

Title:	RN Thermal Network Bullet and Turret Camera	Version:	V5.5.18	Date:	021820
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Action Required:	None, Information Only				

## ■ General Information

Firmware Version	v5.5.19_190930
SDK Version	v6.1.0.10_20190603
Play Library	v7.3.7.38_20190618
iVMS-4200	v2.6.24.3_20190723
Web Component/Plugin Version	v4.0.1_20190717/3.0.7.20
VCA Algorithm Version	v3.3.1_20190316
Fire Detection Algorithm Version	v1.4.0_20180720
Temperature Measurement Algorithm Version	v2.0.3_20181121
MCU Version	N/A
B6 Module Version for 2166V1 and 2866	FPGA_VERSION: V1.02.01, FPGA_BUILD: BUILD20190724, APP_VERSION: V1.02.02, APP_BUILD: BUILD20190724
B3 Module Version for 2136V1, 2836, 2636	FPGA_VERSION: V1.02.00, FPGA_BUILD: BUILD20190723, APP_VERSION: V1.02.00, APP_BUILD: BUILD20190723
F3 Module Version for 2137V1	FPGA_VERSION: V3.00.08, FPGA_BUILD: BUILD20190524, APP_VERSION: V3.00.08, APP_BUILD: BUILD20190524
F1 Module Version for 1217V1, 2117V1, 2671V1	FPGA_VERSION: V2.00.05, FPGA_BUILD: BUILD20190505, APP_VERSION: V2.00.05, APP_BUILD: BUILD20190505
D1 Module Version (AGC 4.0) for 2615	FPGA_VERSION: V4.01.03, FPGA_BUILD: BUILD20180723, APP_VERSION: V4.04.04, APP_BUILD: BUILD20190723

## ■ Key Updates

### • Added Functions

#### 1. Copying of Behavior Analysis Rules

When a new rule is added, it can be copied from an existing rule with a single click. The type, location, and parameters of the newly-added rule are then identical to those of the source rule.

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After the new rule is copied, users can also adjust the new rule.

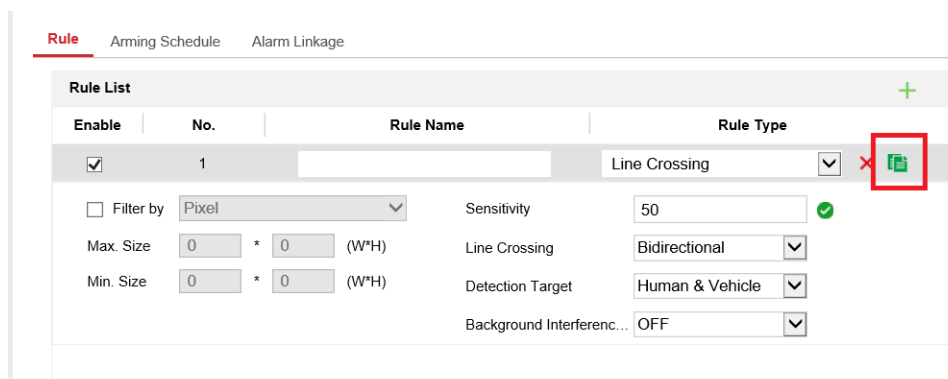


Figure 1, Rule copying interface

## 2. Display Trajectory by Player

In this version, the trajectory information can be overlaid by the player, which leaves the original video stream intact.

Note:

In former versions, trajectory information can only be written into the video directly. This changes the original video and affects intelligent functions, as well as image analysis.

