

Thermal Network Bullet Camera & Turret Camera

V5.5.98 build 240726

Release Note

(2024-09-30)

1. Basic Information

Firmware Version	V5.5.98 build240726
SDK Version	V6.1.9.3 build20220126
Play Lib	7.4.2.41
iVMS-4200	V3.7.4.1 build20220412
Web Component	V4.0.1.0 build 240426
Perimeter Protection Algorithm Version	V1.9.4build20240229
Fire Source Detection Algorithm Version	V4.0.2build20231109
Temperature Measurement Algorithm Version	V2.1.9build20231211
Smoke Detection Algorithm Version	V2.3.0build20220325

Key note:

V5.5.98build240726 mainly fixed temperature range display issue for 2608 camera.

V5.5.98build240528 mainly fixed temperature exception issue when device upgrade from V5.5.76 to V5.5.98build240426.

2. V5.5.98build240426 New Features

2.1 Support Bi-Spectrum analysis to avoid missing alarms in low temperature difference scene.

2.2 VCA performance optimization enhanced by distillation model.

2.3 Support Perimeter Protection Combined Event Alarm.

Setup line crossing as conditions of intrusion rules, the line crossing is triggered first, then intrusion is activated and triggered with alarm interval, then intrusion alarm triggered.

When conditions are not triggered, if people walk in the intrusion area, there will be no alarm triggered.

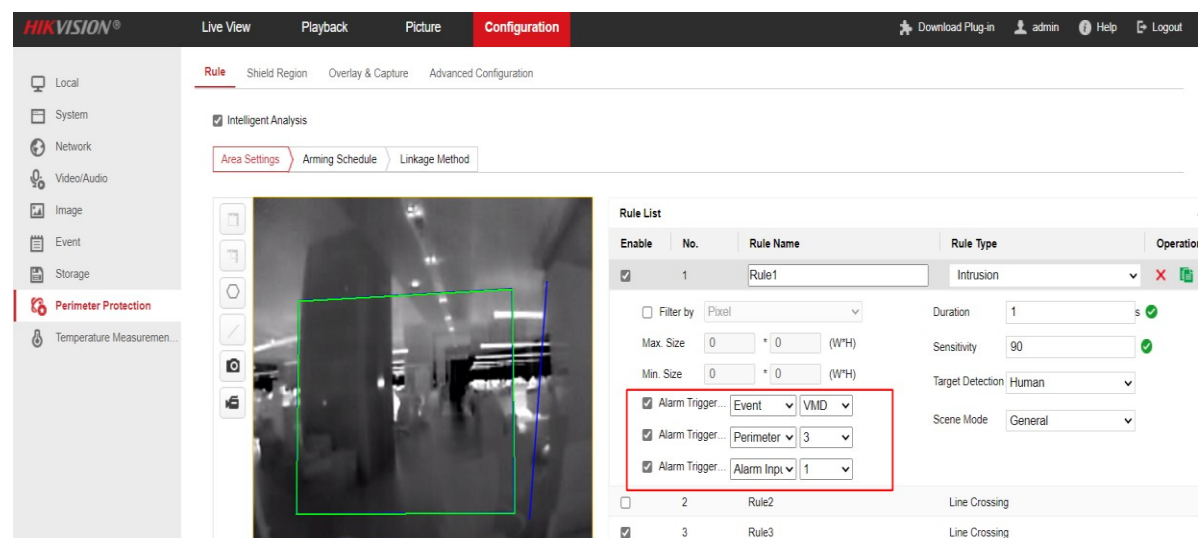


Figure 1

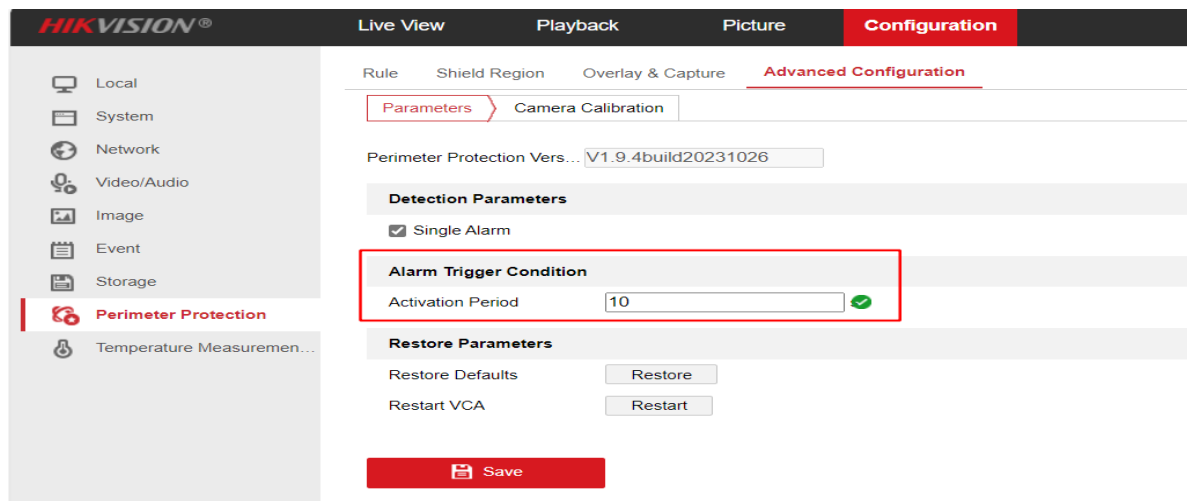


Figure 2

Free combination of 3 condition types: Perimeter Protection Rules, Event (Motion Detection) and Alarm Input. Once one of them are triggered, rules will be activated. When rules are configured as conditions, each single rules will not trigger alarm.

- 96 and 160 resolution device support up to 1 combined event.
- 256 resolution device support up to 2 combined event.
- 384 and 640 resolution device support all rules.

2.4 Support Self-Learning Calibration for 160 and 256 resolution QA Heatpro series.

It can effectively filter animal false alarms with simple configuration. Choose self-learning calibration and filter level, then let people walk back and forth twice under white line area. When all white lines turn green, the calibration is done, and we suggest that you keep the process until it is good enough to meet your expectation. If further adjustment is needed, you can click the resume button or recalibrate button, and make sure someone is in the image.

