

DS-2TD8166-180ZE2F/V2

Thermal & Optical Bi-spectrum Network Stable PTZ Camera

DeepinView^{series}



Hikvision DS-2TD8166-180ZE2F/V2 Thermal & Optical Bi-spectrum Network Stable PTZ Camera

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 frontier defense occasions, maritime defense occasions, port monitoring, airport perimeter security, 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 (0.05°C/32.09°F)
- Smart tracking: Panorama tracking, Event tracking and Multi-scene patrol tracking



Specifications

Parameter		Model	DS-2TD8166-180ZE2FV2
		Thermal & Optical Bi-spectrum Network Stable PTZ Camera	
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)	45 mm to 180 mm	
	MRAD	0.38 to 0.09 mrad	
	Field of View	WIDE: 13.8° × 11°; TELE:3.46° × 2.77°	
	Min. Focusing Distance	5 m	
	Aperture	F 1.2	
Optical camera	Image Sensor	1/1.8 " Progressive Scan CMOS	
	Min. Illumination	Color : 0.005 Lux @ (F3.5, AGC ON) B/W : 0.0005 Lux @ (F3.5, AGC ON)	
	Focal Length	12.5-775 mm, 62 x	
	Field of View	31.5 ° × 23.9 ° to 0.51 ° × 0.39 ° (Wide-Tele)	
	Min. Working Distance	5 m (Wide-Tele)	
	Aperture Range	F3.5 to Close	
	Focus Mode	Auto / Semiautomatic / Manual	
	WDR	Digital	
	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 and mosaics	
	Optical Defog	Yes	
	Enhancement	3D DNR	
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 -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	
Network	Main Stream	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Doom Reboot/Doom Adjust/Aux Output	
		Optical Light: 50Hz:25fps(1920×1080), 25fps(1280×960), 25fps(1280×720) Optical Light: 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, H.264 encoding with Baseline/Main/High Profile
	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,TC P,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 Relay Input (0-5V DC)
	Alarm Output	Up to 2-ch; 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 64GB SD Card, Support Manual/Alarm Recording
	Analog Output Video	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
Wiper		Yes
Power		48V DC/5A, 220W
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
Dimension		649.2 mm × 438 mm × 261.3 mm (25.56 " × 17.24 " × 10.29 ")
Weight		Approx. 60kg (132.3 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	Detection Range	Recognition Range	Recognition Range	Identification Range	Identification Range
(Vehicles: 1.4×4.0m)	(Humans: 1.8×0.5m)	(Vehicles: 1.4×4.0m)	(Humans: 1.8×0.5m)	(Vehicles: 1.4×4.0m)	(Humans: 1.8×0.5m)

Smart functions Range Table

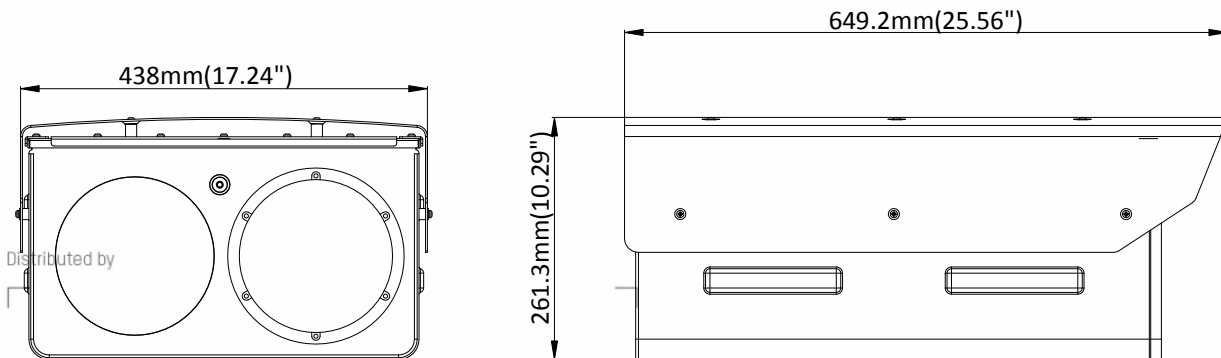
Note: The table below is only for reference, the performance varies from model to model, and the specific data is based on 17 μm detector pitch.

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)
5400m	1800m	4212m	2124m	10584m	5292m

Order Models

DS-2TD8166-180ZE2F/V2

Dimensions



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