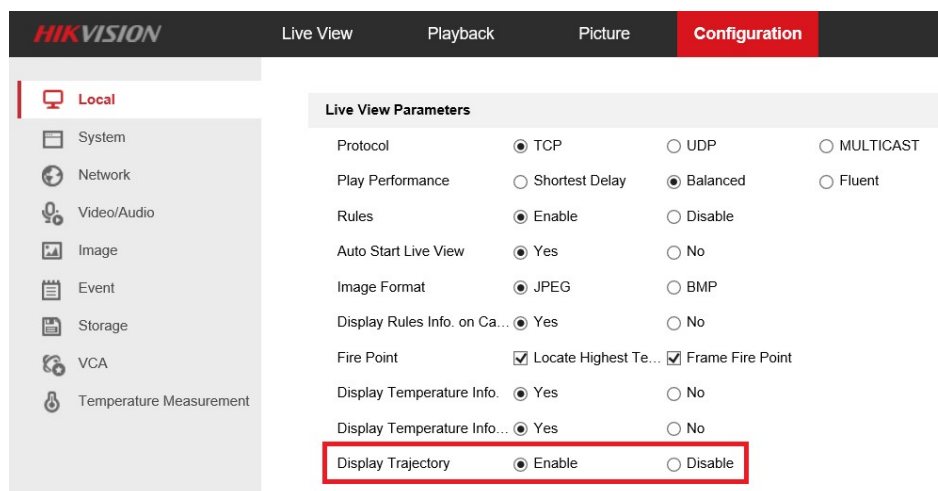


Figure 2, Enable or disable Display Trajectory

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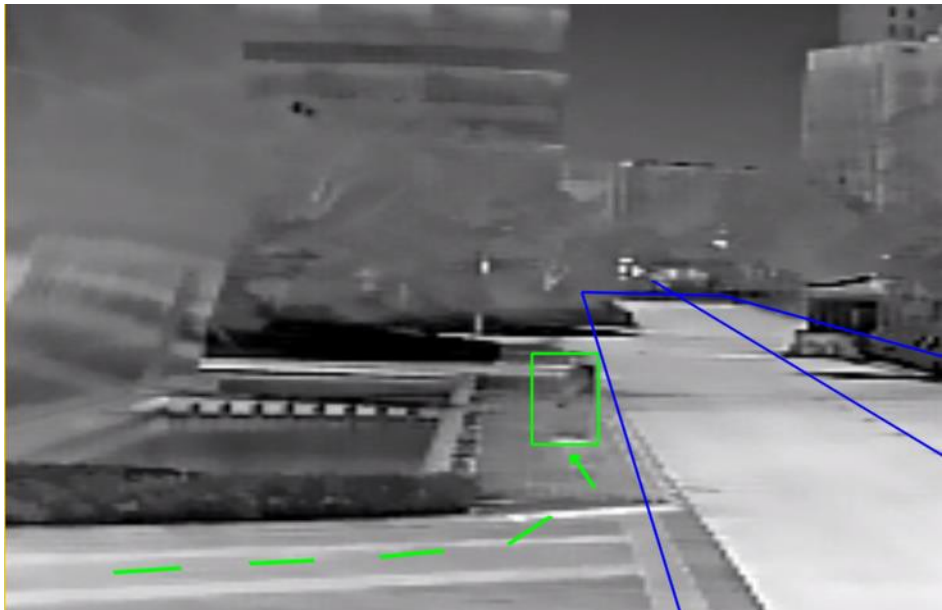


