

DS-2TD8167-190ZE2F/W

Thermal & Optical Bi-spectrum Network Stable PTZ

DeepinView^{series}



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 ≤ 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 |
| 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 |

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| 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 \pm 10% |
| Audio Output | Linear level, impedance: 600 Ω |
| 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 \pm 20%, two-core terminal block |
| Power Consumption | 48 VDC, 5 A, max. 220 W |
| Working Temperature/Humidity | -40 $^{\circ}$ C to 65 $^{\circ}$ C (-40 $^{\circ}$ F to 149 $^{\circ}$ F) 95% or less |
| Wiper | Yes |
| Protection Level | IP67 Standard TVS 6000V lightning protection, surge protection, voltage transient protection |
| Dimension | 649.2 mm \times 438 mm \times 668.3 mm (25.6 " \times 17.2 " \times 26.3 ") |
| Weight | Approx. 60kg (132.3 lb) |

DRI Range Table

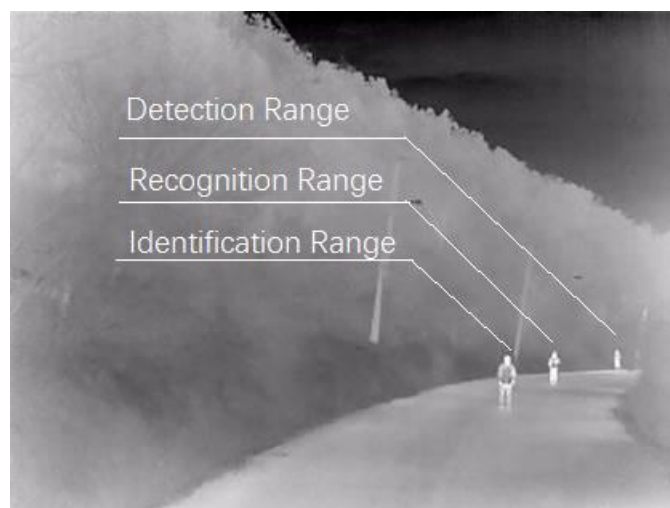
* The table is only for reference and the performance may vary according to different environment.

* 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 (Vehicles: 1.4 × 4.0 m) | Detection Range (Humans: 1.8 × 0.5 m) | Recognition Range (Vehicles: 1.4 × 4.0 m) | Recognition Range (Humans: 1.8 × 0.5 m) | Identification Range (Vehicles: 1.4 × 4.0 m) | Identification Range (Humans: 1.8 × 0.5 m) |
|--|--|---|---|--|--|
| 17137 m | 5588 m | 4284 m | 1397 m | 2142 m | 699 m |

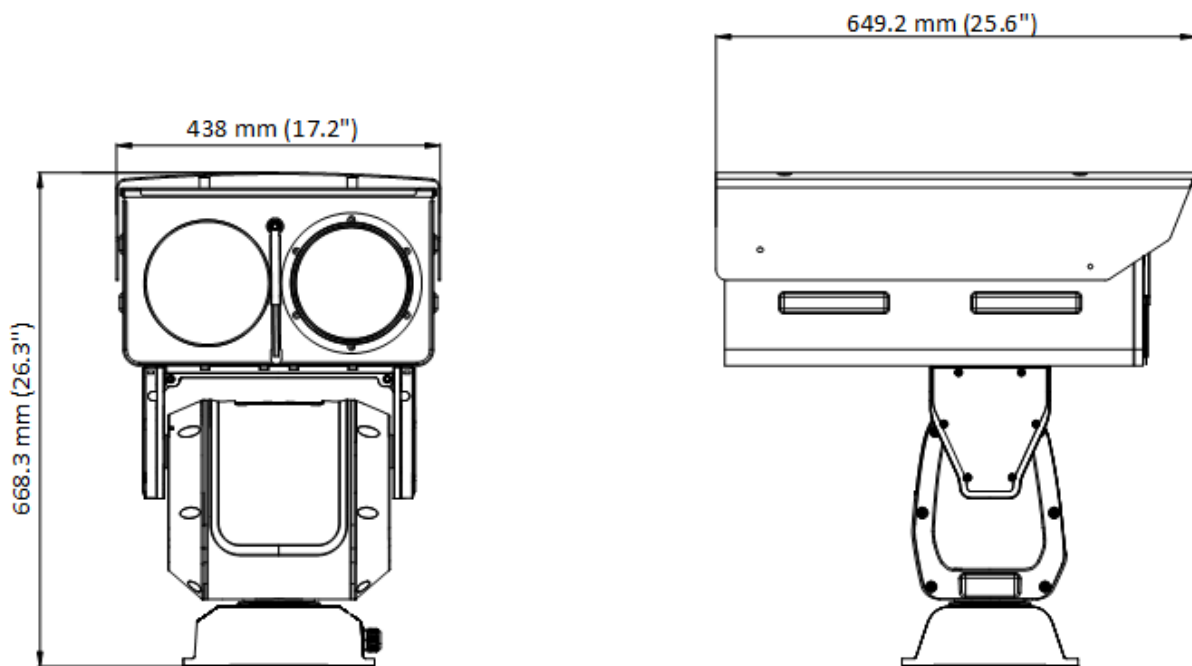
Smart Function Table

* 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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