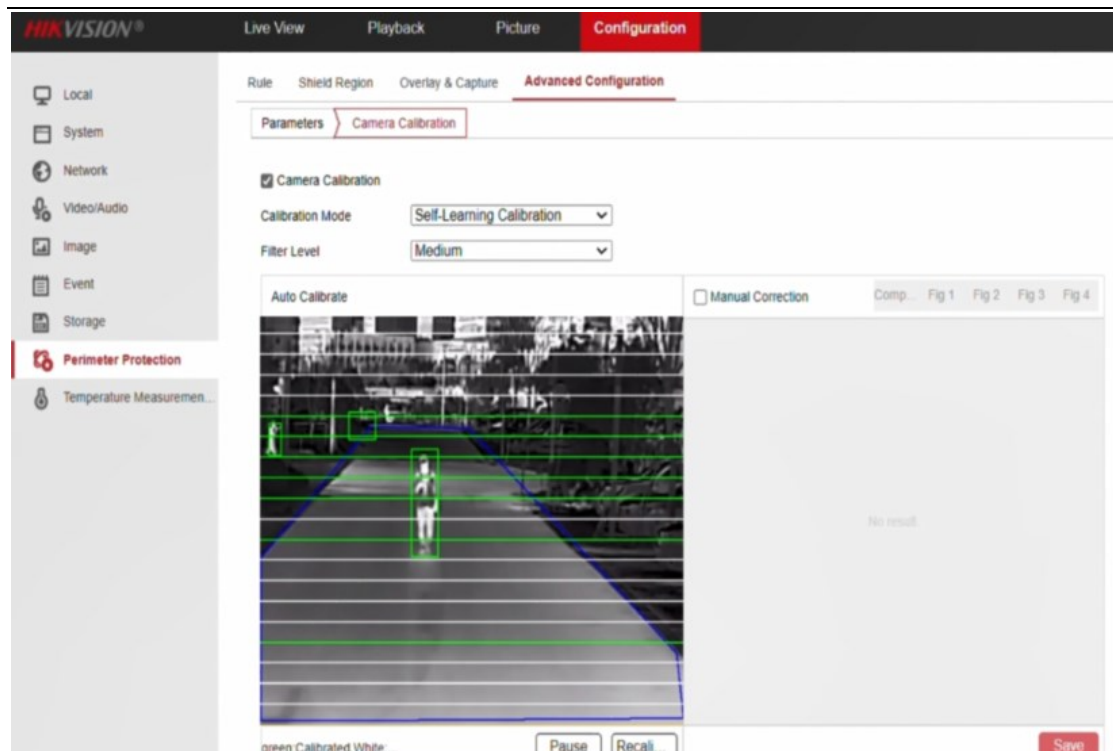


Figure 3

Meanwhile support Self-Learning Calibration Record export.

