

DS-2TD4137-25/W

Thermal and Optical Bi-Spectrum Network Speed Dome



- Behavior Analysis Based on Deep Learning Algorithm: Line Crossing, Intrusion, Region Entrance and Exit
- Temperature Exception Alarm
- Fire Detection Algorithm
- 384 × 288 Resolution 17 μm , VOx UFPA, NETD ≤ 35 mK (25° C, F# = 1.0)
- Image Processing Technology: Liner, Histogram, and Self-Adaptive Thermal AGC Mode, DDE, 3D DNR

Hikvision's DS-2TD4137-25/W Thermal and Optical Bi-Spectrum Network Speed Dome is equipped with a built-in GPU that supports an intelligent behavior analysis algorithm. It can realize high-precision VCA detection and real-time alarms. It is used for perimeter defense and fire-prevention in critical infrastructures such as railways, airports, parking lots, factories, etc. The pre-alarm system helps you discover unexpected events immediately and protects your property.

Available Model

DS-2TD4137-25/W



Specifications

DS-2TD4137-25/W		
Thermal Module		
Image Sensor	Vanadium oxide uncooled focal plane arrays	
Resolution	384 × 288	
Pixel Interval	17 μm	
Response Waveband	8 μm to 14 μm	
NETD	Less than 35 mK (25° C, F# = 1.0)	
Focal Length	25 mm	
Focus Mode	Athermalized	
I FOV	0.68 mrad	
Field of View	14.9° × 11.2° (H × V)	
Minimum Focusing Distance	13 m	
Aperture	f/1.0	
Digital Zoom	2x, 4x, 8x, 16x	
Optical Module		
Image Sensor	1/1.8" progressive scan CMOS	
Resolution	2688 × 1520, 4 MP	
Minimum Illumination	Color: 0.005 lux @ (f/1.3, AGC on), B/W: 0.001 lux @ (f/1.3, AGC on)	
Field of View	56.6° × 33.7° (H × V) to 1.8° × 1.0° (H × V)	
Focal Length	6 mm–240 mm, 40x	
Aperture (Range)	f/1.3–f/4.6	
Focus Mode	Auto, semi-auto, manual	
Shutter Speed	1s to 1/30,000 s	
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	Supported in white hot and black hot mode	
PTZ		
Movement Range	Pan: 360° continuous rotate; tilt: from -20° to + 90° (auto flip)	
Pan Speed	Configurable, from 0.1°/s to 200°/s, preset speed: 240°/s	
Tilt Speed	Configurable, from 0.1°/s to 105°/s, preset speed: 200°/s	
Proportional Zoom	Yes	
Presets	300 in total, 273 are configurable.	
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	
Illuminator		
IR Distance	Up to 660 ft (200 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), up to 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° to 150° C (-4° to 302° F)	
Temperature Accuracy	±8° C (±14.4° F)	
Fire Detection	Dynamic fire detection, up to 10 fire points detectable	
Video and Audio		
Main Stream	Optical Channel	50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 960, 1280 × 720) 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)
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 GB) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)	
API	Open-ended API, supporting ISAPI, HIKVISION SDK, and third-party management platform, open network video interface	

Specifications (continued)

DS-2TD4137-25/W	
Network (continued)	
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	IE 11, Chrome 41-44, Firefox 30-51
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/e-mail linkage
Audio Input	1, 3.5 mm mic in/line in interface. Line input: 2-2.4 V [p-p], output impedance: 1K Ω \pm 10%
Audio Output	Linear level; impedance: 600 Ω
Communication Interface	1, RJ-45 10 M/100 M self-adaptive Ethernet interface 1, RS-485 interface
Analog Video Output	1.0 V [p-p]/75 Ω , BNC for thermal channel
General	
Web Client 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	24 VAC \pm 25% Hi-PoE
Power Consumption	24 VAC \pm 25%: 5 A, maximum 60 W Hi-PoE: Maximum 60 W
Work Temperature/Humidity Wiper	From -40° to 65° C (-40° to 149° F), humidity: 95% or less (non-condensing) Yes
Protection Level	IP66 Standard TVS 6000V lightning protection, surge protection and voltage transient protection
Dimensions	266.6 mm \times 410 mm \times 198.6 mm (10.5" \times 16.15" \times 7.82")
Weight	Approximately 9 kg (19.84 lb)

