

## **Thermal Network PTZ Camera**

## Version:V5.5.45 build220224

## **Release Note**

# (2022-03-07)

## **1. General Information**

Firmware Version	V5.5.45 build 220224
SDK Version	V6.1.7.35_build20210706
Play Lib	V7.4.0.46
Web Component/Plugin Version	V4.0.1.0 build 220110/3.0.7.42
Temperature Measurement Algorithm	V2.1.0build20210607
Version	
VCA Algorithm Version	V1.9.1build20220119
Ship Detection Algorithm Version	V2.0.1build20210729
Smoke Detection Algorithm Version	V2.2.0build20201110
Fire Detection Algorithm Version	V4.0.3build20210818



# 2. V5.5.45 Key Update

### A. New Features

1) Ship detection

All the cameras in the support product list except Mini Positioning System have this function.

HIKVISION	Live View	Playback	Picture	Configuration					
🖵 Local	Scene Parame	ters Capture Patio Ship F	Rule low Detection er Detection						
🛅 System	Function Mo	de Fishin	g Ship Detection						
Network	Min. Size	40	* 15						
Contraction Video/Audio	Max. Size	1000	* 1000						
🔝 Image	Min. Speed	0		12					
9 PTZ	Max. Speed	-0-		120					
Event	Area Settir	ngs Arming Sched	ule 🔪 Linkage Meth	lod					
🖺 Storage									
Co VCA		5-2022 Wed 1	9:13:43		۲	•	•	q	0
Temperature Measurement	and a second second				•	Ü	•	þ	j,
A Ship Detection						v	4	0	
Basic Parameter						_			-
Zooming Ratio		max			< 1	Prese	et 1		
Scene Configuration					2	Prese	et 2		
1					3	Prese	et 3		
2					4	Prese	et 4		
New Scene					5	Prese	et 5		
Scene Auto-switch				ptz	6	Prese	et 6		
Advanced Settings				b.cz	7	Prese	et 7		
				je do	8	Prese	et 8		
	Draw Area	Clear All			1				

Using deep learning algorithm to detect vessels, which can realize ship flow detection, dredger detection and fishing ship detection.

2) Ship Tracking & Center Capture

When the target triggers alarm, it can accomplish continuous tracking and capture a image by centering the ship in the optical channel. **Ship tracking and center capture are mutually exclusive**. When enabled at the same time, ship tracking has a higher priority.

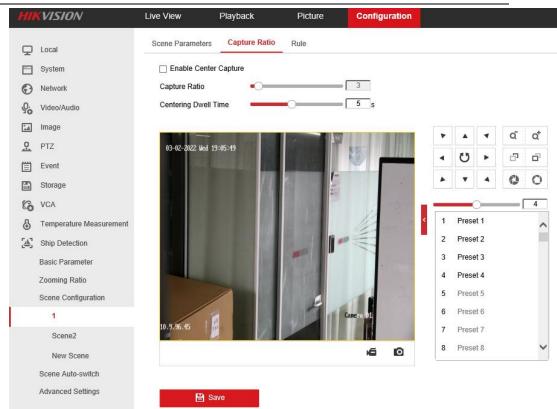
• On the Scene Parameters page, Support to enable tracking and set tracking parameters.



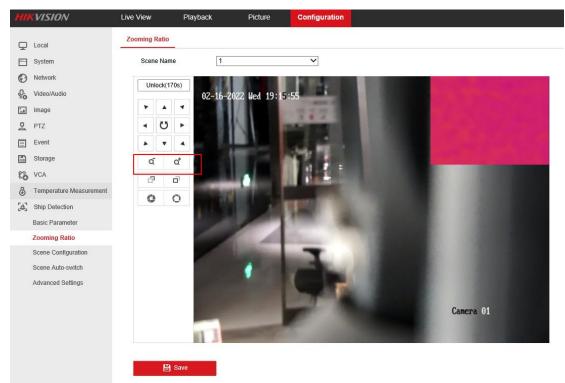
	System	Scene Name	1							
O	Network	Display Scene Name								
Q.	Video/Audio	Channel No.	Camera 02	~						
1	Image	Scene Ratio	0							
오	PTZ	✓ Track ③Center	r capture is not supported	after enabling trackin	g.					
圁	Event	Tracking Duration	0	0						
-	Storage	Post-tracking	0	3						
63	VCA	Limited Tracking								
6	Temperature Measurement	Auto-tracking Limits	Set Up Limit Call		<u>all</u>					
[4]	Ship Detection		Set Down Limit	all Set Right Limit	Call					
	Basic Parameter		a contractor and the			۲		4	ď	a*
	Zooming Ratio	02-16-2022	Wed 19:14:30				U	•	7	67
	Scene Configuration							H	0	0
	1					_			45	U
	2					·	_	)	_	4
	New Scene				<	1	Prese			^
	Scene Auto-switch					2	Prese			
	Advanced Settings					3	Prese			
						4	Prese			
						6	Prese			
				ptz		7	Prese			
						8	Prese			~
				6	0					
		🗎 Save								

• The ship-centered captures with the set capture ratio will be uploaded when a ship detection alarm is triggered.