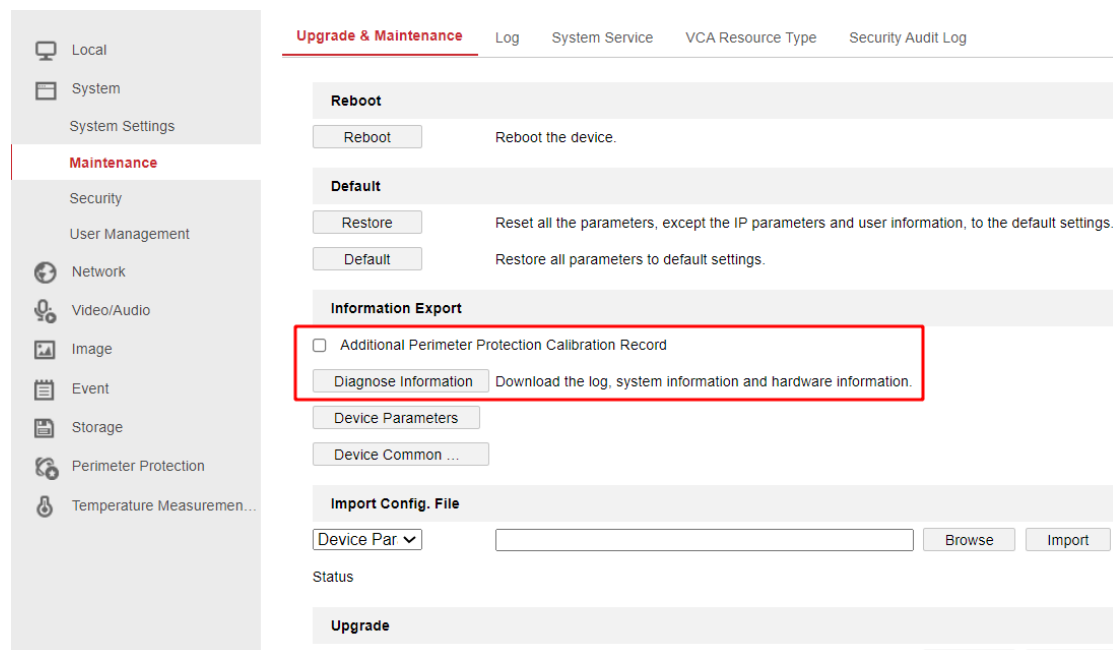


Figure 4

2.5 Temperature Measurement support Smoking Filter.

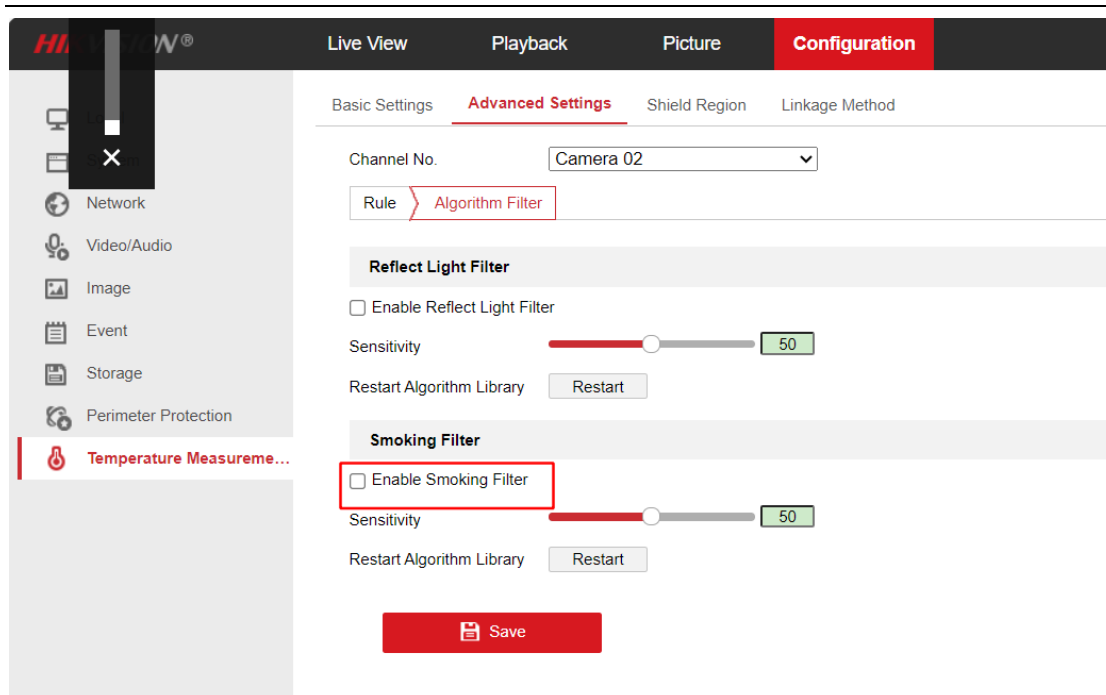


Figure 5

2.6 Reflect Light Filter and Forklift Filter can be configured on each rule.

Each Expert Temperature Measurement Rule can be individually configured with Reflect Light Filter and Forklift Filter Enable.

The original outside Reflect Light Filter settings and Forklift Filter settings will act as a master switch for both normal and expert mode.

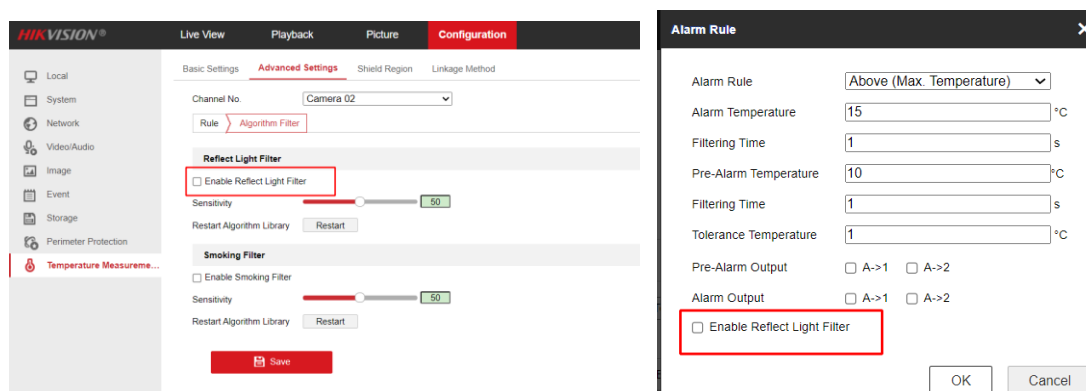


Figure 6

2.7 Thermography Model upgrade Temperature Range to -20~650°C.

HIKVISION Model

DS-2TD2528T-3/Q(C)、DS-2TD2528T-7/Q(C)、DS-2TD2528T-10/Q(C)、DS-

2TD2537T-4/Q(C)、DS-2TD2537T-4Y/Q(C)、DS-2TD2537T-10/Q(C)、DS-
2TD2537T-15/Q(C)

HIKMICRO Model

HM-TD2528T-3/Q、HM-TD2528T-7/Q、HM-TD2528T-10/Q、HM-TD2537T-4/Q

HM-TD2537T-4/QY、HM-TD2537T-10/Q、HM-TD2537T-15/Q

2.8 Fire/Smoke Detection support to link Audible and Strobe Light Warning

The screenshot shows the Hikvision web interface for configuring 'Dynamic Fire Source Detection'. The left sidebar contains a menu with options: Local, System, Network, Video/Audio, Image, Event, Basic Event, Smart Event, Storage, Perimeter Protection, and Temperature Measuremen... The 'Smart Event' section is expanded, showing 'Storage', 'Perimeter Protection', and 'Temperature Measuremen...'. The main content area is titled 'Dynamic Fire Source Detection' and includes a 'Channel No.' dropdown set to 'Camera 02'. Below this, there are three tabs: 'Basic Parameter', 'Arming Schedule', and 'Linkage Method'. The 'Linkage Method' tab is selected, and it contains three columns: 'Normal Linkage', 'Trigger Alarm Output', and 'Trigger Recording'. The 'Normal Linkage' column has options: 'Send Email', 'Notify Surveillance Center' (checked), and 'Upload to FTP/Memory Card/...'. The 'Trigger Alarm Output' column has options: 'A->1', 'A->2', and 'Flashing Alarm' (highlighted with a red box). The 'Trigger Recording' column has options: 'A1' and 'A2'. The 'Audible Warning' option is also highlighted with a red box.

Normal Linkage	Trigger Alarm Output	Trigger Recording
☐ Send Email	☐ A->1	☐ A1
☒ Notify Surveillance Center	☐ A->2	☐ A2
☐ Upload to FTP/Memory Card/...	☐ Flashing Alarm	
	☐ Audible Warning	

