

DS-2TD4166-50/V2

Thermal & Optical Bi-spectrum Network Speed Dome



Hikvision DS-2TD4166-50/V2 Thermal & Optical Bi-spectrum Network Speed Dome equipped with built-in GPU which support intelligent behavior analysis algorithm, can realize high precision VCA detection and real-time alarm. It is applied to perimeter defense and fire-prevention purposes in critical infrastructures such as: airport, railway, prison, power station, 4S stores, and so on. The pre-alarm system helps you discover unexpected events immediately and protects you from property loss.

Smart Function (Thermal Imaging)

- Leading image processing technology: Adaptive AGC, DDE, 3D DNR, NETD < 40mk (@25°C, F#=1.0)
- Smart tracking: Panorama tracking, Event tracking and Multi-scene patrol tracking
- Smart tracking linkage: thermal view and optical view
- Powerful behavior analysis algorithm: Line crossing, Intrusion, Region Entrance & Exit
- Reliable temperature exception alarm function
- Advanced fire detection algorithm

Thermal Imaging Module Function

- 640*512 resolution, high sensitivity sensor, support contrast adjustment
- Support shutter adjustment in various modes
- 3D DNR, 15 palettes of color adjustable, image detail enhancement



Specifications

Parameter		Model	DS-2TD4166-50/V2
		Thermal & Optical Bi-spectrum Network Speed Dome	
Thermal module	Image sensor	Vanadium Oxide Uncooled Focal Plane Arrays	
	Max. Resolution	640 × 512	
	Detector Pitch	17μm	
	Response waveband	8μm to 14μm	
	NETD	< 40mk (@25°C,F#=1.0)	
	Lens (focal length)	50mm	
	MRAD	0.34	
	Field of View	12.42° × 9.95°	
	Min. Focusing Distance	50m	
	F number	1.0	
Optical camera	Image Sensor	1/1.9" Progressive Scan CMOS	
	Min. Illumination	Color: 0.002 lux @ (F1.5 , AGC On) B/W : 0.0002 lux @ (F1.5 , AGC On)	
	Focal Length	5.7-205.2mm, 36x	
	Digital Zoom	16 X	
	Field of View	58.7° - 2.0° (Wide-Tele)	
	Min. Working Distance	10-1500mm (Wide-Tele)	
	Aperture Range	F1.5-F4.5	
	Focus Mode	Auto / Semiautomatic / Manual	
	WDR	120dB	
	Shutter Time	PAL: 1-1/30,000s / NTSC: 1-1/30,000s	
	White Balance	Auto/Manual/ATW/Indoor/Outdoor/Daylight lamp/Sodium lamp	
	Day & Night	IR Cut Filter	
	Privacy Mask	24 privacy masks programmable; optional multiple colors	
	Optical Defog	Yes	
Smart function	VCA	Support 4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), 10 scenes and 8 VCA rules for each scene.	
	Temperature Measurement	Support 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 °C to 302 °F)	
	Temperature accuracy	±8 °C (14.4°F)	
	Fire detection	Support 10 fire points	
PTZ	Movement Range	Pan: 360° Continuous Rotate; Tilt: From -20° to + 90° (auto flip)	
	Pan Speed	Configurable, From 0.1°/s to 160°/s, Preset Speed: 240°/s	
	Tilt Speed	Configurable, From 0.1°/s to 120°/s, Preset Speed: 200°/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	
	Scheduled Task	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Doom Reboot/Doom Adjust/AuxOutput	
Infrared	IR Distance	Up to 200m	
	IR Intensity and Angle	Auto Adjust	
Network	Main Stream	Optical: 50Hz:25fps(1920×1080), 25fps(1280×960), 25fps(1280×720) Optical: 60Hz:30fps(1920×1080), 30fps(1280×960), 30fps(1280×720) Thermal: 50fps(640 × 512)	

	Sub stream	50Hz:25fps (704 × 576), 25fps (352 × 288), 25fps (176 × 144) 60Hz:30fps (704 × 480), 30fps (352 × 240), 30fps (176 × 120) Thermal: 50fps (640 × 512)
	Video compression	H.265+/H.264+/H.265/H.264/MJPEG
	Audio compression	G.711u/G.711a/G.722.1/MP2L2/G.726/PCM
	Protocols	IPv4/IPv6,HTTP,HTTPS,802.1x,Qos,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTCP,RTP, TCP,UDP,IGMP,ICMP,DHCP, PPPoE, Bonjour
	Simultaneous live view	Up to 20-ch
	User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User
	Security measures	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering
Integration	Alarm Input	Up to 7-ch Input (0-5V DC)
	Alarm Output	Up to 2-ch relay output; Support Alarm Linkage
	Alarm Action	Preset/Patrol Scan/Pattern Scan/SD Card Record/Relay Output/Smart capture/FTP upload/Email linkage
	Audio Input	LINE_IN Input/MIC Input; Peak: From 2 to 2.4V[p-p]; Output Impedance: 1KΩ±10%
	Audio Output	Linear Level; Impedance: 600Ω
	Communication Interface	Built-in RJ45; 10M/100M Ethernet Interface
	Onboard Storage	Built-in Micro SD/SDHC/SDXC Card Slot, Up to 64GB; Support Manual/Alarm Recording
	Analog Video Output	1.0V [p-p]/75Ω, PAL/NTSC/BNC
	RS485	Half-Duplex; HIKVISION, PELCO-P and PELCO-D Self-adaptive
	API	Open-ended API, support ISAPI; Support HIKVISION SDK and Third-party Management Platform
	Client	iVMS-4200
	Web Browser	IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+; Multiple Languages
General	Menu	English
	Wiper	Yes
	Power	24V AC, 60W
	Work Temperature/Humidity	From -40°C to 60°C (-40°F to 140°F); Humidity: 90% or Less
	Protection Level	IP66 Standard; TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
	Weight	Approx. 8kg (17.64 lb)

