

# 1 Industrial Temperature Measurement

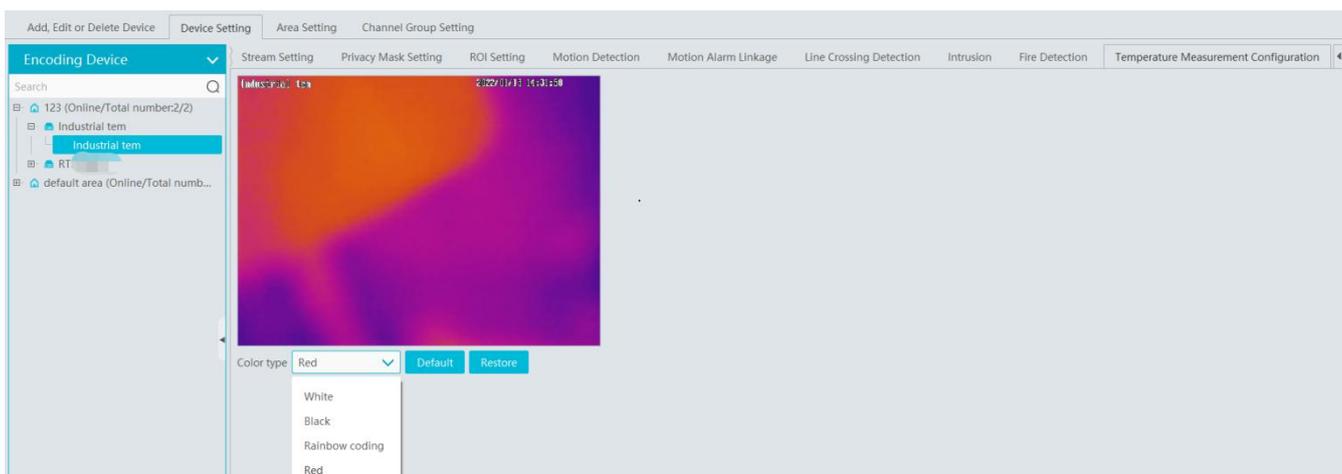
## 1.1 Thermal Network Camera Settings

Click Home→Resource Management→Add, Edit or Delete Device→Encoding Device to go to the encoding device interface. Click [Add] to add the security thermal network cameras.



### 1.1.1 Temperature Measurement Settings

After adding the security thermal network camera, click Resource Management → Device Setting → Temperature Measurement Configuration to go to set the temperature measurement parameters.

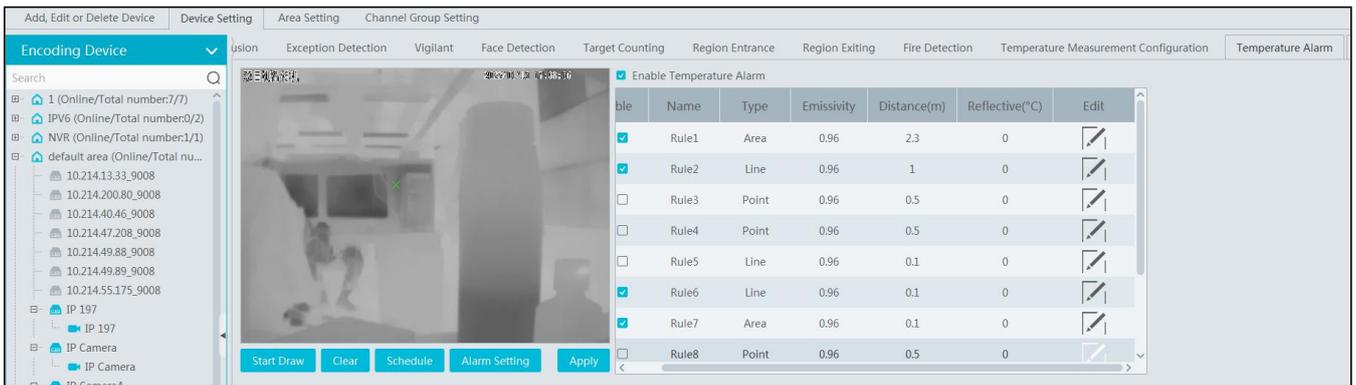


Color Type: White/Black/Rainbow coding/Red

Restore: Click it to restore the set image to the previous image.

