

DS-2TD4137-50/WY Anti-corrosion Thermal and Optical Bi-spectrum Network Speed Dome





Hikvision DS-2TD4137-50/WY Anti-corrosion Thermal and Optical Bi-spectrum Network Speed Dome is applied to perimeter defense and fire-prevention purposes in scenes such as port, dock, island, aquafarm. The coating technology can meet the use requirements in anti-corrosion environment.

#### **Key Feature**

- Behavior analysis function, based on deep learning algorithm: line crossing, intrusion, region entrance and exit.
- Temperature exception alarm for fire prevention.
- Fire detection algorithm.
- $384 \times 288$  (the resolution of output image is  $384 \times 288$ ) resolution  $17 \mu m$ , VOx UFPA, NETD  $\leq 35 m$ K ( $25 \degree$ C, F# = 1.0).
- Image processing technology: Liner, histogram, and self-adaptive thermal AGC mode, DDE, 3D DNR.
- NEMA-4X Standard





# Specification

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	≤ 35 mK (25 °C,F#=1.0)			
Focal Length	50 mm			
Focus Mode	Athermalized			
IFOV	0.34 mrad			
Aperture	F1.0			
Field of View	7.5° × 5.6° (H × V)			
Min. Focusing Distance	50 m			
Digital Zoom	×2, ×4, ×8, ×16			
Optical Module				
Image Sensor	1/1.8" Progressive Scan CMOS			
Resolution	2688 × 1520			
Min. Illumination	Color: 0.005 Lux @(F1.3, AGC ON), B/W: 0.001 Lux @(F1.3, AGC ON)			
Field of View	56.6° ×33.7° (H × V) to 1.8° ×1.0° (H × V)			
Focal Length	6-240 mm, 40x			
Aperture (Range)	F1.3-F4.6			
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 200 m				
IR Intensity and Angle	Automatically adjusted				
Smart Function					
VCA	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 °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 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 G) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)				
API	ISAPI, HIKVISION SDK, third-party management platform, open network video interface				
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 +				



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 $\Omega$ ± 10%				
Audio Output	Linear Level; Impedance: 600 Ω				
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface.				
	1, RS-485 interface				
Analog Video Output	1.0 V [p-p]/75 $\Omega$ , BNC for thermal channel				
General					
	32 languages				
	English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak,				
Web Client 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	24 VAC ± 25%				
Power	Hi-PoE				
Power Consumption	24V AC ± 25%: 5 A, max. 60 W				
	Hi-PoE: Max. 60 W				
Work Temperature/Humidity	From -40 °C to 65 °C (-40 °F to 149 °F)				
	95% or Less				
Wiper	Yes				
Protection Level	IP66 Standard				
	TVS 6000 V Lightning Protection, Surge Protection and Voltage Transient Protection				
Dimension	266.6 mm × 410 mm × 198.6 mm (10.5" × 16.15" × 7.82")				
Weight	Approx. 9 kg (19.84 lb)				

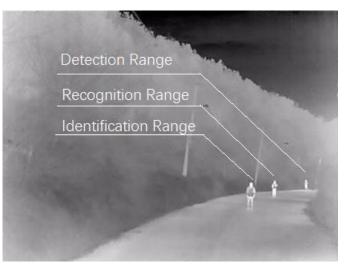


# **DRI Range Table**

\* 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	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)
4510 m	1470m	1127m	368m	564m	184m

# **Smart Function Table**

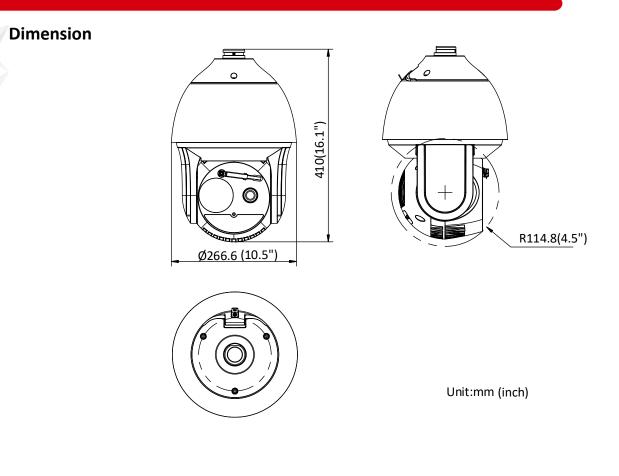
\* The table is only for reference and the performance may vary according to different environment.

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)
1029 m	368 m	1170 m	590 m	2940 m	1470 m

## **Available Model**

DS-2TD4137-50/WY





### Accessory



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