

DS-2TD2617-x/V1 Series

Thermal-Optical DeepinView Network Bullet Camera



DeepinView^{series}

- 160 x 120 Resolution (Upscaled to 320 x 240)
- Vanadium Oxide Uncooled Focal Plane Arrays
- NETD <40 mK
- 3.1 mm, or 6.2 mm Thermal Lens Options
- Adaptive AGC, 3D DNR
- Digital Detail Enhancement
- Smart Features:
 - Line Crossing, Intrusion, Region Entrance/Exit with Human and Vehicle Filtering
 - Temperature Exception
 - Early Warning Fire Prevention
 - Advanced Fire Detection
 - Cigarette Smoking Detection
- Temperature Range: -4° to 302° F (-20° to 150° C)
- Temperature Accuracy: ±14° F (8° C)
- 15 Pseudo Color Palettes Available
- IP66 Protection
- PoE (802.3af), 12 VDC, Maximum 8 W

The Hikvision DS-2TD2617-x/V1 Thermal-Optical DeepinView Network Bullet Cameras are equipped with highly sensitive thermal and optical sensors and a graphical processing unit to run the video content analysis (VCA) algorithms developed by Hikvision's deep learning technology.

Hikvision's HikMicro factory manufactures the vanadium oxide uncooled focal plane array thermal sensor with best in class image quality and price. The sensor's 160 x 120 resolution is upscaled to 320 x 240 and features adaptive AGC (Automatic Gain Control), 3D DNR (Digital Noise Reduction), and Digital Detail Enhancement for outstanding image enhancement. The 2 MP optical sensor provides outstanding color video in very dim environments down to 0.002 lux, and a built-in IR illumination allows black and white optical surveillance in zero-light conditions up to 130 ft (40 m).

This camera series is an excellent solution for short-range outdoor and indoor perimeter detection, fire prevention, predictive maintenance, human smoking detection and other applications. The total cost of ownership for this innovative camera system comes at an unprecedented, low level, due to affordable installation cost and ultra-low thermal-optical camera cost, which is competitive with purely optical cameras.

Available Models:

DS-2TD2617-3/V1 (3.1 mm lens)
DS-2TD2617-6/V1 (6.2 mm lens)



Specifications

	DS-2TD2617-3/V1	DS-2TD2617-6/V1
Thermal Module		
Image sensor	Vanadium oxide uncooled focal plane arrays	
Maximum Resolution	160 x 120 (output image resolution is 320 x 240)	
Detector Pitch	17 µm	
Response waveband	8 µm to 14 µm	
NETD	<40 mK (@ 25° C, F#=1.0)	
Lens (focal length)	3.1 mm	6.2 mm
IFOV	5.48 mRad	2.74 mRad
Field of View	50° x 37.2°	25° x 18.7°
Minimum Focusing Distance	0.2 m	
Aperture	f/1.1	
Optical Module		
Maximum Image Resolution	1920 x 1080	
Image Sensor	1/2.8" Progressive Scan CMOS	
Minimum Illumination	Color: 0.002 lux @ (f/1.5, AGC on), B/W: 0.0002 lux @ (f/1.5, AGC on)	
Shutter Speed	1s to 1/100,000s	
Lens (Focal Length)	4 mm	6 mm
Field of View	87° x 46.2°	53° x 30°
WDR	Digital WDR	
Day/Night	IR cut filter with auto switch	
Image Function		
Bi-Spectrum Image Fusion	Fusion view of thermal view and overlaid details of the optical channel	
Picture in Picture	Combines details of thermal and optical image PIP, overlay, and thermal image on optical image	
Smart Function		
VCA	Supports 4 VCA rule types (line crossing, intrusion, region entrance, and region exiting), 8 VCA rules	
Temperature Measurement	Supports 3 temperature measurement rule types, 21 rules (10 points, 10 regions, and 1 line)	
Temperature Range	-4° to 302° F (-20° to 150° C)	
Temperature Accuracy	±8° C (14.4° F)	
Fire Detection	Dynamic fire point detection, up to 10 fire points detectable	
Infrared		
IR Distance	130 ft (40 m)	
IR Intensity and Angle	Automatically adjusted	
Network		
Main Stream	Visible light: 30 fps (1920 × 1080), 30 fps (1280 × 960), 30 fps (1280 × 720), Thermal: 25 fps (160 × 120 (the resolution of output image is 320 × 240))	
Sub-Stream	Visible light: 30 fps (1920 × 1080), 30 fps (1280 × 960), 30 fps (1280 × 720), Thermal: 25 fps (160 × 120 (the resolution of output image is 320 × 240))	
Video Compression	H.265/H.264/MJPEG, H.265+/H.264+ encoding with baseline/main/high profile	
Audio Compression	G.711u/G.711a/G.722.1/MP2L2/G.726/PCM	
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, 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	2-ch inputs (0 to 5 VDC)	
Alarm Output	2-ch relay outputs, alarm response actions configurable	
Alarm Action	SD recording/relay output/smart capture/FTP upload/email linkage	
Audio Input	1-ch 3.5 mm microphone /line in interface. Line input: 2 to 2.4 V(p-p), output impedance:1k Ω ±10%	
Audio Output	Linear level; impedance: 600 Ω	
Reset	One reset button	
Communication Interface	1-port RJ-45 10M/100M Self-adaptive Ethernet interface, 1 RS-485 interface	
Onboard Storage	Built-in microSD/SDHC/SDXC card slot, up to 256 GB; supports manual/alarm recording	
API	Open-ended API, supports ISAPI; supports HIKVISION SDK and third-party management platforms	
Client	iVMS-4200	
Web Browser	IE 9+, Chrome 31 to 44, Firefox 30 to 51, Safari 5.02+	
General		
Menu	English	
Power	12 VDC ± 20%, PoE (802.3at, class 4)	
Power Consumption	12 VDC ± 20%: maximum 12 W, PoE (802.3af, class 4)	
Work Temperature/Humidity	From -40° to 140° F (-40° to 60° C), 90% or less	
Protection Level	IP66 standard; TVS 6000V lightning protection, surge protection, and voltage transient protection	
Dimensions	13.9" x 4.5" x 4.5" (352.4 mm x 113.5 mm x 114.7 mm)	
Weight	3.3 lbs (1.5 kg)	