DRI Range Table

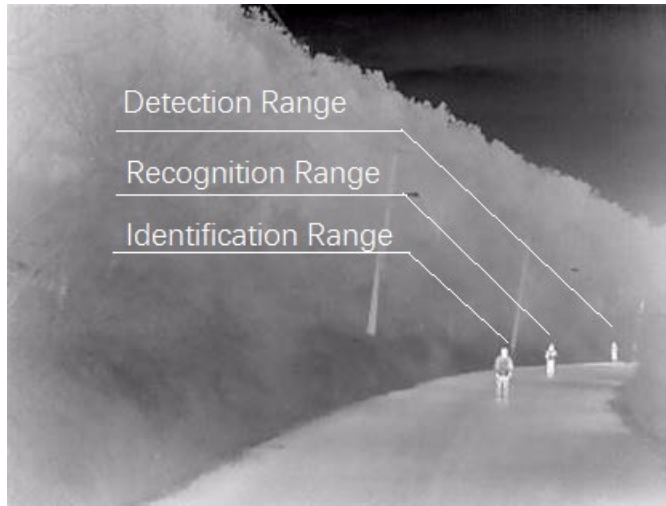
* *The table is only for reference and the performance may vary according to different environment.*

* *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.



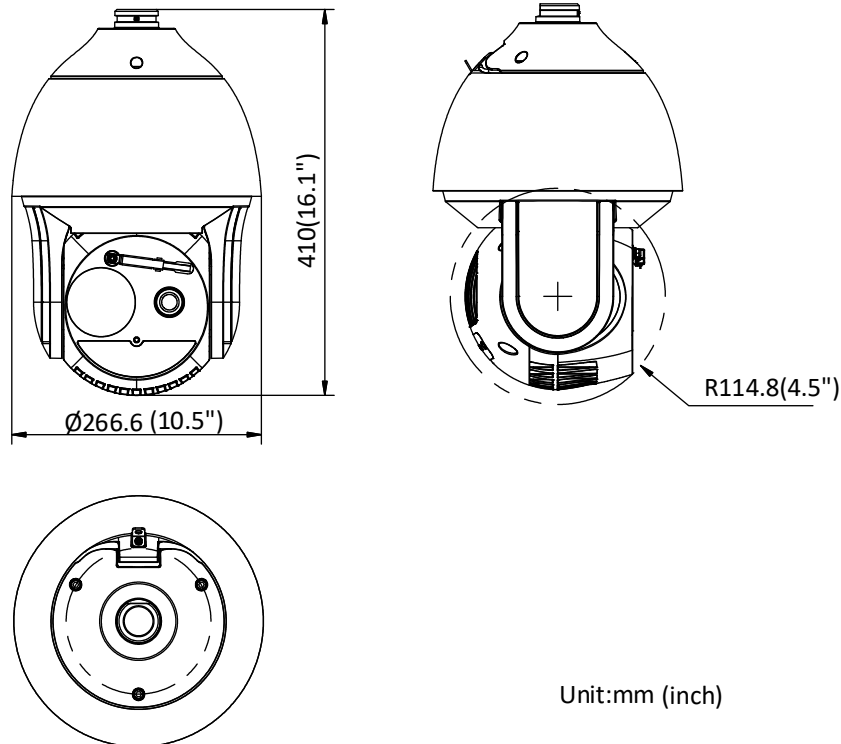
Detection Range (Vehicles: 1.4 × 4.0 m)	Detection Range (Humans: 1.8 × 0.5 m)	Recognition Range (Vehicles: 1.4 × 4.0 m)	Recognition Range (Humans: 1.8 × 0.5 m)	Identification Range (Vehicles: 1.4 × 4.0 m)	Identification Range (Humans: 1.8 × 0.5 m)
2255 m	735 m	564 m	184 m	282 m	92 m

Smart Function Table

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

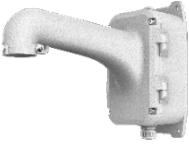


VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 2 × 2 m)	Temperature Measurement (Object: 1 × 1 m)	Fire Detection (Object: 2 × 2 m)	Fire Detection (Object: 1 × 1 m)
515 m	184 m	585 m	295 m	1470 m	735 m

Dimensions



Unit:mm (inch)

Accessories

NOT INCLUDED		
		
JBPW-L Box	PMP + WMP-L Vertical Pole Mount	WMP-L Wall Mount