Figure 7

2.9 Alarm output can be controlled manually and alarm status can be shown on the live view page.

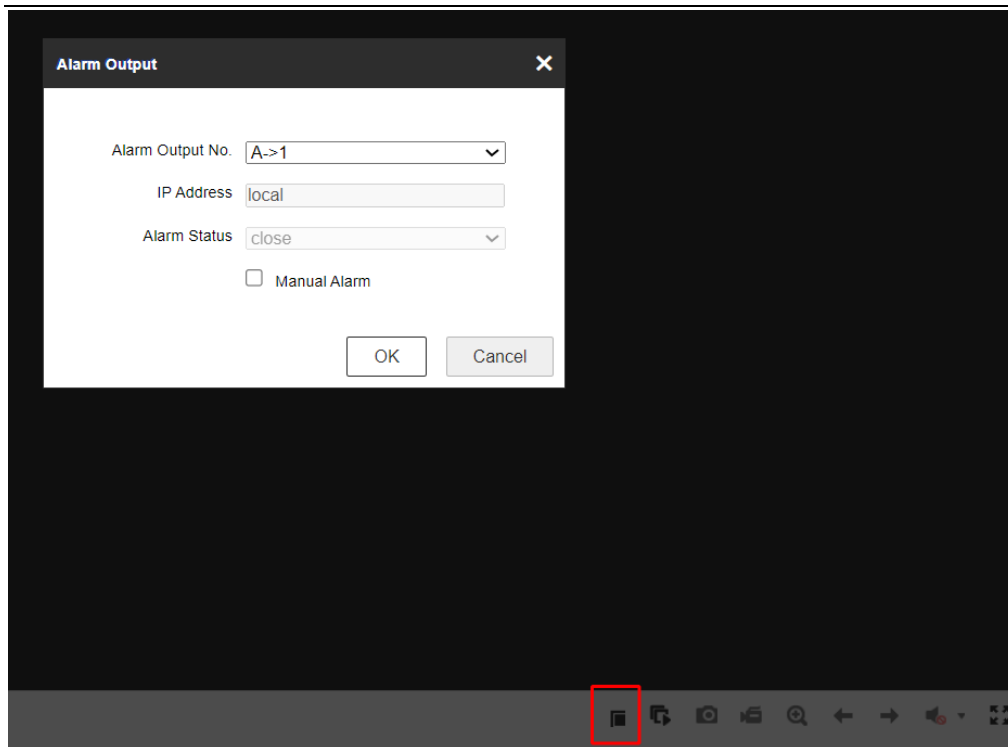


Figure 8

2.10 Alarm Input support to link Audible and Strobe Light Alarm.

Motion Detection	Video Tampering	Alarm Input	Alarm Output	Exception	Flashing Alarm Light Output	Audible Alarm Output	External Alarm Module
Alarm Input No.		A<-1	IP Address		Local		
Alarm Type		NO	Alarm Name		(cannot copy)		
☒ Enable Alarm Input Handling							
Arming Schedule		Linkage Method					
☐ Normal Linkage		☐ Trigger Alarm Output		☐ Trigger Recording			
☐ Send Email		☐ A->1		☐ A1			
☐ Notify Surveillance Center		☐ A->2		☐ A2			
☐ Upload to FTP/Memory Card/...							
☐ Flashing Alarm							
☐ Audible Warning							

Figure 9

Local

System

Network

Video/Audio

Image

Event

Basic Event

Smart Event

Storage

Perimeter Protection

Temperature Measurement...

Motion Detection

Video Taping

Alarm Input

Alarm Output

Exception

Flashing Alarm Light Output

Audible Alarm Output

External Alarm Module

Alarm Type

Alarm Input

Sound Type

Warning

Warning

(Siren)&Danger, please keep a

Test

Alarm Times

5

Sound Volume

100

Arming Schedule

Delete

Delete All

Mon

0

2

4

6

8

10

12

14

16

18

20

22

24

Tue

0

2

4

6

8

10

12

14

16

18

20

22

24

Wed

0

2

4

6

8

10

12

14

16

18

20

22

24

Thu

0

2

4

6

8

10

12

14

16

18

20

22

24

Fri

0

2

4

6

8

10

12

14

16

18

20

22

24

Sat

0

2

4

6

8

10

12

14

16

18

20

22

24

Sun

0

2

4

6

8

10

12

14

16

18

20

22

24

Save

Figure 10

2.11 Support network I/O module (ADAM, ARTECO, FM2466).

Factory parks and other big scenes, need a lot of alarm inputs and alarm outputs to do the linkage. The integration network alarm module can effectively expand the number of alarms, and reduce the cost of physical wiring.

Motion Detection
Video Tampering
Alarm Input
Alarm Output
Exception
Flashing Alarm Light Output
Audible Alarm Output
External Alarm Module

☐ Channel No.
Camera Name
Device Type
IP Address
Channel...
Protocol
Managem...
Security
Status
Model
Alarm Input
Alarm Output

Add
Modify
Delete

Figure 11

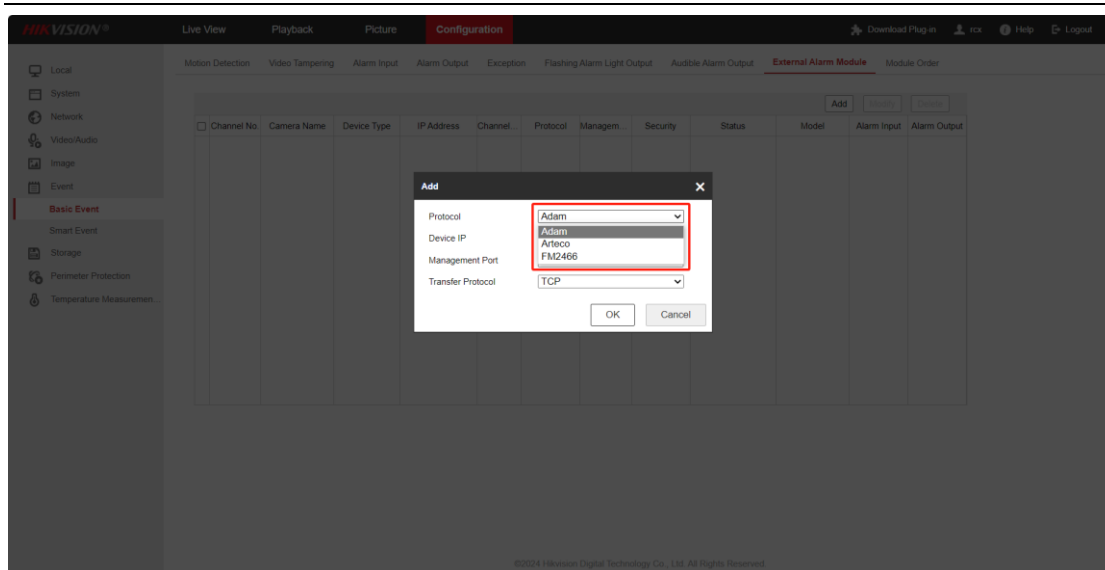


Figure 12

2.12 Support Custom HTTP Order Linkage.

Support to transmit alarm information to 3rd party alarm panel via HTTP Order.