Range Performance¹

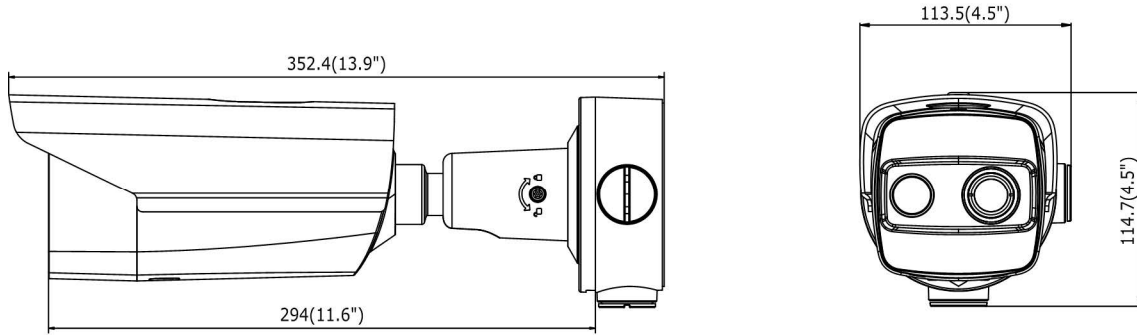
Standard Range Table	Model			
	DS-2TD2617-3/V1		DS-2TD2617-6/V1	
Johnson Criteria	Human	Vehicle	Human	Vehicle
Detection	298 ft (91 m)	919 ft (280 m)	597 ft (182 m)	1834 ft (559 m)
Recognition	75 ft (23 m)	230 ft (70 m)	151 ft (46 m)	459 ft (140 m)
Identification	36 ft (11 m)	114 ft (35 m)	75 ft (23 m)	230 ft (70 m)

Smart Functions Range Table	Model
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¹ Range performance values are calculated under ideal conditions and are not a guarantee of performance.

Line Cross/Intrusion/Region Entrance-Exit	Object	DS-2TD2617-3/V1	DS-2TD2617-6/V1
Optimized to Johnson Criteria (Recognition)	Human	69 ft (21 m)	138 ft (42 m)
	Vehicle	207 ft (63 m)	413 ft (126 m)
Temperature Exception	Size of Point	Max Range	Max Range
Accuracy at 5 x 5 pixels	2 m x 2 m	217 ft (66 m)	434 ft (132 m)
	1 m x 1 m	108 ft (33 m)	217 ft (66 m)
Advanced Fire Detection	Size of Point	Max Range	Max Range
Accuracy at 2 x 2 pixels	2 m x 2 m	591 ft (180 m)	1181 ft (360 m)
	1 m x 1 m	295 ft (90 m)	591 ft (180 m)

Dimensions



Units: mm (inch)

Accessories

