

# DS-2TD1217-3/PA Thermal & Optical Bi-Spectrum Network Turret Camera

## **DeepinView**















Hikvision DS-2TD1217-3/PA Thermal & Optical Bi-Spectrum Network Turret Camera equipped with built-in GPU which supports intelligent perimeter protection algorithm, can realize high-precision VCA detection and real-time alarm. It is applied to perimeter protection and fire prevention purposes in commercial facilities such as residential, retail, villa, parking lot, museum, data centers and so on. The pre-alarm system helps you discover unexpected events immediately and protects your property.

#### **Key Feature**

- Powerful perimeter protection functions, based on intelligent algorithm: Line crossing, intrusion, region entrance & exit
- Temperature exception alarm function
- Fire detection algorithm
- 160 × 120 (the resolution of output image is 320 × 240) resolution 17  $\mu$ m, VOx UFPA, NETD  $\leq$  40 mK (25 °C, F# = 1.1)
- Image processing technology: Liner, histogram, and self-adaptive thermal AGC mode, DDE, 3D DNR





## Specification

Thermal Module						
Image Sensor	ge Sensor Vanadium Oxide Uncooled Focal Plane Arrays					
Resolution	$160 \times 120$ (the resolution of output image is $320 \times 240$ )					
Pixel Interval	17 μm					
Response Waveband	8 μm to 14 μm					
NETD (Noise Equivalent Temperature Difference)	≤ 40 mK (25 °C, F# = 1.1)					
Focal Length	3.1 mm					
IFOV	5.48 mrad					
Field of View	50° × 37.2° (H × V)					
Min. Focusing Distance	0.2 m					
Aperture	F1.1					
Digital Zoom	×2, ×4, ×8					
Optical Module						
Image Sensor	1/2.7" Progressive Scan CMOS					
Resolution 2688 × 1520						
Min. Illumination	Color: 0.0089 Lux @ (F1.6, AGC ON), B/W: 0.0018 Lux @ (F1.6, AGC ON)					
Shutter Speed	1 s to 1/100,000 s					
Focal Length 4 mm						
Field of View	84° × 44.8°(H × V) F2.3					
Aperture						
NDR 120 dB						
Image Effect						
Picture in Picture	Display partial image of thermal channel on the full screen of optical channel					
Bi-spectrum Image Fusion	Display the details of optical channel on thermal channel					
Target Coloration	Yes. Supported in white hot and black hot mode.					
Smart Function						
VCA (Video Content Analysis)	4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), up to 8 VCA rules totally.					
Temperature Measurement	3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line).					
Temperature Range	-20 °C to +150 °C (-4 °F to +302 °F)					
Temperature Accuracy	rature Accuracy ± 8 °C (± 14.4 °F)					
Fire detection	Dynamic fire detection, up to 10 fire points detectable.					
Illuminator						
IR Distance	Up to 15 m					
IR Intensity and Angle	Automatically adjusted					



Audible and Visual Alarm	
White Light Range	Up to 30 m
Visual Alarm	Yes. White light used as the visual alarm, flashing frequency adjustable
Audio alarm	Yes. 6 audio alarms are supported to cover all kinds of alarm.
Video & Audio	
	Optical channel
	50 Hz: 25 fps (2688 × 1520), 25 fps (1920 × 1080), 25 fps (1280 × 720)
Main Stream	60 Hz: 30 fps (2688 × 1520), 30 fps (1920 × 1080), 30 fps (1280 × 720)
	Thermal channel
	25 fps (1280 × 720, 704 × 576, 640 × 480, 352 × 288, 320 × 240)
	Optical channel
	50 Hz: 25 fps (704 × 576), 25 fps (352 × 288), 25 fps (176 × 144)
Sub-stream	60 Hz: 30 fps (704 × 480), 30 fps (352 × 240), 30 fps (176 × 120)
	Thermal channel
	25 fps (704 × 576, 640 × 480, 352 × 288, 320 × 240)
Video Compression	Main Stream: H.265/H.264
Video compression	Sub-Stream: H.265/H.264/MJPEG
Audio Compression	G .711u/G.711a/G.722.1/MP2L2/G.726/PCM
Network	
Drotocolo	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP,
Protocols	RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
Notwork Storago	MicroSD/SDHC/SDXC card (up to 256 G) local storage, and NAS (NFS, SMB/CIFS), auto
letwork Storage	network replenishment (ANR)
API	ISAPI, HIKVISION SDK, third-party management platform, ONVIF (Profile S, Profile G,
API	Profile T)
Simultaneous Live View	Up to 20 channels
User/Host Level	Up to 32 users, 3 levels: Administrator, Operator, User
Coqueity	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE
Security	802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering
Client	iVMS-4200, Hik-Connect
	Live view (plug-in allowed): Internet Explorer 11
Web Browser	Live view (plug-in free): Chrome 57.0 +, Firefox 52.0 +
	Local service : Chrome 57.0+, Firefox 52.0 +
Interface	
Alarm Input	1-ch input (0-5 VDC)
Alarm Output	1-ch relay output, alarm response actions configurable
Alarm Antiss	SD recording/relay output/smart capture/FTP upload/email linkage/audio alarm/white
Alarm Action	light alarm
Audio Innut	1, 3.5 mm Mic in/Line in interface
audio Input	Line input: 2 - 2.4 V [p-p], output impedance: 1 $K\Omega \pm 10\%$
Audio Output	Linear level; impedance: $600 \Omega$
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface
Communication Interface	1, RS-485 interface