### 1.1.2 Temperature Alarm Settings

In the device setting interface, select the security thermal network camera and then click the temperature alarm tab as shown below.



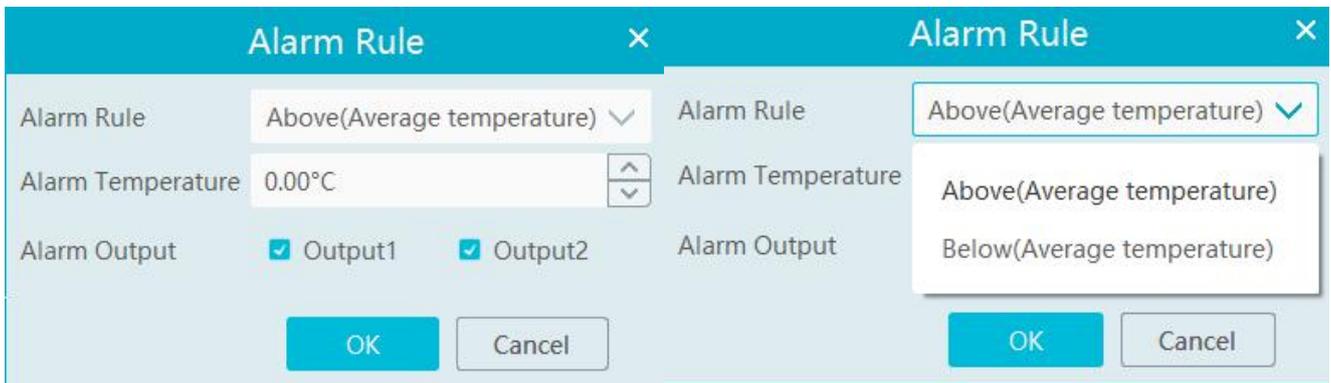
Enable temperature alarm.

Set the rules. Up to 10 rules can be set.

Double click rule name, type, emissivity, distance and reflective temperature of each rule to modify them.

The rule type includes point, line and area.

Edit: set the alarm rule.



After the above alarm rules is set and temperature alarm is enabled, set the alarm linkage items of monitoring point-temperature alarm in the alarm linkage interface. When the detected temperature exceeds the set threshold, the related alarms will be triggered.

Start Draw: select the type and then draw on the image.

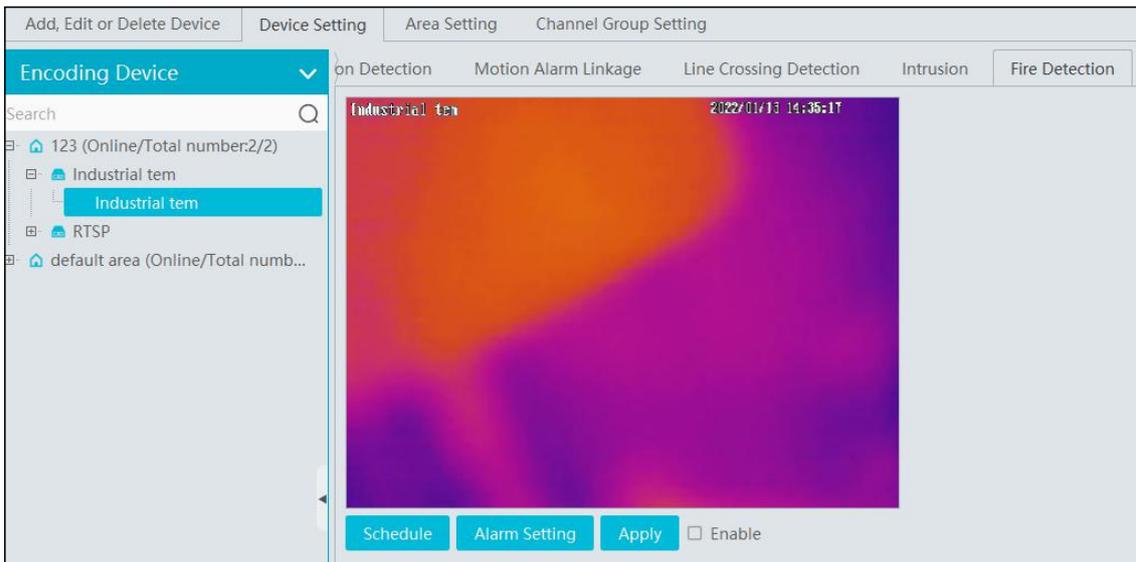
Clear: clear the drawn point/line/area.

