Thermal Network PTZ Camera

V5.5.49 build 220822

Release Note

(2022-09-28)

1. Basic Information

Firmware Version	V5.5.49 build 220822
SDK Version	V6.1.9.30_build20220610
Play Lib	V7.4.0.57
iVMS-4200	V3.7.4.3 build20220630
Web Component/Plugin Version	V4.0.1.0 build 220727/3.0.7.42
Temperature Measurement Algorithm Version	V2.1.4build20220512
Behavior Analysis Algorithm Version	V1.9.3build20220424
Ship Detection Algorithm Version	V2.0.1build20210729
Smoke/Exhaust Fume Detection Algorithm Version	V2.3.0build20220325
Fire Source Detection Algorithm Version	V4.1.1build20220520
Vehicle Detection Algorithm Version	V2.0.3build20210121

2. Updated Functions

A. New Features

1. Add Filter Level in Forklift Filter

Filter Level is added in Forklift Filter, which support high, middle and low levels to meet the filtering requirements in different situations.

Note: The default value in China is high, and the default value is low overseas.

2. RS-485 supports MODBUS-RTU in PTZ Control Protocol

MODBUS-RTU is supported and used for transmission of temperature measurement results.

Note: The default value for PTZ cameras is still PELCO-D, the user should configure related parameters manually.

3. SFTP Protocol is supported

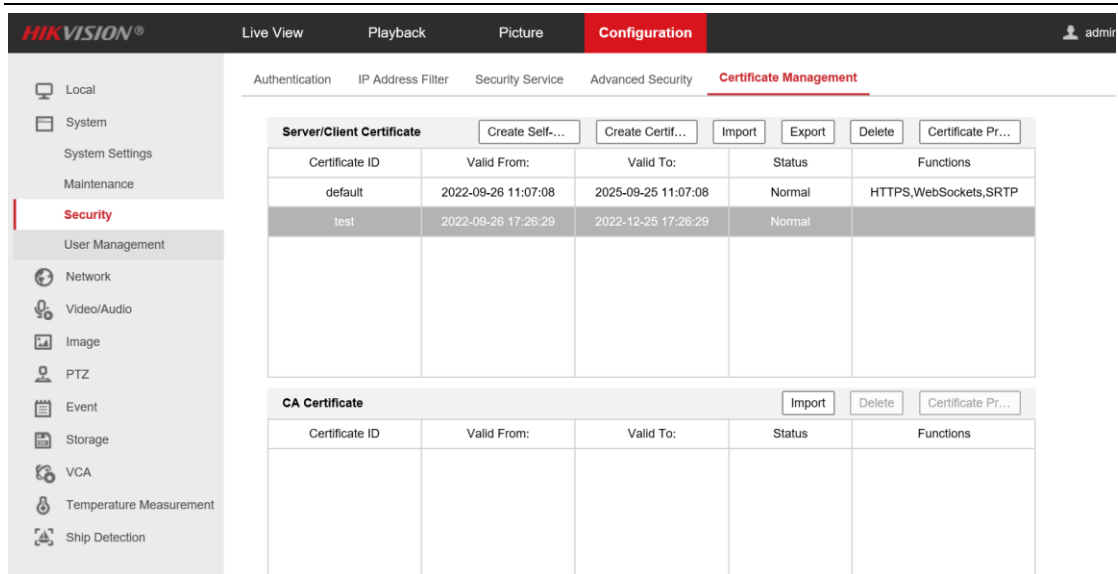SFTP Protocol is supported, enhance data transmission security.

4. Preview SRTP is supported

Note: UDP and multicast transport protocols are supported only.