Up to 10 HTTP orders could be configured.

HTTP Order, H1, H2, H3, H4, H5, H6, H7, H8, H9, H10 (Default H1)

URL: length 128

Username: length 32 (Default empty, special characters allowed)

Password: length 32 (Default empty, special characters allowed)

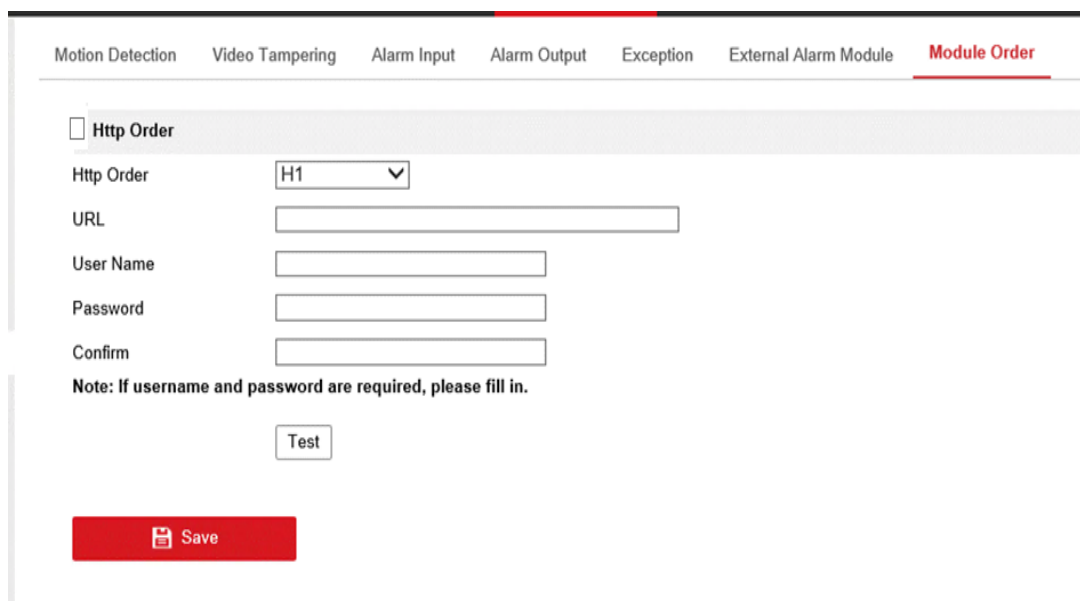


Figure 13

Once HTTP order function enabled, you can find the HTTP order linkage in Linkage Method page.