Schedule: Set the schedule of temperature alarm.

Alarm Setting: Set the alarm of the IPC.

### 1.1.3 Fire Detection Settings

In the device setting interface, select the security thermal network camera and then click the fire detection tab as shown below.



Schedule: set the schedule of fire detection, 7\*24 by default.

Alarm Setting: set the alarm of IPC.

Apply: Click it to save the settings.

Enable: Check it to enable the fire detection function.

## 1.1.4 Alarm Linkage Settings

Click Alarm Center→Alarm Linkage Settings→Monitoring Point-Fire detection alarm

Enable the alarm linkage items, like record, snapshot, alarm output, etc.

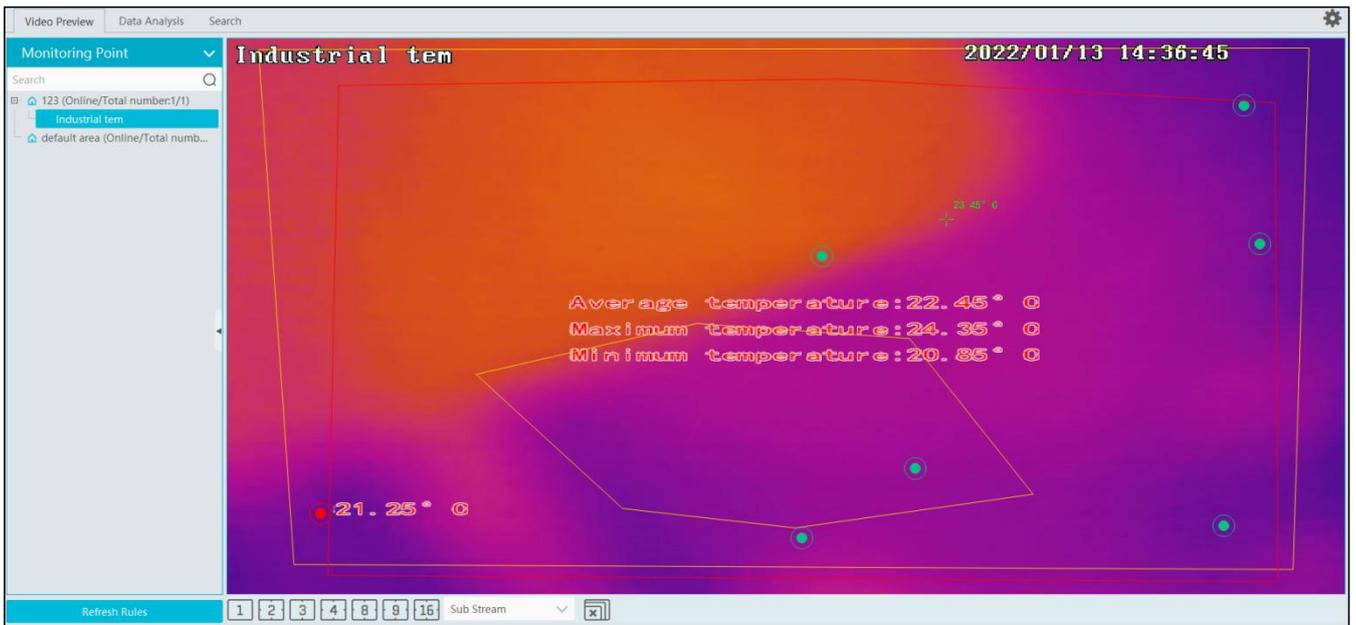
When the detected temperature exceeds the set threshold, alarms will be triggered.

