

DS-2TD8167-190ZE2FL/W **Thermal & Optical Bi-spectrum Network Stable PTZ**

















Hikvision DS-2TD8167-190ZE2FL/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 μ m, VOx UFPA, NETD ≤ 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	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 Scan/Panorama Scan				
PT Status	Turn On/Turn Off				
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Scheduled Task	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Dome Reboot/Dome Adjust/Aux Output			
Illuminator				
IR Distance	Up to 3000 m			
IR Intensity and Angle	Automatically adjusted			
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.			
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				
Main Stream	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)			
Sub-stream	Optical channel 50 Hz:25 fps (704 × 576, 352 × 288) 60 Hz: 30 fps (704 × 576, 352 × 288) Thermal channel 25 fps (704 × 576, 640 × 480, 384 × 288)			
Video Compression	Main stream: H.265+/H.265/H.264+/ H.264 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 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 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering			
Client	iVMS-4200, Hik-Connect			
Web Browser	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)			
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 upload/email linkage			
Audio Input	1, 3.5 mm Mic in/Line in interface. Line input: 2-2.4 V [p-p], output impedance: 1 K Ω ± 10%			
Audio Output	Linear level, impedance: 600Ω			
Communication Interface	1, RJ45 10M/100M self-adaptive Ethernet interface. 1, RS-485 interface			
Analog Video Output	1.0 V [p-p]/75 Ω,BNC for thermal channel			
General				
Menu Language	32 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, 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 Temperature/Humidity	-40 °C to 65 °C (-40 °F to 149 °F) 95% or less			
Wiper	Yes			
Protection Level	IP67 Standard TVS 6000V lightning protection, surge protection, voltage transient protection			
Dimension	543 mm × 674.2 mm × 665.1 mm (21.4 " × 26.5" × 26.2 ")			
Weight	Approx. 60kg (132.3 lb)			



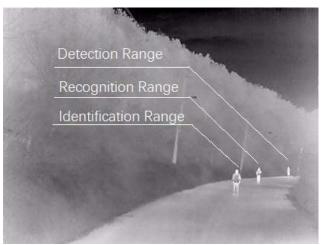
DRI Range Table

- * 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	1406 m	2142 m	704 m

Smart Function Table

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

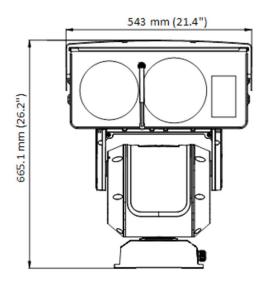
VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 2 × 2 m)	Temperature Measurement (Object: 1 × 1 m)	Fire Detection (Object: 2 × 2 m)	Fire Detection (Object: 1 × 1 m)
3912 m	1397 m	4446 m	2242 m	11172 m	5586 m

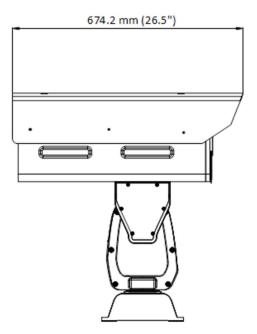
Available Model

DS-2TD8167-190ZE2FL/W



Dimension





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