

DS-2TD6166-50B2L/75B2L

Observable Thermal + Optical Bi-Spectrum Outdoor Network PTZ Camera

- 640 x 512 Resolution
- Vanadium Oxide Uncooled FPA
- 50 mm and 75 mm Lens Options
- NETD <50 mk
- Adaptive AGC
- Dynamic Detail Enhancement
- Visible Imager: 1/2.8" CMOS
- 32x Optical Zoom, 16x Digital Zoom
- Smart IR Array, 1,640 ft (500 m) Range
- Smart Features
 - Smart Tracking
 - Line Crossing, Intrusion, Region Entrance/Exit
 - Temperature Exception
 - Advanced Fire Detection
- Edge Recording
- 3D DNR, EIS, Defog
- Region of Interest Encoding (ROI)
- IP66
- 24 VAC (Optional 36 VDC), 120 W



The Hikvision DS-2TD6166-50B2L and DS-2TD6166-75B2L Thermal + Optical Bi-Spectrum network PTZ cameras offer thermal as well as optical imaging in a single unit.

Smart Detection functions include intrusion detection, line crossing detection, region entrance detection, region exiting detection, audio exception detection, benefitting users with great improvement in security efficiency and, more importantly, with key events and objects being recorded for further forensic needs.

Also featured is Smart Tracking: panorama tracking, event tracking, and multi-scene patrol tracking, which enable the camera to detect a progressively moving object and follow it within the camera's area of coverage. IR intensity is automatically adjusted, depending on the zoom ratio.

Image enhancement features include defog, high light compensation, and EIS (Electronic Image Stabilization).

Available Models:

DS-2TD6166-50B2L (50 mm Lens)
DS-2TD6166-75B2L (75 mm Lens)



DS-2TD6166-50B2L		DS-2TD6166-75B2L	
Thermal Module			
Image Sensor	Vanadium Oxide Uncooled Focal Plane Detectors		
Maximum Resolution	640 x 512		
Response Waveband	8 to 14μm		
NETD	<50 mk (@ 25° C, f/=1.0)		
Lens (Focal Length)	50 mm	75 mm	
MRAD	0.5 mrad	0.23 mrad	
Field Angle	10.97° x 8.24°	8.3° x 6.6°	
Minimum Focusing Distance	7.5 m	8 m	
F Number	1.0		
Optical Module			
Maximum Resolution	1920 x 1080		
Image Sensor	1/2.8" Progressive Scan CMOS		
Minimum Illumination	Color : 0.02 Lux @ (F1.5, AGC ON); B/W : 0.002 Lux @ (F1.5, AGC ON)		
Focal Length	8 to 250 mm, 32x		
Aperture Range	F1.8 to F6.1		
PTZ			
Movement Range	Pan: 360° continuous rotation; Tilt: +40° to -90°		
Pan Speed	Configurable, from 0.1°/s to 110°/s		
Tilt Speed	Configurable, from 0.1°/s to 50°/s		
Proportional Zoom	Supported		
Presets	300		
Patrol Scan	8; Up to 32 presets per patrol		
Pattern Scan	4; more than 10 minutes per pattern		
Power Off Memory	Supported		
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 / Aux Output		
Infrared			
IR Distance	Up to 1,640 ft (500 m)		
IR Intensity and Angle	Auto adjust		
Network			
Main Stream	Optical light: 50 Hz: 25 fps (1920 × 1080), 25 fps (1280 × 960), 25 fps (1280 × 720); Optical light: 60 Hz: 30 fps (1920 × 1080), 30 fps (1280 × 960), 30 fps (1280 × 720); Thermal: 50 fps (640 × 512)		
Sub Stream	50 Hz: 25 fps (704 × 576), 25 fps (352 × 288), 25 fps (176 × 144); 60 Hz: 30 fps (704 × 480), 30 fps (352 × 240), 30 fps (176 × 120); Thermal: 25 fps (384 × 288)		
Video Compression	H.264 (Baseline / Main / High Profile) / MJPEG / MPEG4		
Audio Compression	G.711u / G.711a / G.722.1 / MP2L2 / G726 / AAC / 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 Authentication	Up to 32 users; three levels: administrator, operator, and 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 to 5 VDC)		
Alarm Output	Up to 2-ch; supports alarm linkage		
Alarm Action	Preset / patrol scan / pattern scan / SD card recording / relay output		
Audio Input	Line input / microphone input; peak: from 2 to 2.4 V [p-p]; output impedance: 1 kΩ ±10%		
Audio Output	Linear level; impedance: 600 Ω		
Communication Interface	Built-in RJ-45; 10M/100M Ethernet interface		
Onboard Storage	Built-in microSD / SDHC / SDXC card slot, up to 64 GB; support manual / alarm recording		
Analog Video Output	1.0 V [p-p] / 75 Ω, PAL / NTSC / BNC		
RS-485	Half-duplex; HIKVISION, PELCO-P, and PELCO-D self-adaptive		
API	Open-ended; supports ONVIF, PSIA, and CGI; supports HIKVISION SDK and third-party management platforms		
Client	iVMS-4200		
Web Browser	IE 7+, Chrome 18+, Firefox 5.0+, Safari 5.02+; multiple languages		
General			
Menu	English		
Power	24 VAC (36 VDC optional), 120 W		
Working Temperature/Humidity	-40° F to 140° F (-40° C to 60° C); humidity: 90% or less		
Protection Level	IP66 standard; TVS 6000 V lightning protection, surge protection, and voltage transient protection		
Weight	41.89 lbs (19 kg)		