Area	Name	Audio	PTZ Control	Record	Alarm Preview	Snapshot	Alarm Output	Voice Broadcast	Open Door	TV Wall
123	Industrial tem	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
default area	RTSP测试_CAM001	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

## 1.2 Temperature Measurement

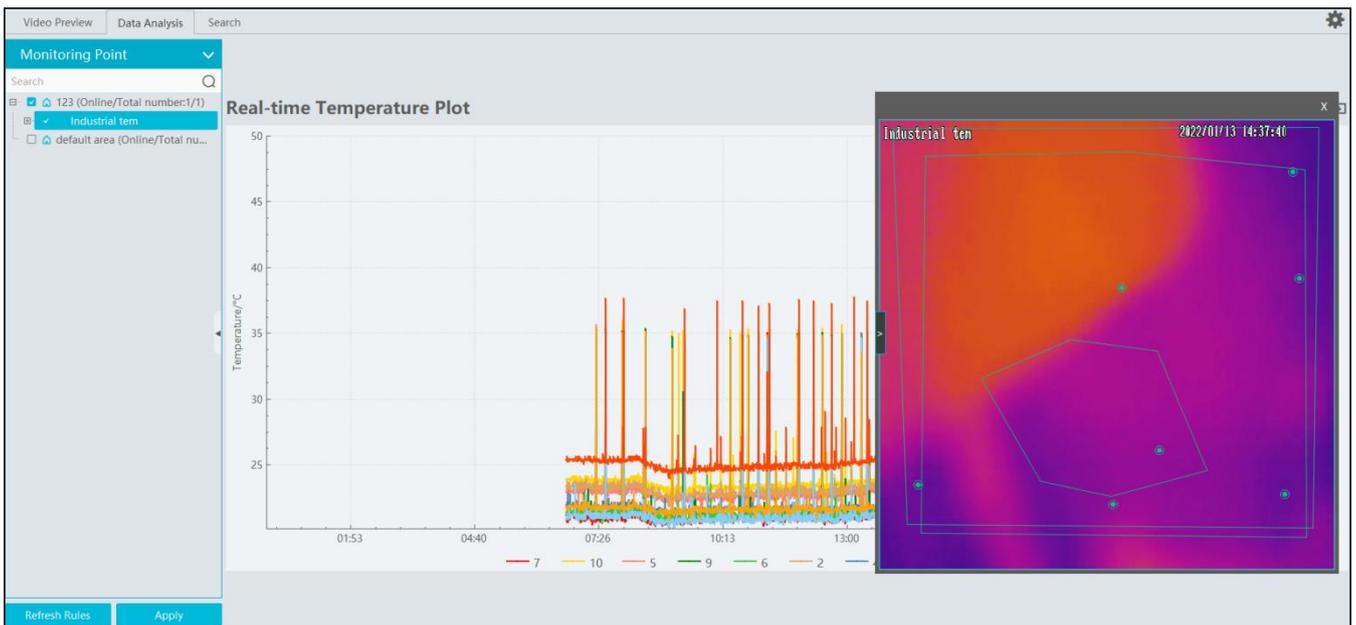
### 1.2.1 Video Preview

Go to the video preview interface and then drag the thermal camera to the window to play. The default video stream is the fourth stream (thermal imaging stream). You can switch the stream under the preview window. The temperature measurement rule and the current temperature will be displayed in the image. When the temperature alarm is triggered, they will turn red.

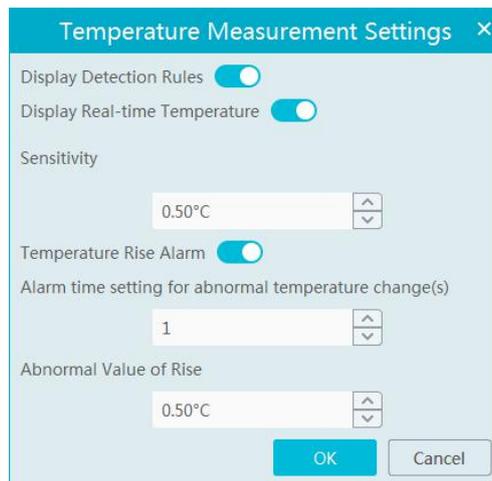


## 1.2.2 Data Analysis

Select the data analysis tab to enter the following interface. Select the temperature measurement rule (multiple rules can be selected) and click [Apply] to view the real-time temperature reading results and image.



Temperature measurement settings: Click  to open the temperature measurement setting window. You can choose whether to display detection rules and real-time temperature, set sensitivity and temperature rise alarm.