5. Add Certificate Management

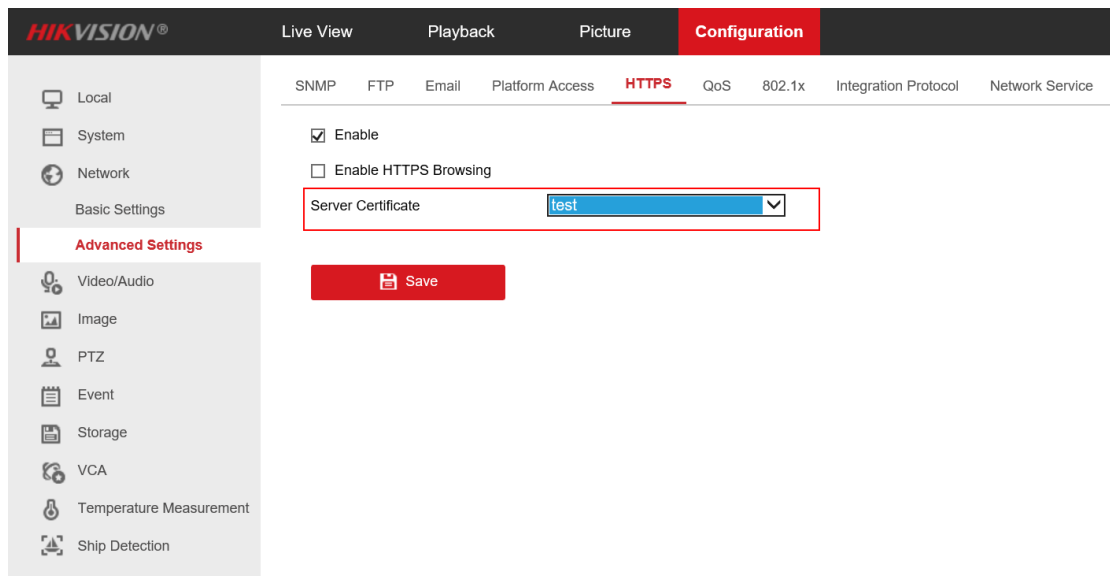Certificates can be chosen in HTTPS and SRTP after setting or importing certificates.

Note: There is no separate configuration for choosing certificates in WebSockets, the certificates are same as those in HTTPS.
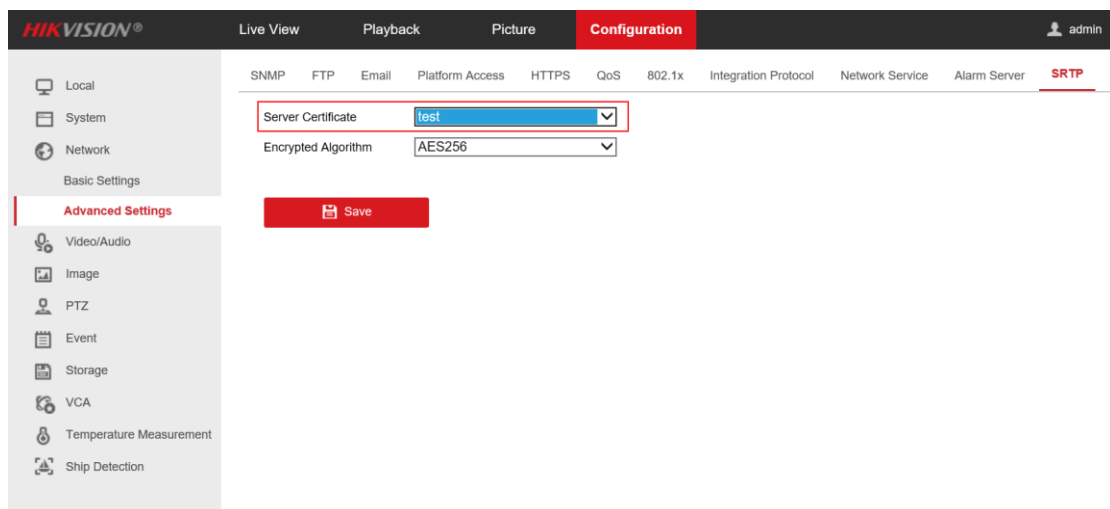
6. Add Certificate Expiration Alarm

Note: Email notification is supported only.

7. PTZ Block Alarm is supported

Support Range: Speed dome series 41, PTZ positioning series 62

Note: The hardware needs to support PTZ encoder (new hardware).

8. The mode controlling angular velocity is supported

Angular velocity controlling is supported by calling ISAPI. The control protocol is required that the P and T fields are not delivered. Instead, the panning speed and tilting speed are used for controlling the rotational angular velocity in motion.

