

## DS-2TD1217-x/V1\* Series

### Thermal-Optical DeepinView Outdoor Network Turret Camera

DeepinView<sup>series</sup>



- 160 x 120 Resolution (Upscaled to 320 x 240)
- Vanadium Oxide Uncooled Focal Plane Arrays
- NETD <40 mK
- 1.8 mm, 3.1 mm, or 6.2 mm Thermal Lens
- 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
- IP67 Protection
- PoE (802.3af), 12 VDC, Maximum 8 W

The Hikvision DS-2TD1217-x/V1 Thermal-Optical DeepinView Outdoor Network Turret 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 built-in IR illumination allows black and white optical surveillance in zero-light conditions up to 50 ft (15 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-2TD1217-2/V1 (1.8 mm lens)

DS-2TD1217-3/V1 (3.1 mm lens)

DS-2TD1217-6/V1 (6.2 mm lens)

\* Rev B



# Specifications

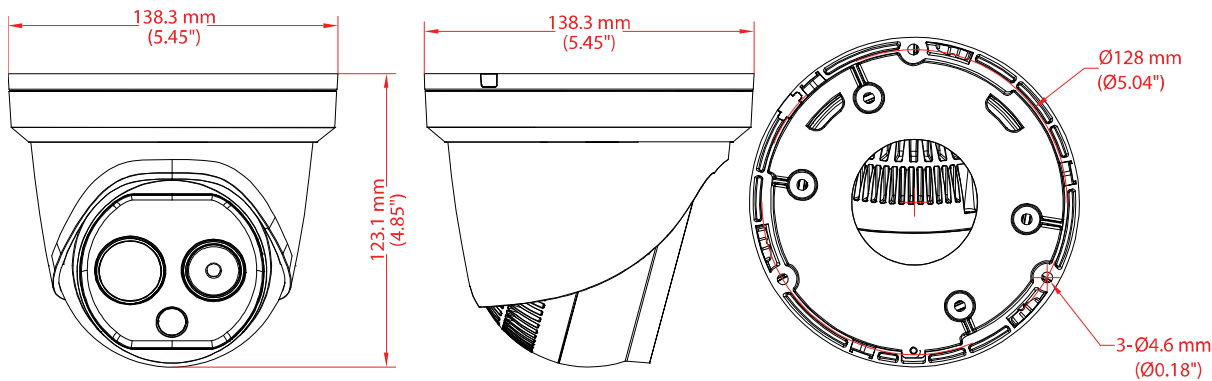
		DS-2TD1217-2/V1	DS-2TD1217-3/V1	DS-2TD1217-6/V1
<b>Thermal Module</b>				
Image Sensor	Vanadium oxide uncooled focal plane arrays			
Maximum Resolution	160 x 120 (output image resolution is 320 x 240)			
Detector Pitch	17 $\mu$ m			
Response Waveband	8 $\mu$ m to 14 $\mu$ m			
NETD	<40 mK (@ 25° C, F#=1.1)			
Lens (Focal Length)	1.8 mm	3.1 mm	6.2 mm	
IFOV	9.44 mRad	5.48 mRad	2.83 mRad	
Field of View	90° x 66.4°	50° x 37.2°	25° x 18.7°	
Minimum Focusing Distance	0.1 m	0.2 m	0.6 m	
Aperture	f/1.1			
<b>Optical Module</b>				
Maximum Image Resolution	1600 x 1200	1920 x 1080		
Image Sensor	1/2.7" Progressive Scan CMOS			
Minimum Illumination	Color: 0.002 lux @ (f/1.2, AGC on), B/W: 0.0002 lux @ (f/1.2, AGC on)			
Shutter Speed	1s to 1/100,000s			
Lens (Focal Length)	2.1 mm	4 mm	6 mm	
Field of View	101.2° x 77°	87° x 46.2°	53° x 30°	
WDR	120 dB			
Day/Night	IR cut filter with auto switch			
<b>Image Function</b>				
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			
<b>Smart Function</b>				
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	±14.4° F (±8° C)			
Fire Detection	Dynamic fire point detection, up to 10 fire points detectable			
<b>Infrared</b>				
IR Distance	50 ft (15 m)			
IR Intensity and Angle	Automatically adjusted			
<b>Network</b>				
Main Stream	Visible Light	30 fps (1600 x 1200), 30 fps (1280 x 960), 30 fps (1280 x 720)	30 fps (1920 x 1080), 30 fps (1280 x 960), 30 fps (1280 x 720)	
	Thermal	25 fps (160 x 120) (output image resolution is 320 x 240)		
Sub-Stream	Visible Light	30 fps (704 x 480), 30 fps (640 x 480)		
	Thermal	25 fps (160 x 120) (output image resolution is 320 x 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			
<b>Integration</b>				
Alarm Input	1-ch input (0 to 5 VDC)			
Alarm Output	1-ch relay output, alarm response actions configurable			
Alarm Action	SD recording/relay output/smart capture/FTP upload/e-mail linkage			
Audio Input	1-ch 3.5 mm microphone/line in interface. Line input: 2 to 2.4 V [p-p], output impedance: 1k $\Omega$ ±10%			
Audio Output	Linear level; impedance: 600 $\Omega$			
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			
Analog Video Output	1.0 V [p-p]/75 $\Omega$ , PAL/NTSC/BNC			
API	Open-ended API, supports ISAPI, ONVIF; 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+			
<b>General</b>				
Menu	English			
Power	12 VDC ±20%, two-core terminal block, PoE (802.3af, class 3)			
Power Consumption	12 VDC ±20%: 0.7 A, maximum 8 W, PoE (802.3af, class 3): 42.5 V to 57 V, 0.14 A to 0.22 A, maximum 8.5 W			
Work Temperature/Humidity	-22° to 140° F (-30° to 60° C), humidity: ≤95% non-condensing			
Protection Level	IP67 standard; TVS 6000V lightning protection, surge protection, and voltage transient protection			
Dimensions	5.45" x 5.45" x 4.85" (138.3 mm x 138.3 mm x 123.1 mm)			
Weight	1.98 lb (900 g)			