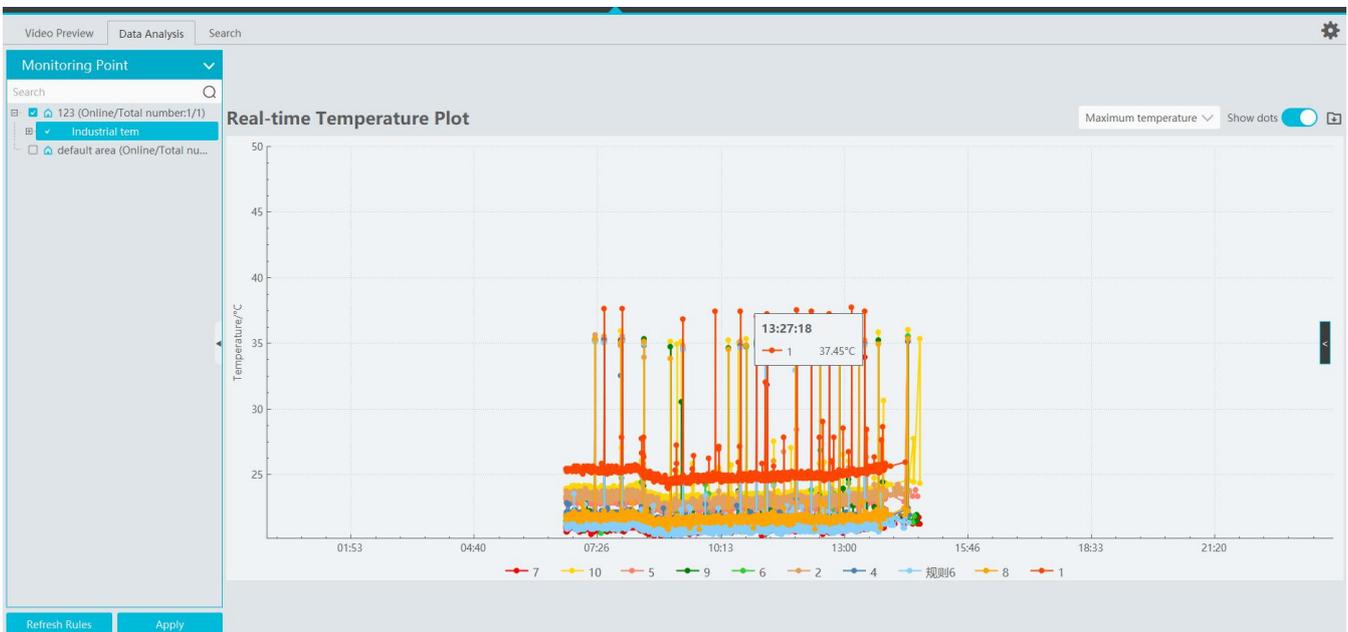
You can set the alarm linkage items of temperature rise alarm. When the rise of the temperature exceeds the set value, the relevant alarms will be triggered. Go to Alarm Center→Alarm Linkage Settings interface and select “Monitoring Point—Abnormal temperature rise” to set the alarm linkage items.

Note: At present, the system will detect the temperature every 10s. If the temperature goes up 0.1°C every one second, the temperature will rise up 0.5°C after 5 seconds, but alarms will not be triggered immediately. Alarms will be triggered when the temperature rises up 0.5°C or higher after 10 seconds.

Different colors stands for different temperature measurement rules. You can view the temperature reading results.

Statistical type: Maximum/average/Minimum temperature.

Show dots: if enabled, the statistical temperature plot will show the dots as shown below. Put the cursor on the dot and then the detailed data will be displayed.



