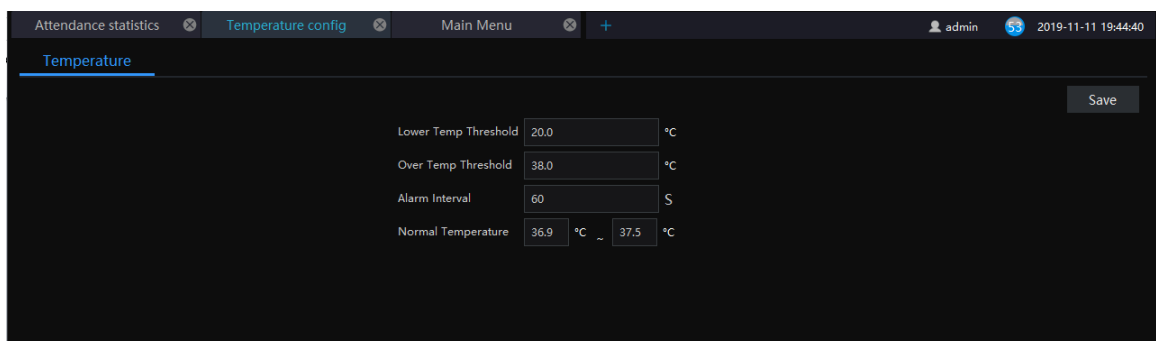
Select images in the result set to display details.

Temperature Configuration

Set temperature thresholds to determine when the system logs alarms.

1. Click + to open a new tab and click Temperature Config.
2. Input your temperature thresholds.
3. Set the alarm interval. This typically prevents the system from logging multiple alarms for the same face or person.
4. Set the Normal Body Temperature to act as a reference point for temperature readings.
5. Click **Save** to save the settings.

Figure 13: Temperature Config



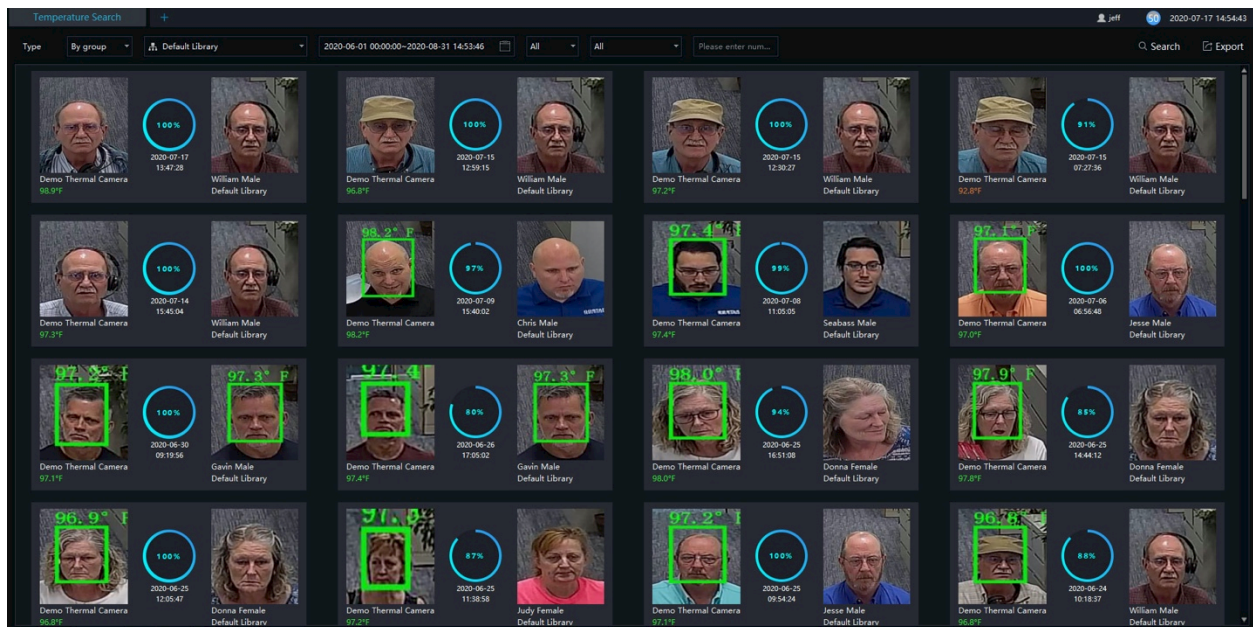
Lower Temp Threshold	20.0	°C
Over Temp Threshold	38.0	°C
Alarm Interval	60	S
Normal Temperature	36.9 °C ~ 37.5 °C	

Temperature Search

Use the Temperature Search function to find temperature readings. You can search by personnel group and library, or by capture device.

