

DS-2TD8167-150ZC4F/W

Thermal & Optical Bi-spectrum Network Stable PTZ

















Hikvision DS-2TD8167-150ZC4F/W Thermal & Optical Bi-spectrum Network Stable PTZ equipped with built-in GPU which supports intelligent behavior analysis algorithm, can realize high-precision VCA detection and real-time alarm. It is applied to frontier defense scenes, such as airport, railway, farm, large parking lot. The pre-alarm system helps you discover unexpected events immediately and protects your property.

Key Feature

- Behavior analysis function, based on deep learning algorithm: line crossing, intrusion, region entrance & exit
- Temperature exception alarm for fire prevention
- Fire detection algorithm
- 640×512 resolution 17 µm, VOx UFPA, NETD \leq 35 mK (25 °C, F# = 1.1)
- Image processing technology: Liner, histogram, and self-adaptive thermal AGC mode, DDE, 3D DNR





Specification

Thermal Module					
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays				
Resolution	640 × 512				
Pixel Interval	17 μm				
Response Waveband	8 μm to 14 μm				
NETD (Noise Equivalent Temperature Difference)	≤ 35 mK (25 °C, F# = 1.1)				
Focal Length	30 to 150 mm				
IFOV	0.57 to 0.11 mrad				
Field of View	20.56° × 16.51° (H × V) to 4.15° × 3.32° (H × V)				
Min. Focusing Distance	0.1 m				
Aperture	F0.8 to F1.2				
Focus Mode	Semi-auto, manual				
Digital Zoom	×2, ×4, ×8				
Optical Module					
Image Sensor	1/1.8" Progressive Scan CMOS				
Resolution	2688 × 1520				
Min. Illumination	Color: 0.0005 Lux @ (F1.5, AGC ON), B/W: 0.0001 Lux @ (F1.5, AGC ON)				
Shutter Speed	1 s to 1/30,000 s				
Focal Length	6.7 to 360 mm				
Field of View	$60^{\circ} \times 35.8^{\circ}$ (H × V) to $1.2^{\circ} \times 0.7^{\circ}$ (H × V)				
Aperture Range	F1.5-F5.3				
Focus Mode	Auto, semi-auto, manual.				
WDR	120 dB				
Optical Defog	Yes				
Image Effect					
Picture in Picture	Display partial image of thermal channel on the full screen of optical channel				
Target Coloration	Yes. Supported in white hot and black hot mode.				
PTZ					
Movement Range	Pan: 360° Continuous Rotate; Tilt: From -45° to + 45° (auto flip)				
Pan Speed	Configurable, From 0.01°/s to 40°/s				
Tilt Speed	Configurable, From 0.01°/s to 20°/s				
Proportional Zoom	portional Zoom Yes				
Presets	300				
Patrol Scan	8; Up to 32 Presets Per Patrol				
Pattern Scan	4; More Than 10 Minutes Per Pattern				
Power Off Memory	Yes				
Park	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan				



PT Status	Turn On/Turn Off
Scheduled Task	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame
	Scan/Panorama Scan/Dome Reboot/Dome Adjust/Aux Output
Smart Function	
VCA (Video Content Analysis)	4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), 10
VCA (Video Content Analysis)	scenes and 8 VCA rules for each scene.
Temperature Measurement	3 temperature measurement rule types, 273 presets as scene, 21 rules of each scene
	(10 points, 10 areas, and 1 line)
Temperature Range	-20 °C to 150 °C (-4 °F to 302 °F)
Temperature Accuracy	±8 °C (14.4 °F)
Fire Detection	Dynamic fire detection, up to 10 fire points detectable.
Video & Audio	
	Optical channel
	50 Hz:25 fps (2688 × 1520, 1920 × 1080, 1280 × 960, 1280 × 720)
Main Stream	60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 960, 1280 × 720)
	Thermal channel
	25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 384 × 288)
	Optical channel
Cub atmana	50 Hz: 25 fps (704 × 576, 352 × 288)
Sub-stream	60 Hz: 30 fps (704 × 576, 352 × 288) Thermal channel
	25 fps (704 × 576, 640 × 480, 384 × 288)
	Main stream: H.265+/H.265/H.264+/ H.264
Video Compression	Sub-stream: H.265/H.264/MJPEG
Audio Compression	G.711u/G.711a/G.722.1/MP2L2/G.726/PCM
Network	
	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP,
Protocols	RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
Network Storage	MicroSD/SDHC/SDXC card (up to 256 G) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
API	ISAPI, HIKVISION SDK, third-party management platform, ONVIF (Profile S, Profile G,
	Profile T)
Simultaneous Live View	Up to 20 channels
User/Host Level	Up to 32 users. 3 levels: administrator, operator, user
Security	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE
Client	802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering
Client	iVMS-4200, Hik-Connect Live view (plug-in allowed) : Internet Explorer 11
Web Browser	Live view (plug-in free) : Chrome 57.0 +, Firefox 52.0 +
	Local service : Chrome 57.0+, Firefox 52.0+
Interface	
Interface	
Alarm Input	7-ch inputs (0-5 VDC)
Alarm Output	2-ch relay outputs, alarm response actions configurable