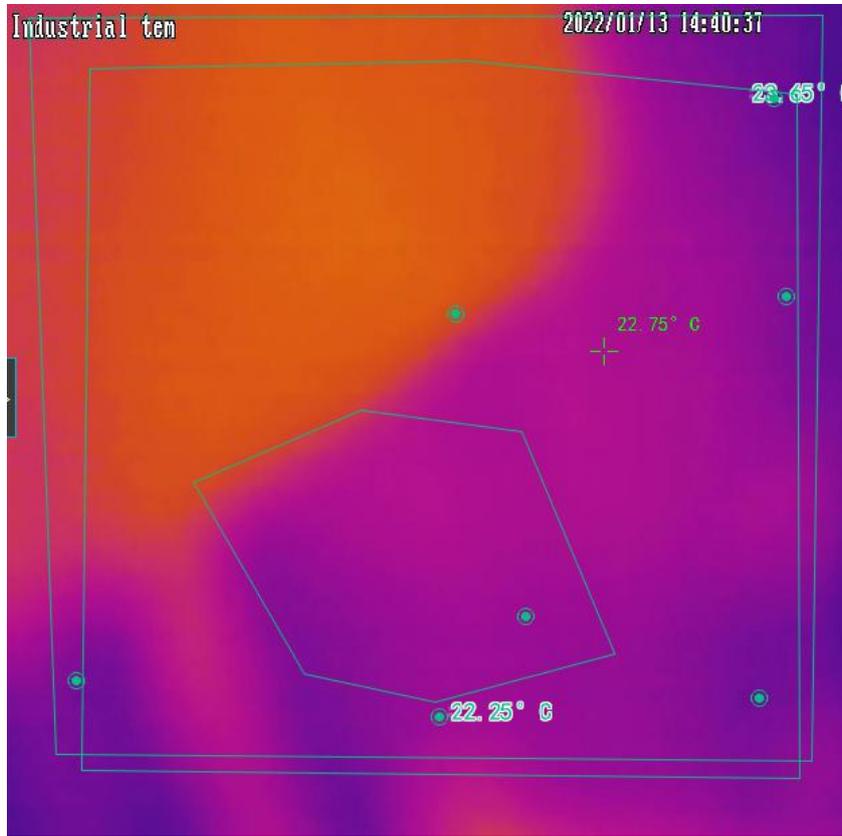
: Click it to export the temperature measurement data to the specified file.

Refresh Rules: Click it to refresh the monitoring points and then select the desired rules

Apply: After you select rules, click it to view the line chart.

Real-time Preview: click  on the right to extend the video preview window. Select a rule on the left monitoring point panel, this rule will be highlighted. Click any point in the preview window to view the real-time temperature.

Note: Dual lens thermal cameras don't support temperature reading by clicking any point.



### 1.2.3 Record Search

Click Industrial Temperature Measurement → Search to go to the following interface. Select one or more rules, set the start and end time and click [Search] to view the temperature data.

No.	Time	Monitoring Point Name	Minimum temperature	Average temperature	Maximum temperature	Aera
7	2022-01-13 14:41:59	Industrial tem	20.85°C	22.45°C	24.35°C	10
8	2022-01-13 14:41:48	Industrial tem	33.25°C	34.55°C	35.35°C	10
9	2022-01-13 14:40:28	Industrial tem	21.75°C	21.75°C	21.75°C	7
10	2022-01-13 14:39:07	Industrial tem	21.25°C	21.25°C	21.25°C	7
11	2022-01-13 14:38:57	Industrial tem	23.35°C	23.35°C	23.35°C	5
12	2022-01-13 14:38:16	Industrial tem	21.45°C	21.45°C	21.45°C	9
13	2022-01-13 14:37:36	Industrial tem	21.95°C	21.95°C	21.95°C	9
14	2022-01-13 14:37:26	Industrial tem	21.75°C	21.75°C	21.75°C	7
15	2022-01-13 14:36:05	Industrial tem	23.85°C	23.85°C	23.85°C	5
16	2022-01-13 14:34:14	Industrial tem	21.85°C	21.85°C	21.85°C	6
17	2022-01-13 14:33:24	Industrial tem	20.95°C	22.55°C	24.45°C	10
18	2022-01-13 14:33:14	Industrial tem	20.95°C	22.75°C	27.75°C	10
19	2022-01-13 14:32:34	Industrial tem	21.35°C	21.35°C	21.35°C	6
20	2022-01-13 14:32:04	Industrial tem	21.25°C	21.25°C	21.25°C	7
21	2022-01-13 14:32:04	Industrial tem	23.35°C	23.35°C	23.35°C	5
22	2022-01-13 14:28:31	Industrial tem	21.45°C	21.45°C	21.45°C	9

Start/End Time: The end time shouldn't be earlier than the start time.

Export: Click [Export] to export the temperature data to the Excel file as shown below.

