

Thermal Network Bullet/Turret Camera

Version:V5.5.18 build190930

Release Note

(2019-11-18 **External**)

1. General Information

Firmware Version	V5.5.18 build 190930
SDK Version	V6.1.0.10 build 20190603
Play Lib	V7.3.7.38 build 20190618
iVMS-4200	V2.6.24.3 build 20190723
Web Component/ Plugin Version	V4.0.1 build 20190717/3.0.7.20
VCA Algorithm Version	V3.3.1 build 20190316
Fire Detection Algorithm Version	V1.4.0 build 20180720
Temperature Measurement Algorithm Version	V2.0.3 build 20181121
MCU Version	N/A
B6 Module Version for 2166V1, 2866	FPGA_VERSION:V1.02.01,FPGA_BUILD:BUILD20190724 APP_VERSION:V1.02.02,APP_BUILD:BUILD20190724
B3 Module Version for 2136V1, 2836,	FPGA_VERSION:V1.02.00,FPGA_BUILD:BUILD20190723 APP_VERSION:V1.02.00,APP_BUILD:BUILD20190723

2636	
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, 2617V1	FPGA_VERSION:V2.00.05,FPGA_BUILD:BUILD20190505 APP_VERSION:V2.00.05,APP_BUILD:BUILD20190505
D1 Module Version (AGC4.0) for 2615	FPGA_VERSION:V4.01.03,FPGA_BUILD:BUILD20180723 APP_VERSION:V4.04.04,APP_BUILD:BUILD20190723

2. Supported Model

160Dual Lens Turret	DS-2TD1217-2/V1	DS-2TD1217-6/V1
	DS-2TD1217-3/V1	
160 Single Lens Bullet	DS-2TD2117-3/V1	DS-2TD2117-6/V1
160 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
Dual Lens Bullet	DS-2TD2166-15/V1	
	DS-2TD2836-25	DS-2TD2866-25
V1 Dual Lens Bullet	DS-2TD2836-50	DS-2TD2866-50
	DS-2TD2836-25/V1	DS-2TD2866-25/V1
Dual Lens Bullet	DS-2TD2836-50/V1	DS-2TD2866-50/V1
	DS-2TD2615-7	DS-2TD2615-10
Dual Lens Bullet	DS-2TD2636-10	DS-2TD2636-15
	DS-2TD2636T-10	DS-2TD2636T-15
	DS-2TD2137-7/VP	DS-2TD2137-25/VP
VP Bullet	DS-2TD2137-10/VP	DS-2TD2137-35/VP
	DS-2TD2137-15/VP	

3. V5.5.18 Key Updates

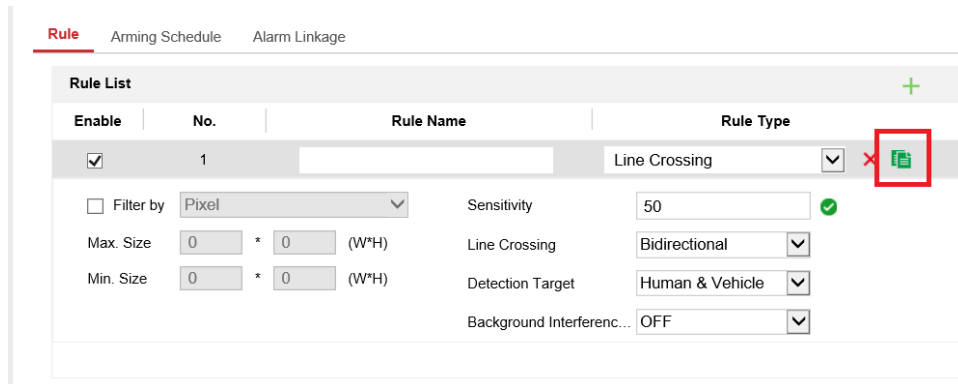
3.1 Added Function

1. Behavior Analysis Rules Copy

When adding a new rule, it can be copied from an existing rule by a single click.