Alarm Action	Preset/patrol scan/pattern scan/SD card record/relay output/smart capture/FTP
Alaim Action	upload/email linkage
Audio Input	1, 3.5 mm Mic in/Line in interface.
Audio input	Line input: 2-2.4 V [p-p], output impedance: 1 K Ω ± 10%
Audio Output	Linear level, impedance: $600~\Omega$
	1, RJ45 10M/100M self-adaptive Ethernet interface.
Communication Interface	1, RS-485 interface
Analog Video Output	1.0 V [p-p]/75 Ω,BNC for thermal channel
General	
	32 languages
	English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak,
Menu Language	French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian,
	Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai,
	Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)
Power	48 VDC ± 20%, two-core terminal block
Power Consumption	48 VDC, 5 A, max. 220 W
Working Town orature / Lumidity	-40 °C to 65 °C (-40 °F to 149 °F)
Working Temperature/Humidity	95% or less
Wiper	Yes
Protection Level	IP66 Standard
FIOLECTION LEVEL	TVS 6000V lightning protection, surge protection, voltage transient protection
Dimension	649.2 mm × 438 mm × 668.3 mm (25.6 " × 17.2 " × 26.3 ")
Weight	Approx. 42 kg (92.6 lb)



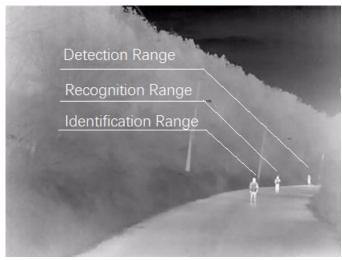
DRI Range Table

- * The table is only for reference and the performance may vary according to different environment.
- * The optimal human detection, recognition, and identification distances are calculated according to Johnson's Criteria.

 Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animal, human, vehicle, etc.), the object must be covered by 6 or more pixels.

Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.



Detection Range	Detection Range	Recognition	Recognition	Identification	Identification
(Vehicles: 1.4 ×	(Humans: 1.8 ×	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
4.0 m)	0.5 m)	1.4 × 4.0 m)	1.8 × 0.5 m)	1.4 × 4.0 m)	1.8 × 0.5 m)
13529 m	4412 m	3382 m	1103 m	1691 m	

Smart Function Table

* The table is only for reference and the performance may vary according to different environment.

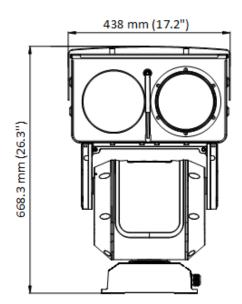
VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 2 × 2 m)	Temperature Measurement (Object: 1 × 1 m)	Fire Detection (Object: 2 × 2 m)	Fire Detection (Object: 1 × 1 m)
3088 m	1103 m	3510 m	1770 m	8820 m	4410 m

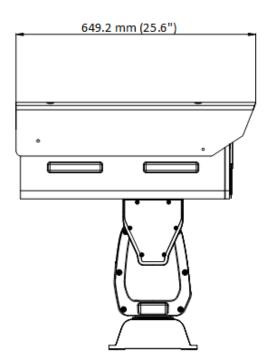
Available Model

DS-2TD8167-150ZC4F/W



Dimension





COMPLIANCE NOTICE: The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.





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