2.12.1 Perimeter Protection support custom HTTP linkage.

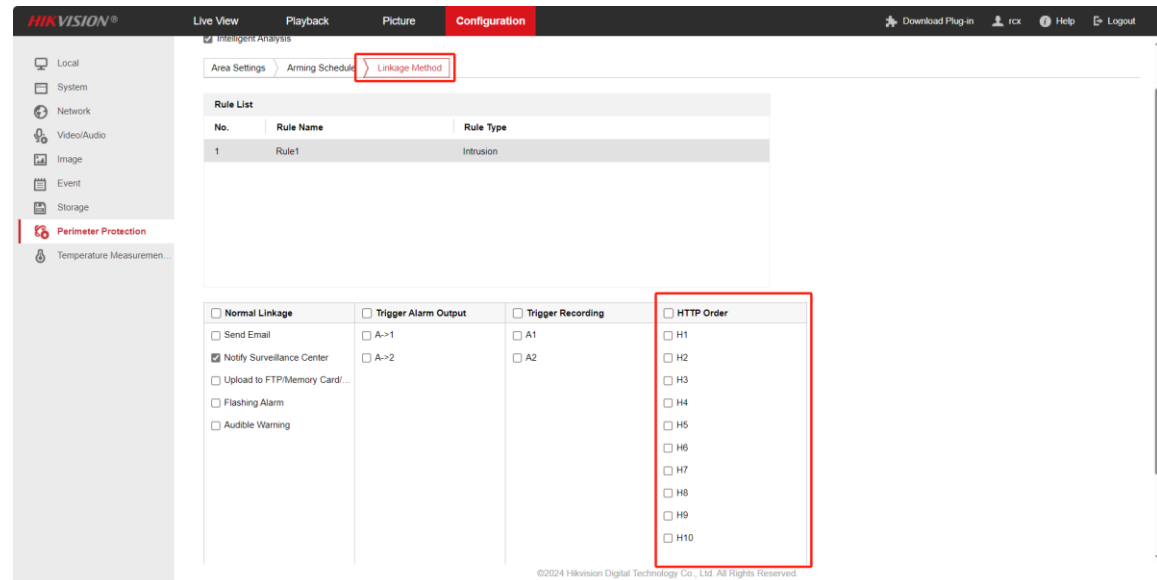


Figure 14

2.12.2 Alarm input support custom HTTP linkage.

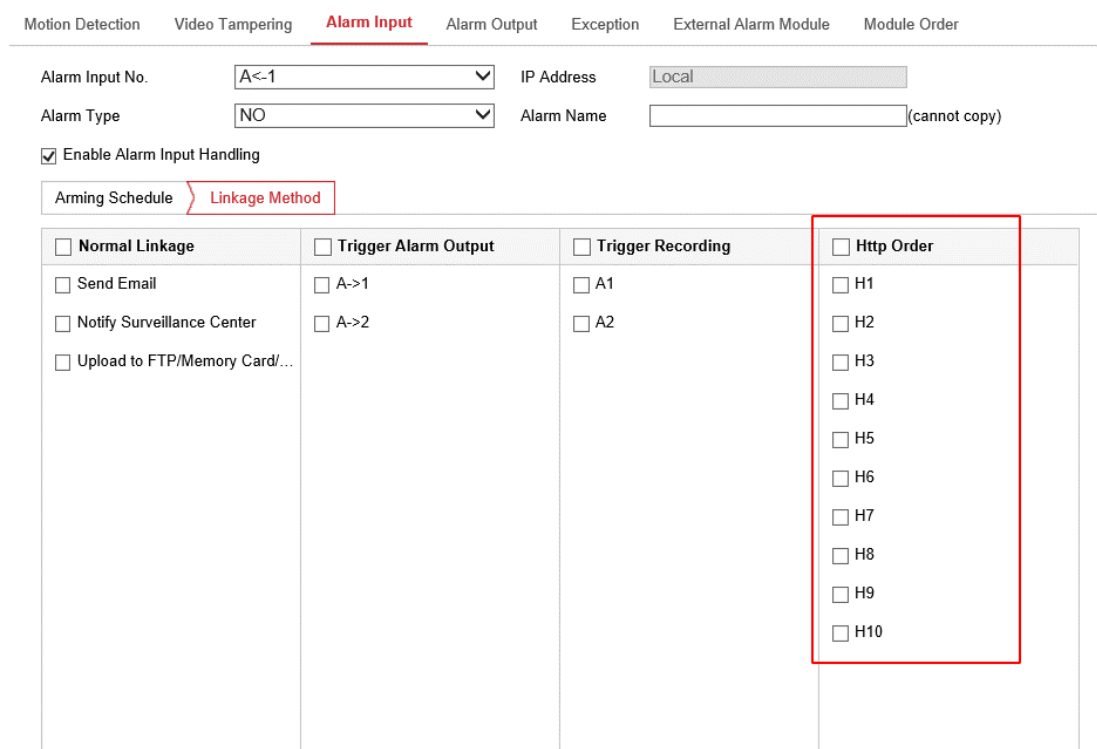
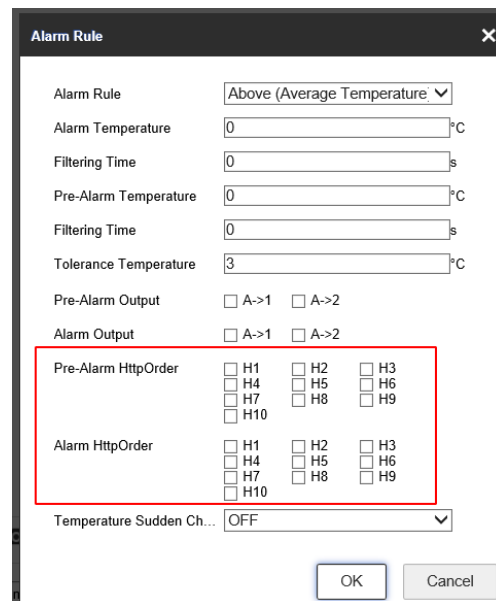


Figure 14

2.12.3 Temperature Measurement support custom HTTP linkage



The 'Alarm Rule' configuration window contains the following settings:

- Alarm Rule: Above (Average Temperature) ▾
- Alarm Temperature: 0 °C
- Filtering Time: 0 s
- Pre-Alarm Temperature: 0 °C
- Filtering Time: 0 s
- Tolerance Temperature: 3 °C
- Pre-Alarm Output: ☐ A->1 ☐ A->2
- Alarm Output: ☐ A->1 ☐ A->2
- Pre-Alarm HttpOrder:

☐ H1	☐ H2	☐ H3
☐ H4	☐ H5	☐ H6
☐ H7	☐ H8	☐ H9
☐ H10		
- Alarm HttpOrder:

☐ H1	☐ H2	☐ H3
☐ H4	☐ H5	☐ H6
☐ H7	☐ H8	☐ H9
☐ H10		
- Temperature Sudden Ch...: OFF ▾

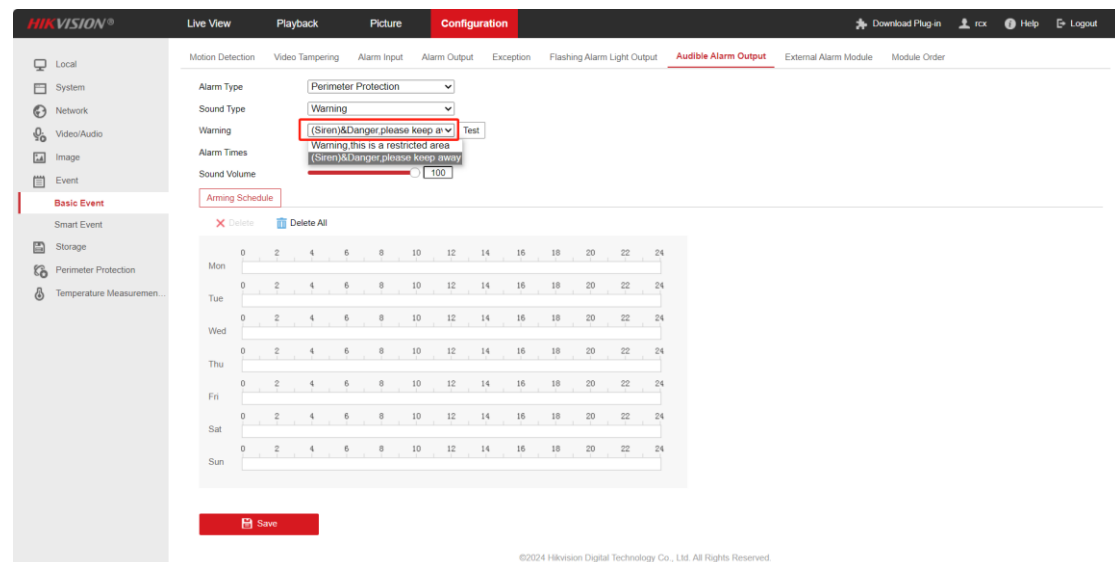
Buttons: OK, Cancel

Figure 15

2.13 Perimeter Protection Audible Warning Optimization.

Default audible warning for Perimeter Protection is Siren, which is sharper and more penetrated to scare intruders away.

Besides, the AGC algorithm has been applied to control power of volume, the ensure speaker working stability for long alarm.



The 'Audible Alarm Output' configuration interface shows the following settings:

- Alarm Type: Perimeter Protection ▾
- Sound Type: Warning ▾
- Warning: ((Siren)&Danger please keep away) test
- Alarm Times: Warning this is a restricted area
- Sound Volume: ((Siren)&Danger please keep away) 100
- Arming Schedule: Arming Schedule

The Arming Schedule section includes a calendar view with days of the week (Mon to Sun) and a time range from 0 to 24 hours. Buttons: Save, Delete, Delete All.