Wide Range Coverage for Different Specifications

Note: The table below is only for reference, the performance varies from model to model, and the specific data is based on 17 μm detector-pitch.

Detection Range (Vehicles: 1.4×4.0m)	Detection Range (Humans: 1.8×0.5m)	Recognition Range (Vehicles: 1.4×4.0m)	Recognition Range (Humans: 1.8×0.5m)	Identification Range (Vehicles: 1.4×4.0m)	Identification Range (Humans: 1.8×0.5m)
4510m	1471m	1127m	368m	564m	184m

Smart functions Range Table

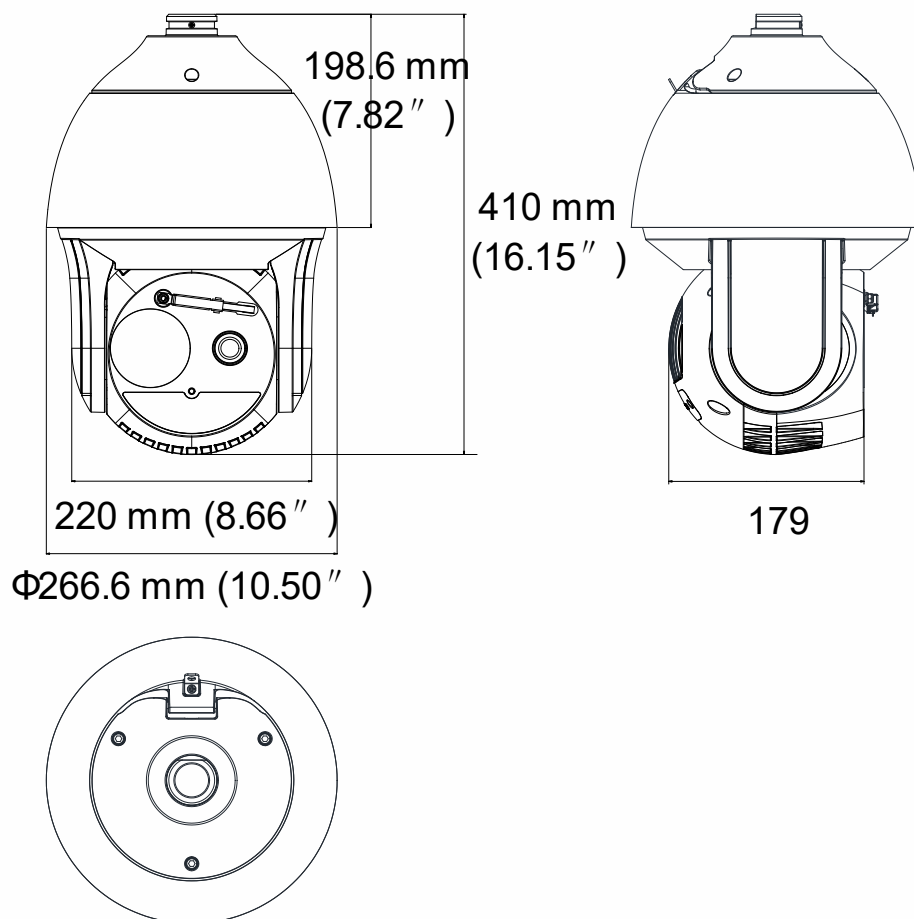
Note: The table below is only for reference, the performance varies from model to model, and the specific data is based on 17 μm detector-pitch.

VCA Range (Vehicles: 1.4×4.0m)	VCA Range (Humans: 1.8×0.5m)	Temperature Measurement (Object:2×2 m)	Temperature measurement (Object:1×1 m)	Fire Detection (Object:2×2 m)	Fire Detection (Object:1×1 m)
1500	500	1170	590	2940	1470

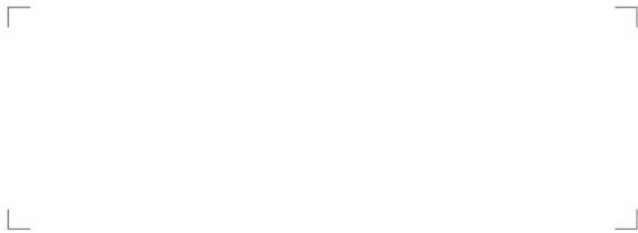
Order Models

DS-2TD4166-50/V2

Dimensions



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