Figure 3, Trajectory displayed

3. Temperature Information Adjustments

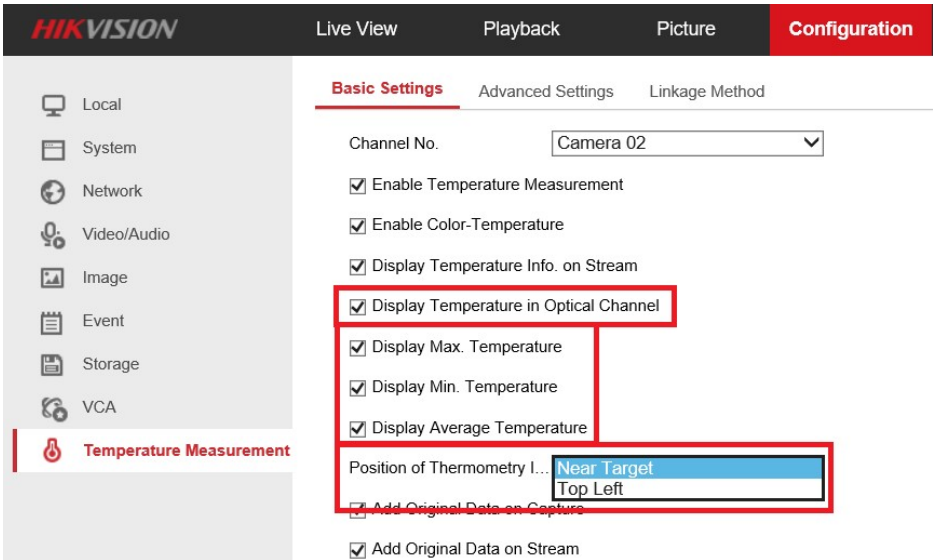


Figure 4, Temperature measurement adjustments

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Position of thermometric information:

**Near Target** or **Top Left** options can be selected.



Figure 5, Near Target temperature information



Figure 6, Top Left temperature information

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### Maximum/Minimum/Average Temperature Display:

The Maximum/Minimum/Average Temperature can be shown individually, both in Normal Mode as well as in Expert Mode.



Figure 7, Max/Min/Average temperature information

### Temperature Display in Optical Channel:

For dual-lens devices, the **Display Temperature** option is clicked in the Optical Channel, The temperature information can be displayed in both the thermal and optical channels.



Figure 8, Temperature Display in optical and thermal channels

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#### 4. Audible Alarm Output and Linkage

The audible warning linkage function can be added for the temperature, behavior analysis, fire detection, and smoke detection alarms.

The Alarm Sound Type, Alarm Times, alarm Sound Volume and alarm Arming Schedule can be configured by taking the following steps:

Event → Basic Event → Audible Alarm Output

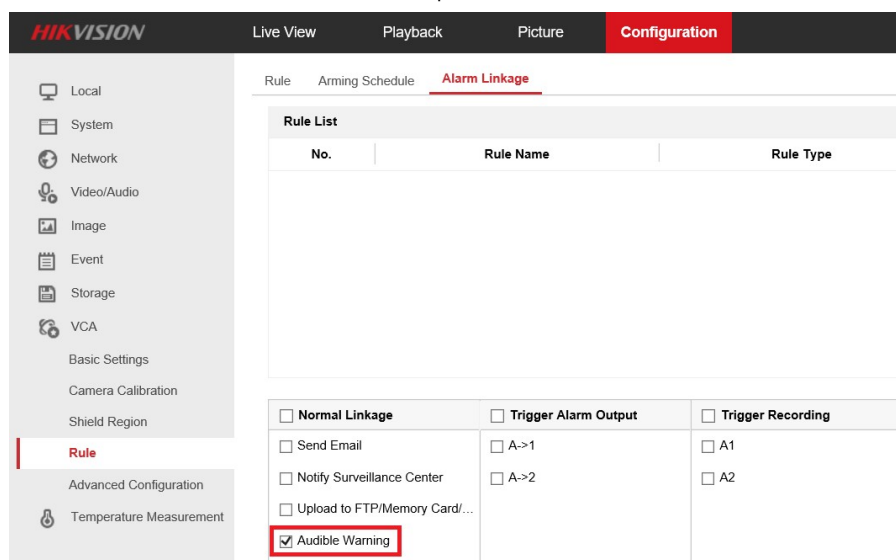


Figure 9, Alarm Linkage interface

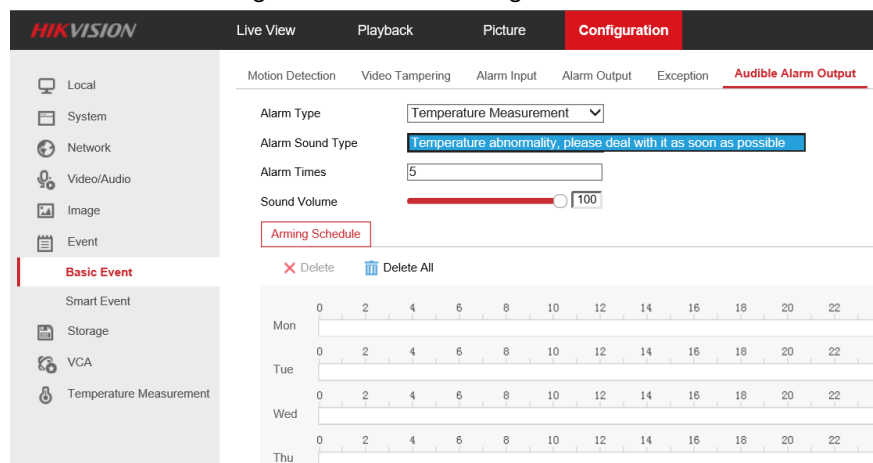


Figure 10, Basic Event alarm configuration interface

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## 5. Quick Configuration

Partial functions can be configured in the Live View interface for both thermal and optical channels.

Quick configuration for optical channels:

### a. Display Settings:

The screenshot shows the PTZ General settings interface. At the top, there are tabs for 'PTZ' and 'General', with 'General' being the active tab. Below the tabs, there is a section titled 'Display Settings' with a dropdown arrow. This section contains several sliders and dropdown menus: 'Bright...' (slider at 50), 'Contrast' (slider at 50), 'Satura...' (slider at 50), 'Sharp...' (slider at 50), 'Expos...' (dropdown menu set to 1/25), 'WDR' (dropdown menu set to OFF), 'Digital...' (dropdown menu set to Normal), and 'Noise...' (slider at 50). Below these settings is a 'Default' button. At the bottom of the interface, there are two more sections: 'OSD Settings' and 'Video/Audio', both with dropdown arrows.

Figure 11, Quick Display Settings configuration

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b. OSD Settings:

PTZ

General

▼ Display Settings

▲ OSD Settings

☐ Display Name

Camer...

Camera 01

☐ Display Date

☐ Display Week

Time F...

24-hour

Date F...

MM-DD-YYYY

Text OverLay

☐ 1

☐ 2

☐ 3

☐ 4

Save

▼ Video/Audio

Figure 12, Quick OSD Settings configuration



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c. Video/Audio:

PTZ

General

Display Settings

OSD Settings

Video/Audio

Strea...Main Stream(Nor

Resolu...1920\*1080P

Max. B...2048 Kbps

Displa...Player

Figure 13, Quick Video/Audio configuration

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Quick configuration for thermal channels:

- a. Display Settings:

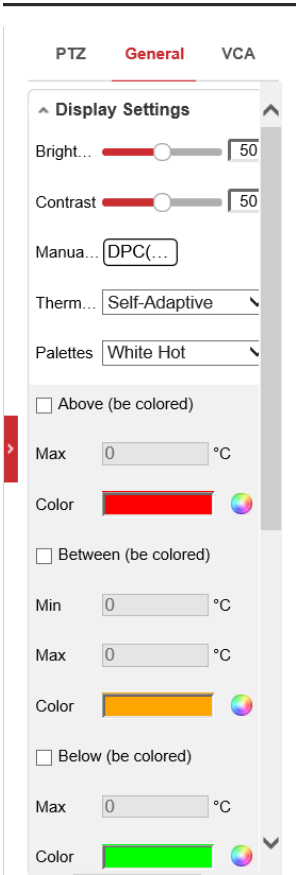


Figure 14, Quick Display Settings configuration

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b. OSD Settings:

PTZGeneralVCA

▼ Display Settings

▲ OSD Settings

☐ Display Name

Camer...

Camera 02

☐ Display Date

☒ Display Week

Time F...

24-hour

Date F...