# Range Performance<sup>1</sup>

Standard Range Table	Model					
	DS-2TD1217-2/V1		DS-2TD1217-3/V1		DS-2TD1217-6/V1	
Johnson Criteria	Human	Vehicle	Human	Vehicle	Human	Vehicle
Detection	174 ft (53 m)	531 ft (162 m)	298 ft (91 m)	919 ft (280 m)	597 ft (182 m)	1834 ft (559 m)
Recognition	43 ft (13 m)	135 ft (41 m)	75 ft (23 m)	230 ft (70 m)	151 ft (46 m)	459 ft (140 m)
Identification	23 ft (7 m)	66 ft (20 m)	36 ft (11 m)	114 ft (35 m)	75 ft (23 m)	230 ft (70 m)

Smart Functions Range Table	Line Cross/Intrusion/Region Entrance-Exit	Object	Model		
			DS-2TD1217-2/V1	DS-2TD1217-3/V1	DS-2TD1217-6/V1
Optimized to Johnson Criteria (Recognition)		Human	46 ft (14 m)	69 ft (21 m)	138 ft (42 m)
		Vehicle	138 ft (42 m)	207 ft (63 m)	413 ft (126 m)
Temperature Exception	Size of Point			<b>Max Range</b>	<b>Max Range</b>
		2 m x 2 m	144 ft (44 m)	217 ft (66 m)	434 ft (132 m)
Accuracy at 5 x 5 pixels		1 m x 1 m	72 ft (22 m)	108 ft (33 m)	217 ft (66 m)
				<b>Max Range</b>	<b>Max Range</b>
Advanced Fire Detection	Size of Point	2 m x 2 m	354 ft (108 m)	591 ft (180 m)	1181 ft (360 m)
		1 m x 1 m	177 ft (54 m)	295 ft (90 m)	591 ft (180 m)

# Dimensions



# Accessories<sup>2</sup>

NOT INCLUDED					
PC140 140 mm Pendant Cap Requires WML	WML Long Wall Mount w/Back Box Requires PC140	PM Pole Mount Requires WML	CM Corner Mount	CB135 Conduit Base	CPM Ceiling Pendant Mount Requires PC140

NOT INCLUDED	
PM1 Pole Mount	CM1 Corner Mount
Requires CB135	

<sup>1</sup> Range performance values are calculated under ideal conditions and are not a guarantee of performance.

<sup>2</sup> Additional accessories not shown may fit without, or in combination with, these accessories. See your sales representative for information about your needs.