	A	B	C	D	E	F	G
7	6	2022-01-13 14:41:59	Industrial tem	21.25°C	21.25°C	21.25°C	7
8	7	2022-01-13 14:41:59	Industrial tem	20.85°C	22.45°C	24.35°C	10
9	8	2022-01-13 14:41:48	Industrial tem	33.25°C	34.55°C	35.35°C	10
10	9	2022-01-13 14:40:28	Industrial tem	21.75°C	21.75°C	21.75°C	7
11	10	2022-01-13 14:39:07	Industrial tem	21.25°C	21.25°C	21.25°C	7
12	11	2022-01-13 14:38:57	Industrial tem	23.35°C	23.35°C	23.35°C	5
13	12	2022-01-13 14:38:16	Industrial tem	21.45°C	21.45°C	21.45°C	9
14	13	2022-01-13 14:37:36	Industrial tem	21.95°C	21.95°C	21.95°C	9
15	14	2022-01-13 14:37:26	Industrial tem	21.75°C	21.75°C	21.75°C	7
16	15	2022-01-13 14:36:05	Industrial tem	23.85°C	23.85°C	23.85°C	5
17	16	2022-01-13 14:34:14	Industrial tem	21.85°C	21.85°C	21.85°C	6
18	17	2022-01-13 14:33:24	Industrial tem	20.95°C	22.55°C	24.45°C	10
19	18	2022-01-13 14:33:14	Industrial tem	20.95°C	22.75°C	27.75°C	10
20	19	2022-01-13 14:32:34	Industrial tem	21.35°C	21.35°C	21.35°C	6
21	20	2022-01-13 14:32:04	Industrial tem	21.25°C	21.25°C	21.25°C	7
22	21	2022-01-13 14:32:04	Industrial tem	23.35°C	23.35°C	23.35°C	5
23	22	2022-01-13 14:28:31	Industrial tem	21.45°C	21.45°C	21.45°C	9
24	23	2022-01-13 14:28:11	Industrial tem	21.15°C	22.15°C	23.75°C	2
25	24	2022-01-13 14:27:30	Industrial tem	21.95°C	21.95°C	21.95°C	4
26	25	2022-01-13 14:27:09	Industrial tem	20.85°C	22.65°C	24.55°C	10

Delete: if the rule is deleted, all historical temperature measurement records under this rule will be deleted too.

The screenshot shows a software interface with a table of monitoring data. A dialog box is overlaid on the table, asking for confirmation to delete a rule and its associated history records.

No.	Time	Monitoring Point Name	Minimum temperature	Average temperature	Maximum temperature	Aera
7	2022-01-13 14:41:59	Industrial tem	20.85°C	22.45°C	24.35°C	10
8	2022-01-13 14:41:48	Industrial tem	33.25°C	34.55°C	35.35°C	10
9	2022-01-13 14:40:28	Industrial tem	21.75°C	21.75°C	21.75°C	7
10	2022-01-13 14:39:07	Industrial tem	21.25°C	21.25°C	21.25°C	7
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14	2022-01-13 14:37:26	Industrial tem	21.75°C	21.75°C	21.75°C	7
15	2022-01-13 14:36:05	Industrial tem	23.85°C	23.85°C	23.85°C	5
16	2022-01-13 14:34:14	Industrial tem	21.85°C	21.85°C	21.85°C	6
17	2022-01-13 14:33:24	Industrial tem	20.95°C	22.55°C	24.45°C	10
18	2022-01-13 14:33:14	Industrial tem	20.95°C	22.75°C	27.75°C	10
19	2022-01-13 14:32:34	Industrial tem	21.35°C	21.35°C	21.35°C	6
20	2022-01-13 14:32:04	Industrial tem	21.25°C	21.25°C	21.25°C	7
21	2022-01-13 14:32:04	Industrial tem	23.35°C	23.35°C	23.35°C	5
22	2022-01-13 14:28:31	Industrial tem	21.45°C	21.45°C	21.45°C	9

Dialog Box Content:

**Question**

Deleting rules will delete history records together.  
Do you want to delete?

Buttons: OK, Cancel

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System Info: Authentication Server Address: 10.214.11.109, Port: 6003, User Name: admin, CPU: 36%, Memory: 62%