MM-DD-YYYY

Text OverLay

☐ 1

☐ 2

☐ 3

☐ 4

Save

▼ Video/Audio

Figure 15, Quick OSD Settings configuration

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c. Video/Audio:

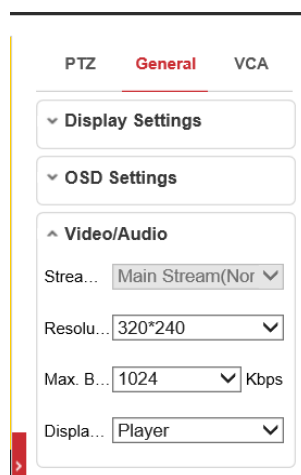


Figure 16, Quick Video/Audio configuration

- Optimized Functions

- Recommended Filter Size:

When **Target Detection** is set to **Human**, the recommended Minimum Size is 1.968 x 3.28 ft (0.6 x 1 m). The recommended Maximum Size is 6.56 x 9.84 ft (2 x 3 m).

When **Target Detection** is set to **Vehicle**, the recommended Minimum Size is 5.904 x 4.592 ft (1.8 x 1 m). The recommended Maximum Size is 16.4 x 32.8 ft (5 x 10 m).

When **Target Detection** is set to **Human and Vehicle or All**, the recommended Minimum Size is 1.968 x 3.28 ft (0.6 x 1 m). The recommended Maximum Size is 16.4 x 32.8 ft (5 x 10 m).

- Recommended Emissivity:

The Emissivity value ensures the accuracy of the temperature measurement. A recommended emissivity value has been added to Normal Mode and Expert Mode, which makes it easier to configure temperature measurements.

There are five kinds of Emissivity:

**Rougher:** 0.95

**Rough:** 0.80

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**Smoother:** 0.60

**Smooth:** 0.30

**Custom:** 0.01 to 1

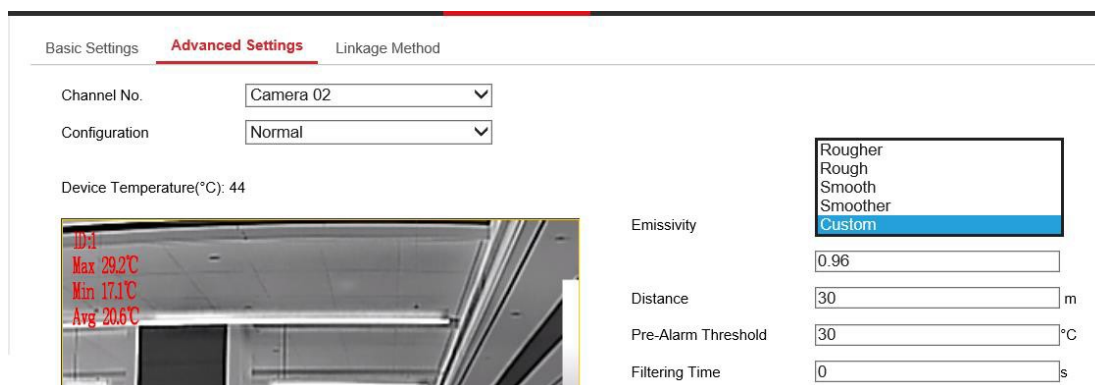


Figure 17, Recommended Emissivity in Normal Mode

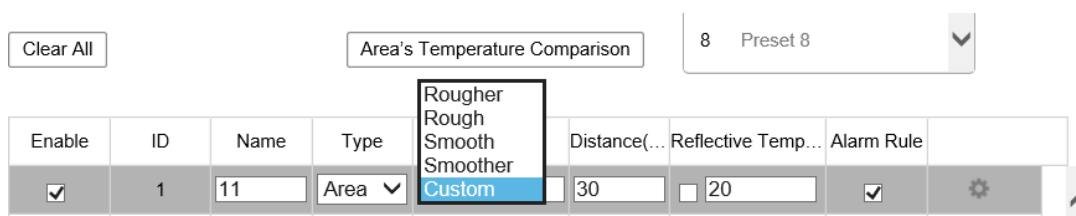


Figure 18, Recommended Emissivity in Expert Mode

### 3. Use Same Unit feature:

The selectable **Temperature Units** include degrees Celsius, Fahrenheit and Kelvin.