Click **+** to open a new tab and then select **Temperature Search**.

Figure 14: Temperature search



1. Choose the search **Type**.
 - a. **By Group** — search libraries to find temperature readings matched with a library. Select the libraries you want to include in your search.
 - b. **By Device** — search temperature readings taken by individual devices. Select the devices that you want to include in your search.
2. Set the start and end times for your search; the search returns results taken between these times.
3. Select the type of personnel you want to include in the search. This limits results to the Type field set in face libraries.
4. Set the temperature you want to search for, and whether you want to see results, over, under, or equal to the number you enter. Select **Abnormal Temperature** to return all results over and under the temperature threshold you set.
5. Click **Search** to view the result.
6. You can click **Export** to save the results to a local folder.

Temperature Screening

The Temperature Screening page provides a live view with the most recent over-temperature alarms. Use this page to perform real-time screening.

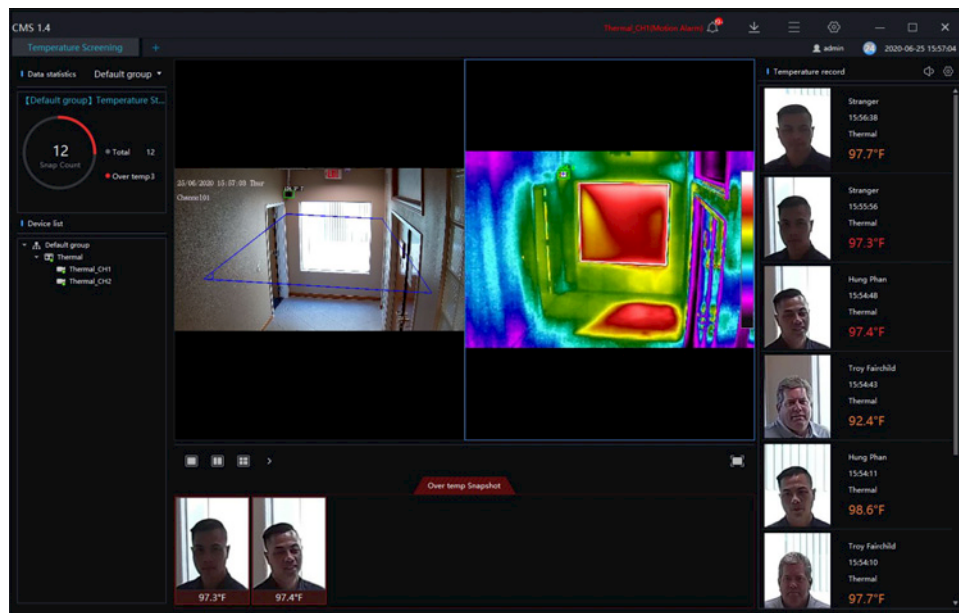
1. Click + to open a new tab and select **Temperature Screening**.
2. To watch cameras live, Double-click or drag them from the device list into the live view.

The **Over Temp Snapshot** row shows the most recent temperature alarm snapshots. Scroll the list to the right to see older alarms.

The **Temperature Record** shows all temperature recording snapshots in order. Scroll down to see older snapshots.

Temperature Statistics in the upper left corner shows the proportion of temperature alarms to total snapshots while you have been on the Temperature Screening page.

Figure 15: Temperature screening



Troubleshooting

Forgot Password

1. Right-click the *ServerManagerTool* in the system tray and select **Restore**. If the icon is not in the system tray, click *Start » Programs » CMS » ServerManagerTool*.

Click **CMU » Config** and email the *GUID* to support@arecontvision.com.

For more information please visit us at:

[*www.CohuHD.com*](http://www.CohuHD.com)