General	
	32 languages
	English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak,
Menu Language	French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian,
	Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai,
	Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)
Power	12 VDC ± 20%, two-core terminal block
	PoE (802.3af, class 3)
Power Consumption	12 VDC ± 20%: 0.5 A, max. 6 W
	PoE (802.3af, class 3): 42.5 V to 57 V, 0.14 A to 0.22 A, max. 6.5 W
Working Temperature/Humidity	-40 °C to 65 °C (-40 °F to 149 °F)
	95% or less
Protection Level	IP66 Standard
	TVS 6000 V Lightning protection, surge protection, voltage transient protection
Dimension	138.3 mm × 138.3 mm × 123.1 mm (5.45 " × 5.45" × 4.85 ")
Weight	940 g (2.07 lb)



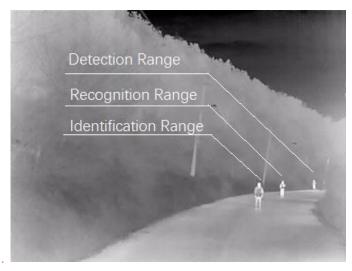
#### **DRI Range Table**

- \* The table is only for reference and the performance may vary according to different environment.
- \* The optimal human detection, recognition, and identification distances are calculated according to Johnson's Criteria.

Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animal, human, vehicle, etc.), the object must be covered by 6 or more pixels.

Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.



Detection Range	Detection Range	Recognition	Recognition	Identification	Identification
(Vehicles: 1.4 ×	(Humans: 1.8 ×	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
4.0 m)	0.5 m)	1.4 × 4.0 m)	1.8 × 0.5 m)	1.4 × 4.0 m)	1.8 × 0.5 m)
280 m	91 m	70 m	23 m	35 m	

#### **Smart Function Table**

\* The table is only for reference and the performance may vary according to different environment.

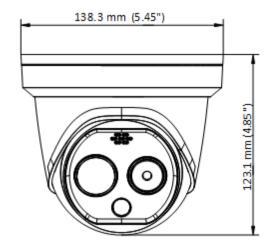
VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 2 × 2 m)	Temperature Measurement (Object: 1 × 1 m)	Fire Detection (Object: 2 × 2 m)	Fire Detection (Object: 1 × 1 m)
43 m	15 m	66 m	33 m	180 m	90 m

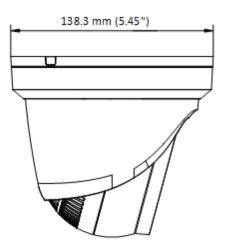
#### **Available Model**

DS-2TD1217-3/PA



#### **Dimension**





#### **Accessory**







DS-1275ZJ-SUS Vertical Pole Mount



DS-1276ZJ-SUS Corner Mount

COMPLIANCE NOTICE: The thermal series products might be subject to export controls in various countries or regions, including without limitation, the United States, European Union, United Kingdom and/or other member countries of the Wassenaar Arrangement. Please consult your professional legal or compliance expert or local government authorities for any necessary export license requirements if you intend to transfer, export, re-export the thermal series products between different countries.





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