

DS-2TD8167-190ZE2F/W

Thermal & Optical Bi-spectrum Network Stable PTZ

















Hikvision DS-2TD8167-190ZE2F/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	≤ 35 mK (25 °C, F# = 1.1)			
Temperature Difference)				
Focal Length	36 to 190 mm			
IFOV	0.47 to 0.09 mrad			
Field of View	17.19° × 13.79° (H × V) to 3.46° × 2.77° (H × V)			
Min. Focusing Distance	3 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	1920 × 1080			
Min. Illumination	Color: 0.005 Lux @ (F3.5, AGC ON), B/W: 0.0005 Lux @ (F3.5, AGC ON)			
Shutter Speed	1s to 1/30,000s			
Focal Length	12.5 to 775 mm			
Field of View	32.13° × 18.4° (H × V) to 0.53°× 0.3° (H × V)			
Aperture Range	F3.5 to F8.2			
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	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			
I WIN	Scan/Panorama Scan			
PT Status	Turn On/Turn Off			



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 scenes and 8 VCA rules for each scene. 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 2 8 °C (14.4 °F) Fire Detection Dynamic fire detection, up to 10 fire points detectable. Video & Audio Video & Audio Optical channel 50 Hz; 25 fps (1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz; 30 fps (1920 × 1080, 1280 × 960, 1280 × 720) Thermal channel 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 384 × 288) Optical channel 50 Hz; 25 fps (704 × 576, 352 × 288) 60 Hz; 30 fps (794 × 576, 352 × 288) Thermal channel 25 fps (704 × 576, 640 × 480, 384 × 288) Video Compression Amin stream: Hz, 265+Hz, 265+Hz, 264+Hz, 264 Sub-stream: Hz, 265+Hz, 265+Hz, 264+Hz, 264 Sub-stream: Hz, 265+Hz, 265+Hz, 264+Hz, 264 Sub-stream: Hz, 265+Hz, 265+Hz, 264+Hz, 264 Audio Compression G, 711u/G, 711a/G, 722z, 1/MP2Lz/G, 726/PCM Network Protocols IPv4/IPv6, HTTP, HTTPS, 802,1x, Qos, FTP, SMTP, UPPP, SMMP, DNS, DDNS, NTP, RTSP, 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), autonetwork replenishment (ANR) API Simultaneous Live View Up to 32 users, 3 levels: administrator, operator, user Security User Journal of the detection (10 and PVW), MAC address binding, HTTPS encryption, IEEE 802,1K(EAP-MDS, EAP-TLS), access control, IP address filtering Live View (plug-in free): Chrome 57.0+, Firefox 52.0+ Local service: Chrome 57.0	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scheduled Task				
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Sub-stream: H.265/H.264/MJPEG Audio Compression G.711u/G.711a/G.722.1/MP2L2/G.726/PCM Network Protocols IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, 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 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 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering Client iVMS-4200, Hik-Connect Live view (plug-in allowed): Internet Explorer 11 Live view (plug-in free): Chrome 57.0 +, Firefox 52.0 + Local service: Chrome 57.0 +, Firefox 52.0 + Local service: Chrome 57.0 +, Firefox 52.0 +		25 fps (704 × 576, 640 × 480, 384 × 288)			
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802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering iVMS-4200, Hik-Connect Live view (plug-in allowed): Internet Explorer 11 Live view (plug-in free): Chrome 57.0 +, Firefox 52.0 + Local service: Chrome 57.0+, Firefox 52.0 + Interface Alarm Input 7-ch inputs (0-5 VDC)	Security	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE			
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Local service : Chrome 57.0+, Firefox 52.0 + Interface Alarm Input 7-ch inputs (0-5 VDC)					
Interface Alarm Input 7-ch inputs (0-5 VDC)	Web Browser				
Alarm Input 7-ch inputs (0-5 VDC)		Local service : Chrome 57.0+, Firefox 52.0 +			
	Interface				
Alarm Output 2-ch relay outputs, alarm response actions configurable	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
Mailli Action	upload/email linkage
Audio Input	1, 3.5 mm Mic in/Line in interface.
Addio iliput	Line input: 2-2.4 V [p-p], output impedance: 1 K Ω ± 10%
Audio Output	Linear level, impedance: $600~\Omega$
Communication Interface	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
Montine Tenere estudo (Liveridito)	-40 °C to 65 °C (-40 °F to 149 °F)
Working Temperature/Humidity	95% or less
Wiper	Yes
Protection Level	IP66 Standard
Protection 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. 60kg (132.3 lb)



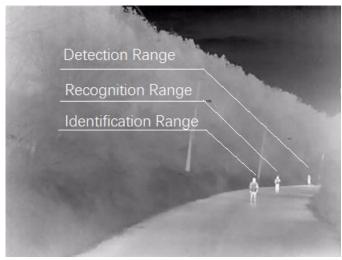
DRI Range Table

- * 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)
17137 m	5588 m	4284 m	1397 m	2142 m	

Smart Function Table

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

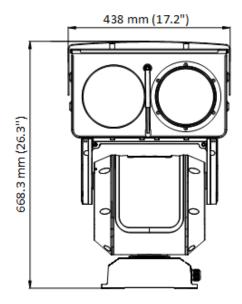
VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 2 × 2 m)	Temperature Measurement (Object: 1 × 1 m)	Fire Detection (Object: 2 × 2 m)	Fire Detection (Object: 1 × 1 m)
3912 m	1397 m	4446 m	2242 m	11172 m	5586 m

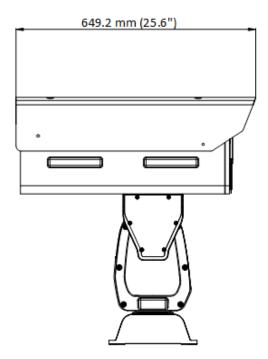
Available Model

DS-2TD8167-190ZE2F/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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