The type, location and parameters of the new-added rule is exactly the same as the source rule.

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

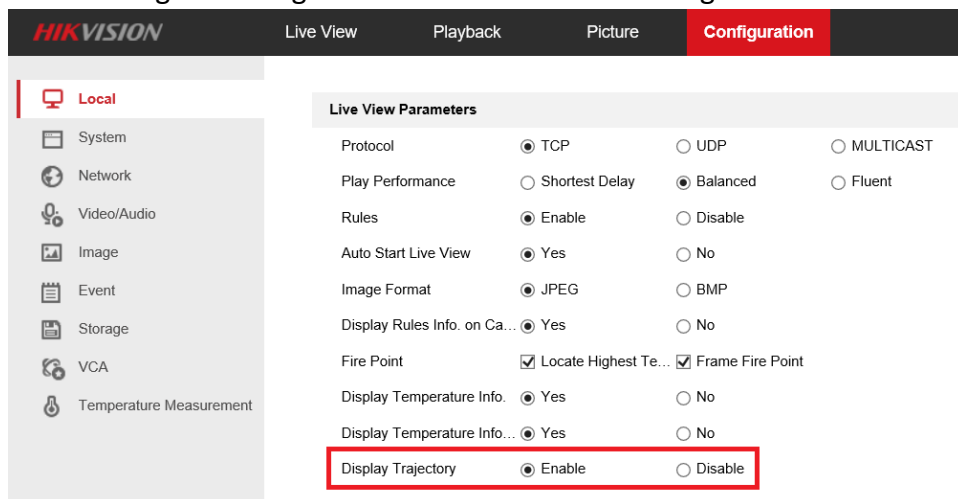


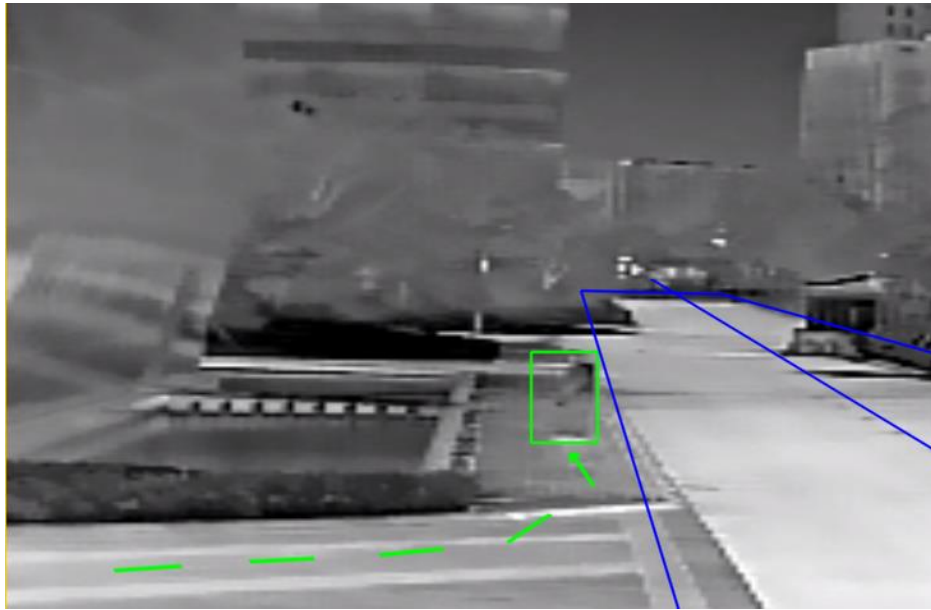
2. Display Trajectory by Player

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

Notice:

In the former versions, trajectory information can only be written into video directly, which changes the original video and affect the intelligent function or image analysis.