 On the tracking rate configuration page, Support to configure the tracking rate of optical channel in various scenarios.



Support displaying online users
Support to display the online users, including user name, user type, ip address and



#### operating time.

HII	KVISION	Live \	/iew	Playback	Picture	Configuration			
ç	Local	User	r Management	Online Users					
<u> </u>	System		User List						Refresh
	System Settings		No. U	ser Name	Level	IP Addres	s	User Operation	Time
	Maintenance		1	admin	Administrator	10.20.96.1	13	2022-02-16 19:1	15:46
	Security								
	User Management								
Ø	Network								
Q.	Video/Audio								
1	Image								
<u>9</u>	PTZ								
Ë	Event								
۵	Storage								
6	VCA								
5	Temperature Measurement								
[ <b>4</b> ]	Ship Detection								

#### 4) Support TLS V1.2.

TLS1.2 by default, which improves the security.

HII	VISION	Live View	'	Playba	ick Pict	ure	Configuration				
Ģ	Local	SNMP	FTP	Email	Platform Access	HTTPS	QoS	802.1x	Integration Protocol	Network Service	Alarm Server
	System	🗸 En	able Web	Socket							
Ø	Network	🖌 En	able Web	Sockets							
	Basic Settings	🗆 En	able TLS	1.1							
	Advanced Settings	🖌 En	able TLS	1.2							
<u>Q.</u>	Video/Audio										
1	Image		8	Save							
므	PTZ										
圁	Event										
B	Storage										
6	VCA										
6	Temperature Measurement										
[ <u>4</u> ]	Ship Detection										

5) Support to redirect to https automatically, which improves the security.



HII	<b>KVISION</b>	Live View	Playbac	k Pict	ure	Config	uration		
Ţ	Local	SNMP FTP	Email	Platform Access	HTTPS	QoS	802.1x	Integration Protocol	Network Servic
	System	Enable							
Ð	Network	Enable H	TTPS Browsing	3					
	Basic Settings	Certificate	Details						
	Advanced Settings	Installed Certi	ficate	C=CN, S	T=ZJ, L=H	HZ, OU=e	mbeddeds	softeware, H/IP=9	Delete
.Q.	Video/Audio	Property			: C=CN, eddedsof			_	
1	Image			H/IP=9k		3c100ef		99140c0dcco	
므	PTZ			Issuer:	C=CN,	ST=ZJ,			
圁	Event			H/IP=9k		3c100ef		99140c0dcco	
B	Storage				y: 2021 2024-03		11:19:31 19:31	1 V	
6	VCA								
6	Temperature Measurement	E	Save						
<u>[4]</u>	Ship Detection								

6) Support Panoramic map in optical channel (those models below are excluded).

HIKVISION	Live View F	Playback	Picture Configuration					<b>1</b> ×	imin (	O Help	e e
THERMAL CAMERA	2-16-2022 Wed 1	9:26:38			- A	2-16-2022 Wed 19	:26:38		PTZ	G	eneral
as Camera 01 ken taj ov as ptz ken taj				1 1 2					•	•	•
~									÷ @		8 8 0
		.518		Canera 01			ptz	-	2	Preset 1 Preset 2 Preset 3	
										Preset 4 Preset 5	
										Proset 6	
										Preset 7	
									9 1	Preset S	
										Preset 1	
										Preset 1	
										Preset 1	
										Preset 1 Preset 1	
		-			-			Q 10 0 4 11 0		Preset 1	
		- Box and	TT PART	1. Stantas	3			And the second second		Preset 1	
	ā — 1882 • ta• ∳•							← → <b>6</b> - 11		Preset 1 Preset 1	
S-2TD8167-1	50ZE2F	-/W	DS-2TD816	7-190ZE2	F/W	DS-2TD8167-19	0ZE2F/WY				
S-2TD8167-2	30ZG21	F/WY	DS-2TD816	7-230ZG2	F/W	DS-2TD8167-23	BOZM2F/W				

7) Support to draw " fire source region shield " in Panorama map.