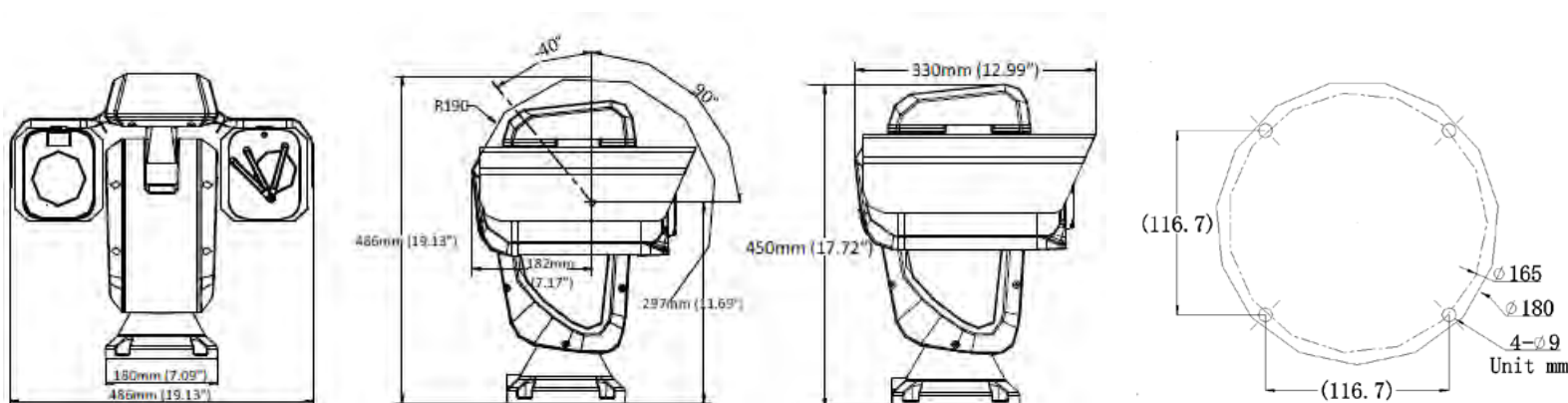


Range Performance¹

Standard Range Table	Model		Model	
	DS-2TD6166D-50		DS-2TD6166D-75	
Johnson Criteria	Human	Vehicle	Human	Vehicle
Detection	4,826 ft (1471 m)	14,797 ft (4,510 m)	7,238 ft (2,206 m)	22,195 ft (6,765 m)
Recognition	1207 ft (368 m)	3,698 ft (1,127 m)	1,808 ft (551 m)	5,548 ft (1,691 m)
Identification	604 ft (184 m)	1,850 ft (564 m)	906 ft (276 m)	2,776 ft (846 m)

Smart Functions Range Table		Model	
Line Cross/Intrusion/Region Entrance-Exit	Object	DS-2TD6166D-50	DS-2TD6166D-75
Optimized to Johnson Criteria (Recognition)	Human	410 ft (368 m)	1,808 ft (551 m)
	Vehicle	3,698 ft (1,127 m)	5,548 ft (1,691 m)
Temperature Exception	Size of Point	Max Range	Max Range
Accuracy at 5 x 5 pixels	2 m x 2 m	3,839 ft (1,170 m)	5,823 ft (1,755 m)
	1 m x 1 m	1,936 ft (590 m)	2,904 ft (885 m)
Advanced Fire Detection	Size of Point	Max Range	Max Range
Accuracy at 2 x 2 pixels	2 m x 2 m	9,346 ft (2,940 m)	14,469 ft (4,410 m)
	1 m x 1 m	4,823 ft (1,470 m)	7,234 ft (2,205 m)

Dimensions



Accessories



¹Range performance values are calculated under ideal conditions and are not a guarantee of performance.