Figure 16

2.14 The Modbus Protocol support Main Device Mode.

MODBUS TCP supports main mode, rather than only slave mode. Cameras could sent

relevant information to connected device directly.

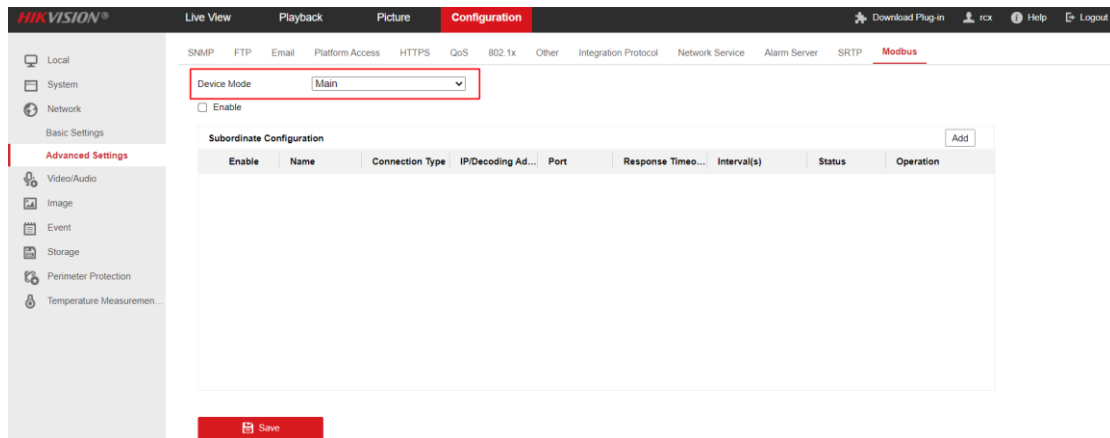


Figure 17

2.15 Newly add OTAP for Platform Access Mode.

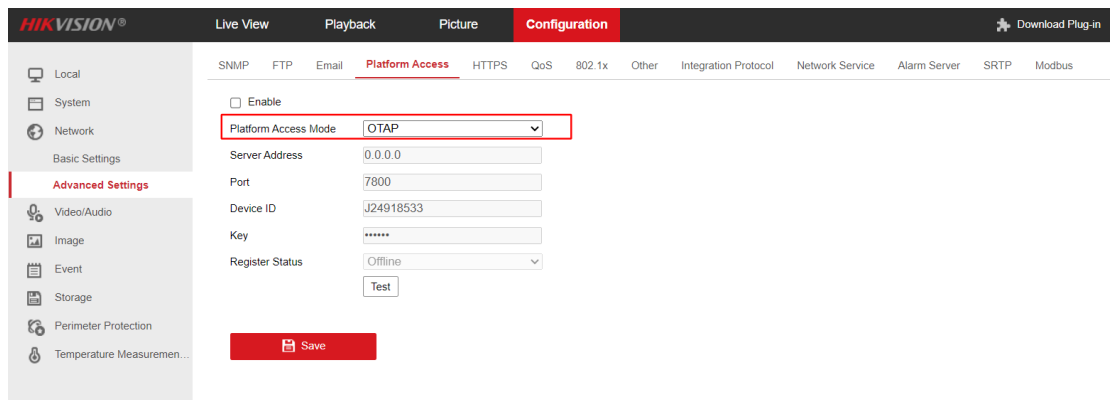


Figure 18

3 V5.5.98build240426 Optimized Features

3.1 384 resolution devices change default scene mode from Distant View to General, and keep good detection due to algorithm optimization.

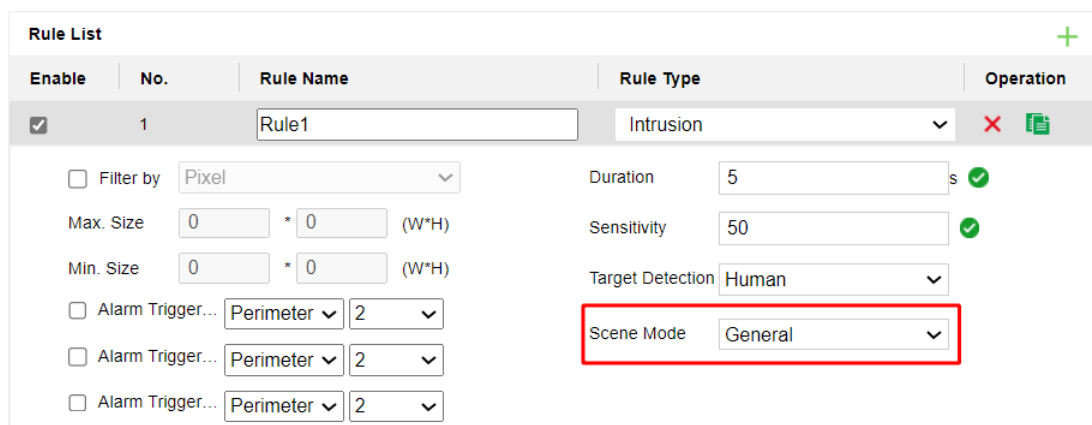


Figure 19

3.2 Optimization of Temperature Filtering Prompts.

After Temperature filtering, the preview page displays the filtering tips, if it is forklift filter, it displays Forklift Filtered. If it is a sunlight reflection filter, it will show Reflection Filtered. If there are both forklift and reflection filters in the same rule or in the same area, it will show Forklift and Reflection Filtered.

Various combinations of filtering tips are shown in the table below.