3. Temperature Information Adjustments

HIKVISION Live View Playback Picture **Configuration**

Basic Settings Advanced Settings Linkage Method

Channel No. Camera 02

- Enable Temperature Measurement
- Enable Color-Temperature
- Display Temperature Info. on Stream
- Display Temperature in Optical Channel
- Display Max. Temperature
- Display Min. Temperature
- Display Average Temperature
- Position of Thermometry I... **Near Target**
Top Left
- Add Original Data on Capture
- Add Original Data on Stream

3.1 Position of Thermometry Information:

Near Target or Top Left can be selected.

Temperature Info Near Target:



Temperature Info Top Left:



3.2 Display Max/Min/Average Temperature

Max/Min/Average Temperature can be shown individually both in Normal Mode and Expert Mode.



3.3 Display Temperature in Optical Channel

For dual-lens device, after ticking Display Temperature in Optical Channel, the temperature info can be displayed both in thermal and optical channels.



4. Audible Alarm Output and Linkage

Add audible warning linkage function in temperature alarm, behavior analysis alarm, fire detection alarm and smoking detection alarm.

The Alarm Sound Type, Alarm Times, Sound Volume and Arming Schedule of alarm can be configured in the following interface:

Event>Basic Event>Audible Alarm Output

The screenshot shows the HIKVISION web interface configuration page for Audible Alarm Output. The page has a sidebar on the left with navigation options: Local, System, Network, Video/Audio, Image, Event, Storage, VCA, Basic Settings, Camera Calibration, Shield Region, Rule, Advanced Configuration, and Temperature Measurement. The main area has tabs for Rule, Arming Schedule, and Alarm Linkage. The Alarm Linkage tab is active, showing a Rule List table with columns for No., Rule Name, and Rule Type. Below the table is a grid of checkboxes for various linkage options:

Normal Linkage	Trigger Alarm Output	Trigger Recording
<input type="checkbox"/> Send Email	<input type="checkbox"/> A->1	<input type="checkbox"/> A1
<input type="checkbox"/> Notify Surveillance Center	<input type="checkbox"/> A->2	<input type="checkbox"/> A2
<input type="checkbox"/> Upload to FTP/Memory Card/...		
<input checked="" type="checkbox"/> Audible Warning		

The screenshot shows the Hikvision Configuration interface. The top navigation bar includes 'Live View', 'Playback', 'Picture', and 'Configuration'. The 'Configuration' tab is active, and the 'Audible Alarm Output' sub-tab is selected. The left sidebar contains a menu with categories: Local, System, Network, Video/Audio, Image, Event, Basic Event, Smart Event, Storage, VCA, and Temperature Measurement. The main content area shows settings for 'Temperature Measurement' alarm type. The 'Alarm Sound Type' is set to 'Temperature abnormality, please deal with it as soon as possible'. The 'Alarm Times' is set to 5. The 'Sound Volume' is set to 100. Below these settings is an 'Arming Schedule' section with a 'Delete' button and a 'Delete All' button. The schedule is displayed as a grid for Monday through Thursday, with time slots from 0 to 24 hours.

5. Fast Configuration

Both thermal and optical channel support configuring partial functions in Live View Interface

5.1 Fast Configuration in Optical Channel:

(1) Display Settings:

The screenshot shows the PTZ General settings interface. The 'General' tab is active. The 'Display Settings' section is expanded, showing various settings: Brightness (50), Contrast (50), Saturation (50), Sharpness (50), Exposure (1/25), WDR (OFF), Digital (Normal), and Noise (50). A 'Default' button is located below the settings. Below the 'Display Settings' section are two collapsed sections: 'OSD Settings' and 'Video/Audio'.

(2) 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

(3) Video/Audio:

PTZ **General**

▼ Display Settings

▼ OSD Settings

^ Video/Audio

Strea... Main Stream(Nor ▼

Resolu... 1920*1080P ▼

Max. B... 2048 ▼ Kbps

Displa... Player ▼

5.2 Fast Configuration in Thermal Channel:

(1) Display Settings:

PTZ **General** VCA

^ Display Settings ^

Bright... 50

Contrast 50

Manua...

