



## DS-2TD1217-6/V1 Thermal & Optical Network Turret Camera



Hikvision DS-2TD1217-6/V1 Thermal & Optical Network Turret 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 fire-prevention purposes in indoor space such as: engine room, ATM, conference room, warehouse, museum, train station, gem, power station, 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 less than 40 mK (25 °C), F#=1.1
- Powerful behavior analysis function, based on deep learning algorithm: Line crossing, Intrusion, Region Entrance & Exit
- Reliable temperature exception alarm function
- Advanced fire detection algorithm
- Bi-spectrum image fusion, picture in picture preview

### **Thermal Imaging Module Function**

- 160 × 120 (the resolution of output image is 320 × 240) resolution sensor, high sensitivity sensor, support contrast adjustment
- Shutter adjustment in various modes
- 3D DNR, 15 palettes of color adjustable, image detail enhancement



# Specification

Thermal Module						
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays					
Max. Resolution	160 × 120 (the resolution of output image is 320 × 240)					
Pixel Interval	17μm					
Response Waveband	8μm to 14μm					
NETD	less than 40 mK (25°C), F#=1.1					
Lens (Focal Length)	6.2 mm					
MRAD	2.83 mrad					
Field of View	25.0° × 18.7° (H × V)					
Min. Focusing Distance	0.6 m					
Aperture	F1.1					
Optical Module						
Max. Image Resolution	1920 × 1080					
Image Sensor	1/2.7" Progressive Scan CMOS					
Min. Illumination	Color: 0.002 Lux @(F1.2,AGC ON), B/W: 0.0002 Lux @(F1.2, AGC ON)					
Shutter Speed	1s to 1/100,000s					
Lens (Focal Length)	6 mm					
Field of View	53° × 30°(H × V)					
WDR	120 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					
Disturs in Disturs	Combins details of thermal and optical image PIP, overlay thermal image on					
Picture in Picture	optical image					
Smart Function						
VCA (Video Content Analysis)	4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), up to 8 VCA rules.					
Temperature Measurement	3 temperature measurement rule types, 21 rules (10 points, 10 areas, and 1 line).					
Temperature Range	-20 °C to +150 °C (-4 °F to +302°F)					
Temperature Accuracy	± 8 °C (± 14.4 °F)					
Fire detection	Dynamic fire point detection, up to 10 fire points detectable.					
Infrared						
IR Distance	Up to 15 m					
IR Intensity and Angle	Automatically adjusted					
Network						
Main Stream	Visible Light: 50Hz: 25fps (1920 × 1080), 25fps (1280 × 960), 25fps (1280 × 720) Visible Light: 60Hz: 30fps (1920 × 1080), 30fps (1280 × 960), 30fps (1280 × 720) Thermal: 25fps (160 × 120 (the resolution of output image is 320 × 240))					



	Visible Light: 50Hz: 25fps (704 × 576), 25fps (640 × 480)						
Sub Stream	Visible Light: 60Hz: 30fps (704 × 480), 30fps (640 × 480)						
	Thermal: 25fps (160 × 120 (the resolution of output image is 320 × 240))						
Video Compression	H.265/H.264, 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						
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	1-ch inputs (0-5vDC)						
Alarm Output	1-ch relay outputs, alarm response actions configurable						
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage						
Audio Input	1 3.5mm Mic in/Line in interface. Line input: 2-2.4V[p-p], output						
	impedance:1KΩ±10%						
Audio Output	Linear Level; Impedance: 600Ω						
Reset	1 Reset Button						
Ethernet	1 RJ45 10M/100M Self-adaptive Ethernet interface, 1 RS-485 interface						
	Built-in Micro SD card slot, support Micro SD/SDHC/SDXC card (up to 256G),						
SD Memory Card	support manual/alarm recording						
Analog Video Output	1.0V [p-p]/75Ω, PAL/NTSC/BNC						
	Open-ended API, support ISAPI, HIKVISION SDK and third-party management						
Application Programming	platform						
Client	iVMS-4200						
Web Browser	IE9+, chrome31-chrome44, Firefox 30-Firefox51, Safari 5.02+(mac)						
General							
Menu language	English						
_	12 VDC± 20%, two-core terminal block						
Power	PoE (802.3af, class 3)						
	12 VDC ± 20%: 0.7 A, max. 8W						
Power Consumption	PoE (802.3af, class 3): 42.5 V to 57 V, 0.14 A to 0.22 A, max. 8.5W						
Working	$20^{\circ}$ C to $60^{\circ}$ C ( $22^{\circ}$ E to $140^{\circ}$ E) $0^{\circ}$ C ( $22^{\circ}$ E to $140^{\circ}$ E)						
Temperature/Humidity	-30 °C to 60 °C (-22 °F to 140 °F), 95% or less						
Protection Level	IP67 Standard						
	TVS 6000V Lightning protection, surge protection, voltage transient protection						
Dimensions	134.2 mm × 123.9 mm × 107.7 mm (5.28 " × 4.87" × 4.24 ")						
Weight	800 g (1.76lb)						



## **Detection Range Table**

\* The table is only for reference, the performance may vary from camera to camera.

## **Smart functions Range**

Different targets trigger the VCA events within different range limits.

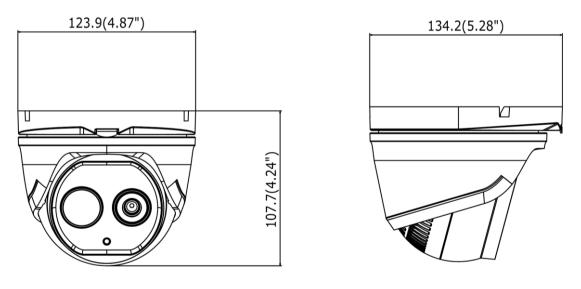
VCA Range (Vehicles: 1.4×4.0m)	VCA Range (Humans: 1.8×0.5m)	Temperature Measurement (Object:2×2 m)	Temperature measurement (Object:1×1 m)	Fire Detection (Object:2×2 m)	Fire Detection (Object:1×1 m)
126 m	42 m	132 m	66 m	360 m	180 m

#### Wide Range Coverage

There is range limit for detecting, recognizing, and identifying human/vehicle targets.

Detection Range	Detection Range	Recognition	Recognition	Identification	Identification
(Vehicles:	(Humans:	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
1.4×4.0m)	1.8×0.5m)	1.4×4.0m)	1.8×0.5m)	1.4×4.0m)	1.8×0.5m)
559 m	182 m	140 m	46 m	70 m	23 m

## Dimension



Unit: mm(inch)

#### ORDERING INFORMATION

114-055

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