IKVISION	Live View	Playback Picture	Configuration					
] Local	Audio Exception Det	lection Fire and Smoke Detection	Smoke Detection Shield	Fire Source	tegion Shield			
] System	Channel No.	Camera 02	~					
) Network	Enable Fire So	ource Region Shield						
Video/Audio	Drawing Mode	In Panorama Map	~					
] Image					1/			
PTZ					1			
] Event	1		5					
Basic Event						BI GIR		
Smart Event		F					T.	
) Storage	<							
VCA	Stop Drawing	Clear All View Shield Area						
Temperature Measurement	Display Shield	I Area						
Ship Detection	Fire Source Re	egion Shi		Add	Delete			
	No.	Fire Source Region Name	Enable	Active 2	oom Ratio			
	1	Fire Mask 1	Yes		1			
	2	Fire Mask 2	Yes		1			
	🖽 Sa	Ne						
Natas								

Notes:

- Mirror is forbidden when drawing the shield area in Panorama map.
- When drawing the shield area in Panorama map, the width of shield area should be less than 1/5 of the whole map.
- Because of some deviation between the dual-channel axis and panorama stitching algorithm, the actual area displayed in the thermal channel prevails.

### **B.** Optimizations:

#### 1) Font adjustment

In white hot, black hot, and the ice fire mode, the color of normal, pre-alarm, alarm are green, yellow, red.

While in the rest of the palette mode, the color of normal, pre-alarm, alarm are white, yellow, red, and the font size by default are 20.



2) When reflect light filter & forklift filter work, OSD will display filter on. Users can use the two functions by enabling them in the below page.



Reflect Light Filter	
Enable Reflect Light Filte	er
Sensitivity	50
Restart VCA	Restart
Forklift Filter	
Enable Forklift Filter	
Display Filtering Status	
Restart VCA	Restart
🖹 Save	

3) Increase the limit of tolerance temperature to 32.

Alarm Rule		×
Alarm Rule	Above (Max. Temperature)	~
Alarm Temperature	100	°C
Filtering Time	0	s
Pre-Alarm Temperature	90	•C
Filtering Time	0	s
Tolerance Temperature	35	°C 😵 Range 1-32
Pre-Alarm Output	□ A->1 □ A->2	
Alarm Output	□ A->1 □ A->2	
	ОК	Cancel

- 4) Improve the stability of focus (for 190Z, 230Z model).
- 5) Improve the stability of zoom, focus when the working temperature is less than  $-32^{\circ}$ C.
- Smoke detection improvement Improve the smoke detection algorithm, which can support detect black smoke.
- **3. Supported Product List**



### A. 4XXX series

DS-2TD4137-25/W	DS-2TD4137-50/W	DS-2TD4167-25/W
DS-2TD4167-50/W	DS-2TD4137-25/WY	DS-2TD4137-25/WY
DS-2TD4167-50/WY	DS-2TD4167-25/WY	DS-2TD4137T-9/W
DS-2TD4137T-25/W	DS-2TD4167T-9/W	DS-2TD4167T-25/W
DS-2TD4228-10/W	DS-2TD4228T-10/W	

# B. Mini Positioning System 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

### C. 62XX series

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

## D. 81XX series:

DS-2TD8167-150ZE2F/W	DS-2TD8167-150ZC4F/W	DS-2TD8167-190ZE2F/W
DS-2TD8167-190ZE2FL/W	DS-2TD8167-190ZE2F/WY	DS-2TD8167-230ZG2F/W
DS-2TD8167-230ZG2FL/W	DS-2TD8167-230ZG2F/WY	

Hikvision Resource Compatibility List



Thermal cameral Version		V5.5.45 build 220122		
Test equipment	iVMS-4200	I series NVR	IE explorer	
Version	V3.6.6.2	DS-7632N-I2/16P	IE10+	
	build20211119	V4.22.005 build 191208		
Live view(display VCA info)	$\checkmark$	√(Web,4200)	√	
Live view(display Fire point info)	$\checkmark$	√(Web,4200)	√	
Live view(display Temperature info)	$\checkmark$	√(Web,4200)	√	
Remote setup VCA rules (Line				
Crossing, Intrusion, Region	$\checkmark$	√(Web)	$\checkmark$	
Entrance,Region Exiting)				
Setup Dynamic Fire Detection	√	√(4200, only support	$\checkmark$	
		linkage)		
Setup Temperature Measurement	$\checkmark$	√(4200, only support	$\checkmark$	
		linkage)		
Receive VCA Alarm info	$\checkmark$	√(4200)	×	
Receive Dynamic Fire Detection info	√	√(4200)	×	
Receive Temperature info	√	√(4200)	×	
Playback(display VCA info)	$\checkmark$	√(Web,4200)	$\checkmark$	
Playback(display Fire point info)	$\checkmark$	√(Web,4200)	√	
Playback(display Temperature info)	√	√(Web,4200)	√	

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	√	√	√	√