Therm...

Palettes

Above (be colored)

Max °C

Color

Between (be colored)

Min °C

Max °C

Color

Below (be colored)

Max °C

Color

(2) OSD Settings:

PTZ **General** VCA

^ Display Settings ^

^ OSD Settings ^

Display Name

Camer...

Display Date

Display Week

Time F...

Date F...

Text OverLay

1

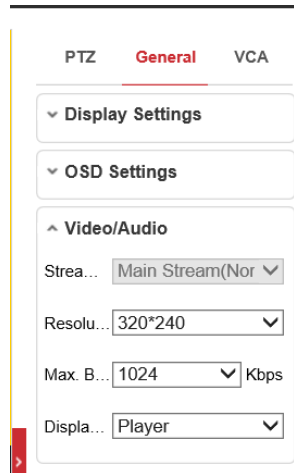
2

3

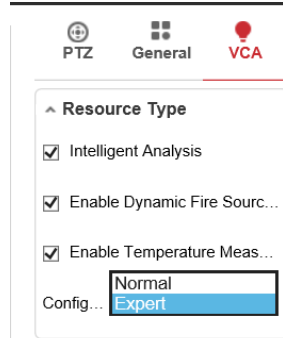
4

^ Video/Audio ^

(3) Video Audio:



(4) Resource Type:



3.2 Optimized Function

1. Recommended Filter Size:

1.1 When the Target Detection is selected as **Human**, the Min.Size is recommended as 0.6m*1m(1.968feet*3.28feet), the Max.Size is recommended as 2m*3m(6.56feet*9.84feet)

1.2 When the Target Detection is selected as **Vehicle**, the Min.Size is recommended as 1.8m*1m(5.904feet*4.592feet), the Max.Size is recommended as 5m*10m(16.4feet*32.8feet)

1.3 When the Target Detection is selected as **Human&Vehicle or All**, the Min.Size is recommended as 0.6m*1m(1.968feet*3.28feet), the Max.Size is recommended as 5m*10m(16.4feet*32.8feet)

2. Recommended Emissivity:

The emissivity value is quite important to ensure the accuracy of temperature measurement, the recommended emissivity value is added in this version for both Normal Mode and Expert Mode, making it easier to configure temperature measurement.

The Emissivity is divided into 5 kinds:

Rougher:0.95

Rough:0.80

Smoother:0.60

Smooth:0.30

Custom: 0.01~1

Recommended Emissivity in Normal Mode:

Recommended Emissivity in Expert Mode:

Enable	ID	Name	Type	Distance(...)	Reflective Temp...	Alarm Rule	
<input checked="" type="checkbox"/>	1	11	Area	30	20	<input checked="" type="checkbox"/>	

3. Use Same Unit:

The Selectable temperature units include: Degree Celsius, Degree Fahrenheit, Degree Kelvin.

The Selectable distance units include: cm, m and feet

After selecting the Units, click User Same Unit, all the relevant option will be changed to the same unit.

4. Importing temperature measurement calibration file via web:

In the past, the calibration file can only be imported to the camera by a professional tool. This version simplifies the process and makes it possible to import the file via the web interface.

4. Compatibility List

Thermal cameral Version	V5.5.18 build 190930				
Test equipment	Milestone	Mirasys	Seetec	ONSSI	Axonsoft
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	<ol style="list-style-type: none"> 1. The integration with milestone of fire detection and temperature measurement will be finished 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 metadata, and the integration of different version of Milestone is as below. 				

Thermal cameral Version	V5.5.18 build 190930					
Test equipment	IVMS-5200E	IVMS-4200	I series NVR DS-96XX-116 NVR V4.1.50 180227	I series NVR DS-96XX-116 V3.4.95 customized	IE explorer	HIK central
Version	V3.3	V2.6.24.3 build 20190723	√(Web,4200)	√(Web,4200,Local GUI)	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)	√	√