9. Add Display Position Diagram

Direction can be overlaid in the visible channel. The overlaid position can be changed, while the size cannot.
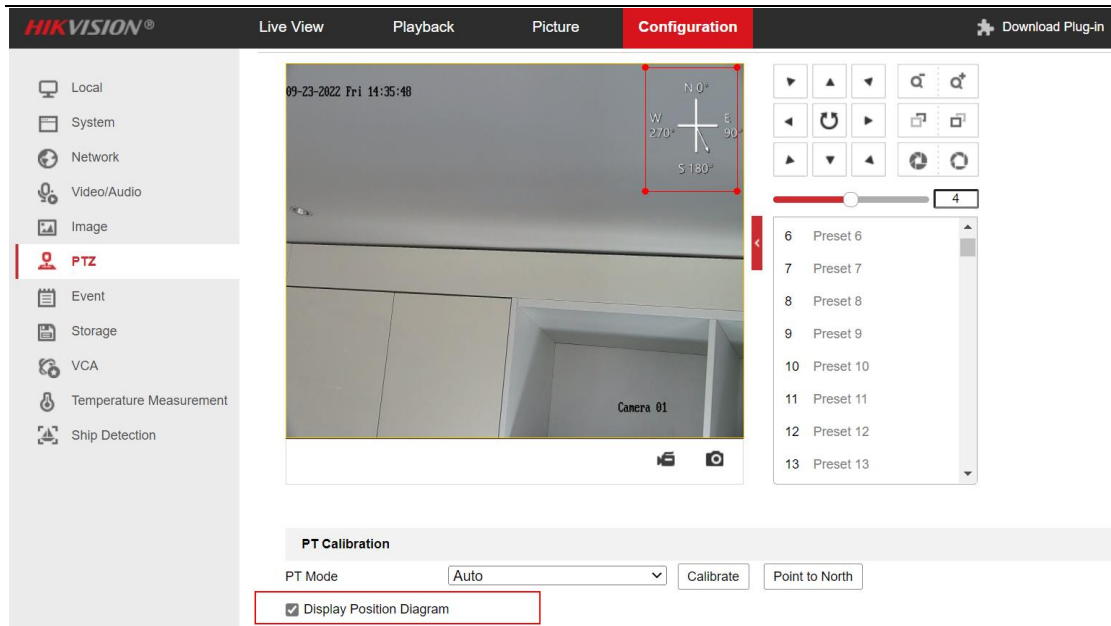
10. Visible lens supports periodic correction

Support Range: All the models in the supported products list at the end of the note are supported except those with D2, E2, G2 in suffixes (2MP visible lens).

In order to reduce the risk of loss for the motor through long time lens operation, choose Camera 01 as channel number, that is visible lens correction.
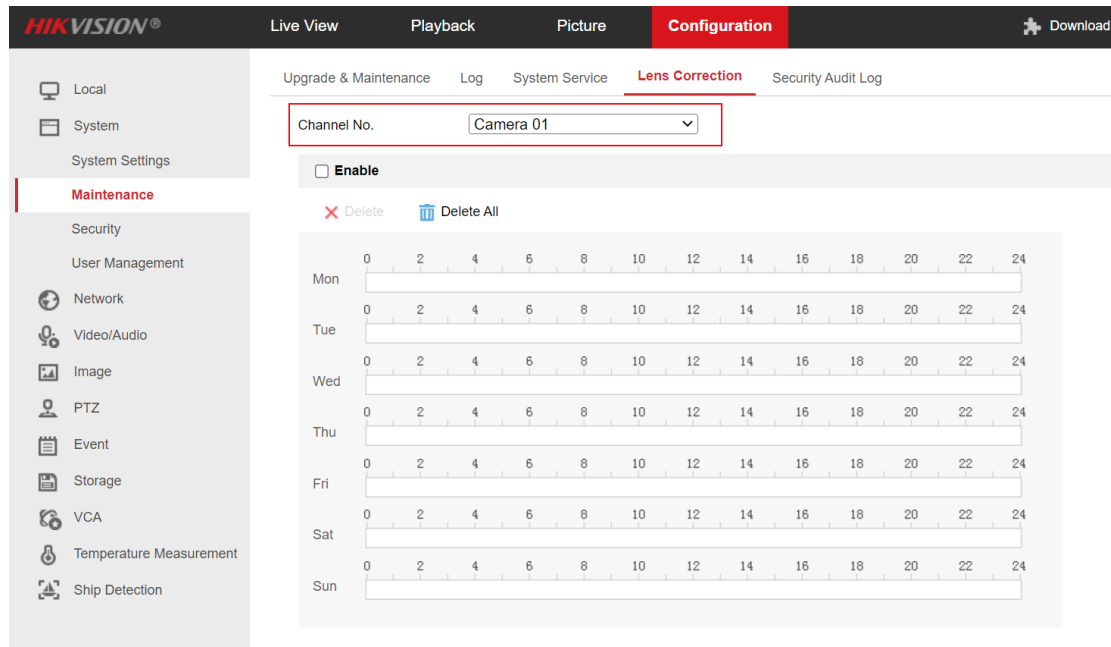
11. T-model supports automatically changing temperature measurement ranges

Support Range: T-model

12. Add atmospheric parameters configuration in temperature measurement

Support Range: T-model, supported overseas only.

13. Add Burning Protection Delay

The avoidance action will be triggered after the burning prevention alarm lasts for X seconds.