The selectable **Distance Units** include centimetres, metres and feet.

When a user enters the Unit Settings interface, they can click the **Use Same Unit** box. All of the relevant options will be changed to the same unit.

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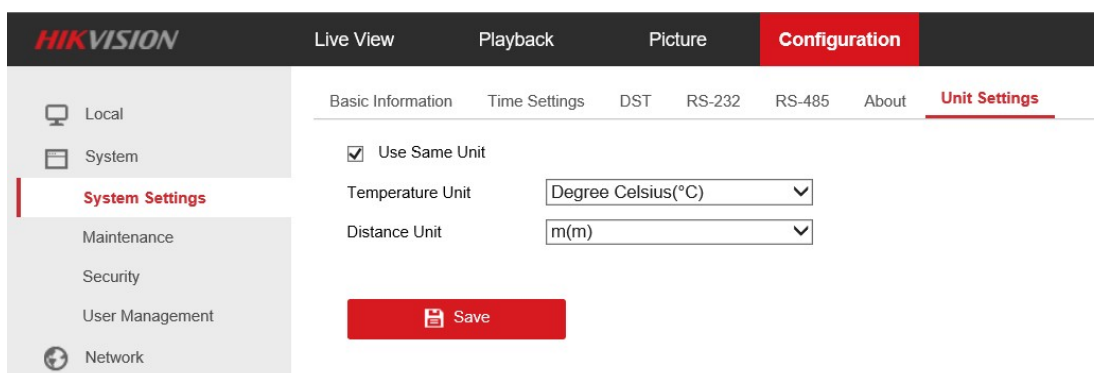


Figure 19, Unit Settings interface

#### 4. Importing of temperature measurement calibration files via the web:

In the past, the calibration files could only be imported to the camera using a professional tool. In this version, the process has been simplified and the file can be imported via the web interface.