Filtered: Forklift
Filtered: Reflection
Filtered: Forklift and Reflection
Filtered: Smoking and Reflection
Filtered: Smoking and Forklift
Filtered: Smoking, Forklift, and Reflection

Table 1

4 Key Function Distribution

Product Series	Sub-series	Bi-spectrum Analysis	Self-Learning Calibration	Distillation Model	Combined Event Alarm	HTTP Order	External Alarm Module
HeatPro PA	160 series	x	x	x	Support 1 rule	√	√
	256 series	x	x	x	Support 2 rules	√	√
HeatPro QA	160 series	√	√	√	Support 1 rule	√	√
	256 series	√	√	√	Support 2 rules	√	√
Security P(Y)	384/640 series	x	x	x	Support all rules	√	√
Security Q(Y)	384/640 series	x	x	√	Support all rules	√	√

5 Supported Product List

DS-2TD2608-1/QA	DS-2TD2608-2/QA		
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DS-2TD1217-2/QA	DS-2TD2617-3/QA	DS-2TD2617-6/QA(C)	
DS-2TD1217-3/QA	DS-2TD2617-6/QA		
DS-2TD1217-6/QA	DS-2TD2617-10/QA		
DS-2TD1228-2/QA	DS-2TD2628-3/QA	DS-2TD2628T-3/QA	DS-2TD1228T-2/QA
DS-2TD1228-3/QA	DS-2TD2628-7/QA	DS-2TD2628T-7/QA	DS-2TD1228T-3/QA
DS-2TD1228-7/QA	DS-2TD2628-10/QA	DS-2TD2628T-10/QA	DS-2TD1228T-7/QA
DS-2TD2628T-10/QA(B)	DS-2TD1228T-2/QA(B)	DS-2TD1228T-3/QA(B)	DS-2TD1228T-7/QA(B)
DS-2TD2628-10/QA(B)			
DS-2TD2138-4/Q	DS-2TD2138-35/Q	DS-2TD2138-10/QY	DS-2TD2138-25/QY
DS-2TD2138-7/Q	DS-2TD2138-4/QY	DS-2TD2138-13/QY	DS-2TD2138-35/QY
DS-2TD2138-10/Q	DS-2TD2138-7/QY	DS-2TD2138-15/QY	DS-2TD2138-4/Q(lite)
DS-2TD2138-4/QY(lite)	DS-2TD2138-7/Q(lite)	DS-2TD2138-7/QY(lite)	DS-2TD2138-10/Q(lite)
DS-2TD2138-10/QY(lite)	DS-2TD2138-15/Q(lite)	DS-2TD2138-15/QY(lite)	DS-2TD2138-25/Q(lite)
DS-2TD2138-25/QY(lite)	DS-2TD2138-15/QY (B)		
DS-2TD2137T-4/Q	DS-2TD2137T-4/QY	DS-2TD2137T-7/QY	
DS-2TD2637-7/Q	DS-2TD2637-10/Q	DS-2TD2637-15/Q	DS-2TD2637-25/Q
DS-2TD2637-35/Q	DS-2TD2637T-7/Q	DS-2TD2637T-10/Q	DS-2TD2637T-15/Q
DS-2TD2637-7/QY	DS-2TD2637-10/QY	DS-2TD2637-15/QY	DS-2TD2637-25/QY
DS-2TD2637-35/QY	DS-2TD2637T-7/QY	DS-2TD2637T-10/QY	DS-2TD2637T-15/QY
DS-2TD2537T-4/Q	DS-2TD2537T-10/Q	DS-2TD2537T-15/Q	
DS-2TD2537T-4/Q(C)	DS-2TD2537T-4Y/Q(C)	DS-2TD2537T-10/Q(C)	DS-2TD2537T-15/Q(C)
HM-TD2537T-4/Q	HM-TD2537T-4/QY	HM-TD2537T-10/Q	HM-TD2537T-15/Q

DS-2TD2537T-4Y/Q			
DS-2TD2528T-3/Q	DS-2TD2528T-7/Q	DS-2TD2528T-10/Q	DS-2TD2528T-3/Q(B)
DS-2TD2528T-3/Q(C)	DS-2TD2528T-7/Q(C)	DS-2TD2528T-10/Q(C)	
HM-TD2528T-3/Q	HM-TD2528T-7/Q	HM-TD2528T-10/Q	

6 Third-party Integration

Thermal cameral Version	V5.5.98 build 240426				
Test equipment	Milestone	Mirasys	Seetec	ONSSI	Axxonsoft
Version	Milestone XProtect series with Corporate 2017 R2	VMS Enterprise, VMS Pro	Cayuga R10	Ocularis 5.4(5.4.0.128)	Intellect 4.10.1
Live view(display VCA info)	√	×	×	×	√
Live view(display Fire point info)	×	×	×	×	×
Live view(display Temperature info)	×	√	×	×	×
Receive VCA Alarm info	√	√	√	√	√
Receive Dynamic Fire Detection info	√	√	×	×	×
Receive Temperature info	√	√	×	×	×
Tips 1. All thermal cameras support Onvif. 2. We have integrated with Mirasys to provide professional solution such as temperature analysis and historical analysis. 3. We integrated with milestone to show the VCA info by metedata, and the integration of different version of Milestone is as below.					

7 Client and Platform Compatibility

Thermal cameral Version	V5.5.98 build 240426		
Test equipment	iVMS-4200	M series NVR	IE explorer
Version	V3.8.2.2 build20221017	DS-7716NI-M4 NVR V4.63.010 build 230619	IE10+
Live view(display VCA info)	√	√(Web,4200)	√
Live view(display Fire point info)	√	√(Web,4200)	√
Live view(display Temperature info)	√	√(Web,4200)	√
Remote setup VCA rules (Line Crossing,Intrusion,Region Entrance,Region Exiting)	√	√(Web)	√
Setup Dynamic Fire Detection	√	√(4200, only support linkage)	√
Setup Temperature Measurement	√	√(4200, only support linkage)	√
Receive VCA Alarm info	√	√(4200)	×
Receive Dynamic Fire Detection info	√	√(4200)	×
Receive Temperature info	√	√(4200)	×
Playback(display VCA info)	√	√(Web,4200)	√
Playback(display Fire point info)	√	√(Web,4200)	√
Playback(display Temperature info)	√	√(Web,4200)	√

Customer Impact and Recommended Action

This update refers to function/compatibility improvement and will take effect automatically after the Date of Change. We are very sorry for any inconvenience of use-habit changes caused by this action.

For any questions and request for this firmware, please contact our local technical support team.

Remarks:

- Hikvision reserves the right to change, alter or withdraw the above notification without prior notice.
- Product design and specifications are subject to change without prior notice.
- The Hikvision firmware may contain errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.
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