Note: The default value is 5s.

14. OSD Outline is supported

Note: The OSD Outline effect is fixed to black edge with white background.

15. PTZF in place report is supported

Note: Absolute position will be reported when it is in place, like calling absolute position, preset point in place and scene in place.

16. Add "None" VCA Type in action task

Park Action, Scheduled Tasks, Combined Path support None VCA Type, which can be used in where users do not want to operate VCA.

Note: when None is selected, no VCA or other smart detection is working. Please be cautious on using this option.

17. Add Self-Adaption in Temperature Measurement

Reduce the influence of distance parameter on temperature measurement result.

Note: Distance mode is displayed only when a camera is using a supported temperature measurement template.

B. Optimized Function

1. Optimize the display of visible light axis adjustment

Support Range: FC Bi-spectrum Thermal Sphere PTZ models

Select different channels and display the cross cursor in the center of the channel for easy calibration.

2. Optimize the fire source detection effect

Optimize the fire source double check strategy to improve the detection rate and

reduce false positives.

3. Optimize the smoke detection effect

Optimize the smoke detection model and filtering strategy to reduce typical false positives such as water vapor, night lights, sky PTZ and lens raindrops.

4. Optimize the vehicle detection effect

Optimize the detection model and filtering strategy to improve the vehicle detection rate and reduce false positives.

5. Optimize the behavior analysis effect

Update the behavior analysis detection algorithm.

6. Adjust the residence time of Intelligent Scene

Adjust the lower limit of the residence time of the behavior analysis and ship detection scenarios to 15s, in order to meet the user's requirement of switching scenarios rapidly.

Note: If the time is too short, the scene may be switched before the alarm condition is reached, and there is a certain risk of missing reports, which needs to be evaluated in combination with the on-site situation.

7. Optimize the virtual focal problem of visible light pictures when capturing after center the ship

Wait for the end of autofocus and capture after center the ship.

8. Add the temperature information of the temperature measurement rule in the capture interface

9. 802.1x supports TLS1.2

Improve security and support SHA512 encryption algorithm.

2 Supported Product List

A. 41XX series

| DS-2TD4137-25/W | DS-2TD4137-50/W | DS-2TD4137-25/WY |

DS-2TD4137-50/WY	DS-2TD4167-25/W	DS-2TD4167-50/W
DS-2TD4167-25/WY	DS-2TD4167-50/WY	DS-2TD4137T-9/W
DS-2TD4137T-25/W	DS-2TD4137T-50/W	DS-2TD4167T-9/W
DS-2TD4167T-25/W	DS-2TD4167T-50/W	DS-2TD4137-25/W/GPS
DS-2TD4137-50/W/GPS	DS-2TD4137-25/WFC	DS-2TD4137-50/WFC

B. 42XX series

DS-2TD4228-10/W	DS-2TD4228T-10/W

C. 55XX series

DS-2TD5537T-7/W	DS-2TD5537T-15/W	DS-2TD5537T-25/W
DS-2TD5567T-7/W	DS-2TD5567T-15/W	DS-2TD5567T-25/W

D. 65XX series

DS-2TD6537T-25H4LX/W	DS-2TD6537T-50H4LX/W	DS-2TD6567T-25H4LX/W
DS-2TD6567T-50H4LX/W		

E. 62XX series

DS-2TD6237-25H4L/W	DS-2TD6237-50H4L/W	DS-2TD6237-50H4L/W/GLT
DS-2TD6237-50H4L/W/5G	DS-2TD6267-25H4L/W	DS-2TD6267-50H4L/W
DS-2TD6237T-25H4L/W	DS-2TD6237T-50H4L/W	DS-2TD6267T-25H4L/W
DS-2TD6267T-50H4L/W	DS-2TD6237-75C4L/W	DS-2TD6237-100C4L/W
DS-2TD6267-75C4L/W	DS-2TD6267-100C4L/W	DS-2TD6267-75C4L/WY
DS-2TD6267-100C4L/WY		