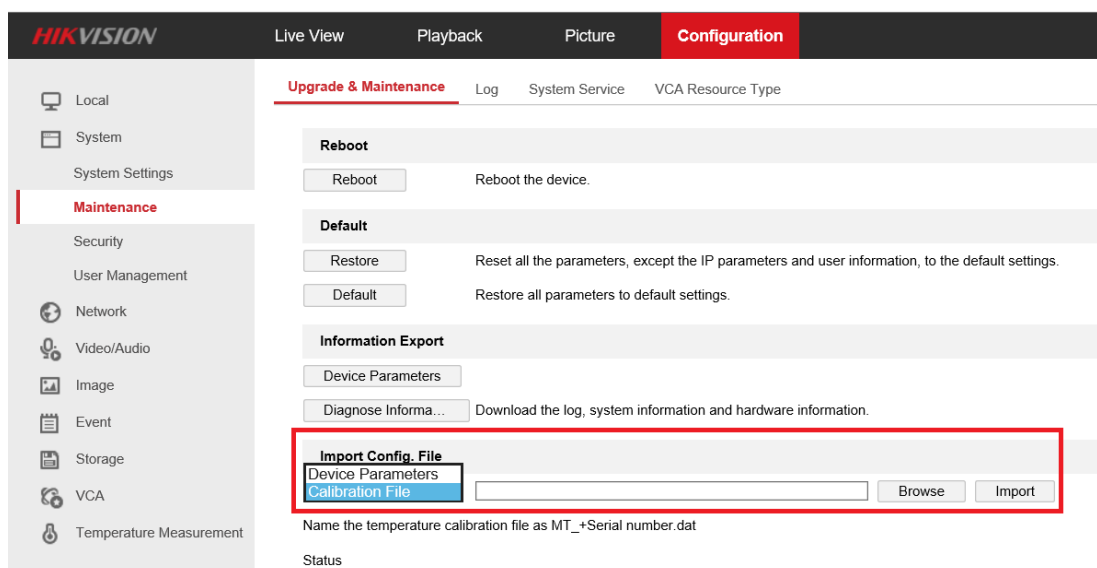


Figure 20, Configuration file importing interface

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## ■ Supported Products

Dual Lens Turret	DS-2TD1217-2/V1	DS-2TD1217-6/V1
	DS-2TD1217-3/V1	
Single Lens Bullet	DS-2TD2117-3/V1	DS-2TD2117-6/V1
Dual Lens Bullet	DS-2TD2617-3/V1	DS-2TD2617-6/V1
V1 Single Lens Bullet	DS-2TD2136-4/V1	DS-2TD2166-25/V1
	DS-2TD2136-7/V1	DS-2TD2166-35/V1
	DS-2TD2136-10/V1	DS-2TD2137-7/V1
	DS-2TD2136-15/V1	DS-2TD2137-10/V1
	DS-2TD2136-25/V1	DS-2TD2137-15/V1
	DS-2TD2136-35/V1	DS-2TD2137-25/V1
	DS-2TD2166-7/V1	DS-2TD2137-35/V1
	DS-2TD2166-15/V1	
Dual Lens Bullet	DS-2TD2836-25	DS-2TD2866-25
	DS-2TD2836-50	DS-2TD2866-50
V1 Dual Lens Bullet	DS-2TD2836-25/V1	DS-2TD2866-25/V1
	DS-2TD2836-50/V1	DS-2TD2866-50/V1
Dual Lens Bullet	DS-2TD2615-7	DS-2TD2615-10
	DS-2TD2636-10	DS-2TD2636-15
	DS-2TD2636T-10	DS-2TD2636T-15
V1 Bullet	DS-2TD2137-7/VP	DS-2TD2137-25/V1
	DS-2TD2137-10/VP	DS-2TD2137-35/V1
	DS-2TD2137-15/VP	

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### ■ Third Party Platform Compatibility List

Thermal cameral Version	V5.5.18 build 190930				
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. The integration with milestone of fire detection and temperature measurment will be finsih in Q3. 2. All thermal cameras support Onvif. 3. We have integrated with Mirasys to provide professional solution such as temperature analysis and historical analysis. 4. We integrated with milestone to show the VCA info by metedata, and the integration of different version of Milestone is as belwo.					

### ■ Hikvision Resource Compatibility List

Thermal cameral Version	V5.5.18 build 190930					
Test equipment	IVMS-5200E	IVMS-4200	I series NVR	I series NVR	IE explorer	HIK central
Version	V3.3	V2.6.24.3 build 20190723	DS-96XX-I16 NVR V4.1.50 180227	DS-96XX-I16 V3.4.95 customized	IE7+	V1.1.1
Live view(display VCA info)	√	√	√(Web,4200)	√(Web,4200,Local GUI)	√	√
Live view(display Fire point info)	×	√	√(Web,4200)	√(Web,4200,Local GUI)	√	√
Live view(display Temperature info)	×	√	√(Web,4200)	√(Web,4200,Local GUI)	√	√
Remote setup VCA rules (Line Crossing,Intrusion,Region Entrance,Region Exiting)	×	√	√(Web)	√(4200, Web)	√	√ (Software associated with the browser to configure)
Setup Dynamic Fire Detection	×	√	√(4200, only support linkage)	√(4200)	√	√ (Software associated with the browser to configure)
Setup Temperature Measurement	×	√	√(4200, only support linkage)	√(4200)	√	√ (Software associated with the browser to configure)
Receive VCA Alarm info	√	√	√(4200)	√(Web,4200,Local GUI)	×	√
Receive Dynamic Fire Detection info	×	√	√(4200)	√(Web,4200,Local GUI)	×	√
Receive Temperature info	×	√	√(4200)	√(Web,4200,Local GUI)	×	√
Playback(display VCA info)	√	√	√(Web,4200)	√(Web,4200,Local GUI)	√	√
Playback(display Fire point info)	×	√	√(Web,4200)	√(Web,4200,Local GUI)	√	√
Playback(display Temperature info)	×	√	√(Web,4200)	√(Web,4200,Local GUI)	√	√



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#### ■ 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.
- Hikvision is not liable for any typing or printing errors.