F. 81XX series

DS-2TD8137-75C4F/W	DS-2TD8137-75C4FL/W	DS-2TD8137-100C4F/W
DS-2TD8137-100C4FL/W	DS-2TD8137-100ZC4F/W	DS-2TD8137-100ZC4FL/W
DS-2TD8137-150C4F/W	DS-2TD8137-150C4FL/W	DS-2TD8137-100D2F/W
DS-2TD8137-100D2FL/W	DS-2TD8137-100ZD2F/W	DS-2TD8137-100ZD2FL/W
DS-2TD8137-150ZD2F/W	DS-2TD8137-100E2F/W	DS-2TD8137-100ZE2F/W
DS-2TD8137-100E2FL/W	DS-2TD8137-100ZE2FL/W	DS-2TD8137-150E2F/W
DS-2TD8137-150ZE2F/W	DS-2TD8137-150E2FL/W	DS-2TD8137-150ZE2FL/W
DS-2TD8137-190ZE2F/W	DS-2TD8137-190ZG2F/W	DS-2TD8137-100D4F/W
DS-2TD8137-100D4FL/W	DS-2TD8137-100ZD4F/W	DS-2TD8137-100ZD4FL/W
DS-2TD8137-150ZD4F/W	DS-2TD8137-150E4F/W	DS-2TD8137-150E4FL/W
DS-2TD8137-150ZE4FL/W	DS-2TD8137-190ZE4F/W	DS-2TD8137-190ZK2F/W
DS-2TD8167-75C4F/W	DS-2TD8167-100C4F/W	DS-2TD8167-100C4FL/W
DS-2TD8167-100ZC4F/W	DS-2TD8167-150C4F/W	DS-2TD8167-150ZC4F/W
DS-2TD8167-100D2F/W	DS-2TD8167-100ZD2F/W	DS-2TD8167-100ZD2FL/W
DS-2TD8167-150D2F/W	DS-2TD8167-150ZD2F/W	DS-2TD8167-100E2F/W
DS-2TD8167-100ZE2F/W	DS-2TD8167-100E2FL/W	DS-2TD8167-150E2F/W

DS-2TD8167-150ZE2F/W	DS-2TD8167-150E2FL/W	DS-2TD8167-150E2FL/W/AR
DS-2TD8167-150ZE2FL/W	DS-2TD8167-190ZE2F/W	DS-2TD8167-190ZE2F/WY
DS-2TD8167-190ZE2FL/W	DS-2TD8167-190ZG2F/W	DS-2TD8167-190ZG2FL/W
DS-2TD8167-230ZG2F/WY	DS-2TD8167-230ZG2F/W	DS-2TD8167-230ZG2FL/W
	DS-2TD8167-100D4F/W	DS-2TD8167-100D4FL/W
DS-2TD8167-100ZD4F/W	DS-2TD8167-100ZD4FL/W	DS-2TD8167-150D4F/W
DS-2TD8167-150E4FL/W	DS-2TD8167-150E4FL/W/AR	DS-2TD8167-150ZE4F/W
DS-2TD8167-150ZE4FL/W	DS-2TD8167-190ZE4F/W	DS-2TD8167-190ZE4FL/W
DS-2TD8167-190ZK2F/W	DS-2TD8167-190ZK2FL/W	DS-2TD8167-230ZK2FL/W

G. 91XX series

DS-2TD9167-100ZC4F/W	DS-2TD9167-100ZD4F/W	DS-2TD9167-100ZD4FL/W
DS-2TD9167-100ZD2F/W	DS-2TD9167-100ZD2FL/W	DS-2TD9167-100ZE2F/W
DS-2TD9167-150ZE2F/W	DS-2TD9167-150ZE2FL/W	DS-2TD9167-190ZE2F/W
DS-2TD9167-190ZE2FL/W	DS-2TD9167-190ZG2F/W	DS-2TD9167-230ZG2F/W
DS-2TD9167-190ZG2FL/W	DS-2TD9167-230ZG2FL/W	
DS-2TD9167-150ZE4F/W	DS-2TD9167-150ZE4FL/W	DS-2TD9167-190ZE4F/W
DS-2TD9167-190ZE4FL/W	DS-2TD9167-190ZK2F/W	DS-2TD9167-190ZK2FL/W
DS-2TD9167-230ZK2F/W	DS-2TD9167-230ZK2FL/W	

H. 95C8 series

DS-2TD95C8-150ZE4F/W	DS-2TD95C8-150ZE4FL/W	DS-2TD95C8-190ZK2FL/W
DS-2TD95C8-300ZK2FL/W		

3 Third-party Integration

Test equipment	Milestone	Avigilon	Exacqvision	Digifort
Version	Milestone Xprotect Management Client 2020R3 20.3a	Avigilon 7.2.2.0	(20.06.2.0) Jun 11 2020	7.3.0.1
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	√	√	√	√

4 Client and Platform Compatibility

Thermal camera Version	V5.5.49 build 220822		
Test equipment	iVMS-4200	I series NVR	IE explorer
Version	V3.7.4.3 build20220630	iDS-9664NX-I8/X V4.61.000 build 220622	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)	√