DS-2TD2568T-5/G0/T1Y
Explosion-Proof Thermal Camera

Hikvision DS-2TD2568T-5/G0/T1Y Explosion-Proof Thermographic Thermal & Optical Bi-spectrum bullet camera series are applied to perimeter protection and fire-prevention in critical infrastructures such as: oil industry, mine fields, chemical industry, port, grain processing industry, and so on. It adopts 304 stainless steel material to meet the requirements of used in explosion-proof environment. The accurate temperature measurement system sends you alarms to protect your property.

- High sensitivity sensor with 640×512 resolution
- NETD is less than 25 mk (@25° C, F#=1.0)
- Leading thermal image processing technology: Adaptive AGC, DDE, 3D DNR
- Powerful perimeter protection functions, based on deep learning algorithm: Line crossing, intrusion, region entrance & exit
- Buit-in TPM2.0 encryption module for cybersecurity
- High quality detector with 10 years warranty
- 304 Stainless Steel enclosure, protecting camera in corrosive environments and extending reliability and longevity far beyond standard cameras
- ATEX, IECEx, NEMA 4X Certificated

▪ Specification

Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	640 x 512
Pixel Pitch	12 μm
NETD	≤ 25 mK (@25° C,F# = 1 , 0)
Focal Length	5.1 mm
IFOV	2.35 mrad
Aperture	F1.0
Field of View	90° × 67.2° (H × V)
Digital Zoom	x2, x4
Min. Focusing Distance	1 m
Optical Module	
Image Sensor	1/2.7" Progressive Scan CMOS
Resolution	2688 × 1520
Min. Illumination	Color: 0.05 Lux @ (F1.6, AGC ON), B/W: 0.01 Lux @ (F1.6, AGC ON)
Field of View	114.6° × 63.8°(H × V)
Focal Length	2.27 mm
WDR	120 dB
Image Effect	
Picture in Picture	Display partial image of thermal channel on the full screen of optical channel
Target Coloration	Yes. Supported in white hot and black hot mode.
EIS	Thermal channel supports EIS, exclusive with all smart functions
Illuminator	
IR Distance	Up to 30m
IR Intensity and Angle	Automatically adjusted
Smart Function	
VCA	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 regions, and 1 line).
Temperature Range	-20°C to 650°C (-4°F to 1,202°F)
Temperature Accuracy	Max (± 2°C, ± 2%)
Fire Detection	Dynamic fire detection, up to 10 fire points detectable
Smoke Detection	Support smoke detection on optical channel
Interface	
Alarm Input	2-ch inputs (0 to 5 VDC)
Alarm Output	2-ch relay outputs, alarm response actions configurable
Alarm Action	SD Card Record/Relay Output/Smart capture/FTP upload/Email linkage
Audio Input	Mic in/Line in interface. Line input: 2 to 2.4V[p-p], output impedance:1 KΩ ± 10%

Audio Output	Linear Level; Impedance: 600 Ω
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface. 1, RS-485 interface (half duplex)
Network	
Main Stream	Thermal: 25 fps (1280 × 720, 704 × 576, 640 × 512, 352 × 288) Optical: 50 Hz: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60 Hz: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)
Sub stream	Thermal: 25 fps (704 × 576, 640 × 512, 384 × 288) Optical: 50 Hz: 25 fps (704 × 576, 352 × 288) 60 Hz: 30 fps (704 × 480, 352 × 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	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS,NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
Simultaneous live view	Up to 20
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User
Security measures	User authentication (ID and Password), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering
Integration	
SD Memory Card	Built-in Micro SD card slot, support Micro SD/SDHC/SDXC card (up to 256G), support manual/alarm recording
Application Programming	Support ISAPI, HIKVISION SDK and third-party management platform
Client	iVMS-4200
Web Browser	Google Chrome 57+, Mozilla Firefox 52+, Internet Explorer 10+, Mac Safari 12+
General	
Menu Language	33 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian, Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese, Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil), Ukrainian
Power	100 to 240 VAC, PoE (802.3af)
Power Consumption	100 to 240 VAC, PoE (802.3af), max.11W
Work Temperature/Humidity	-40°C to 60°C (-40°F to 140°F), 95% or less
Protection Level	IP68 Standard,TVS 6000V Lightning protection, surge protection, voltage transient protection
Dimensions	290.7 mm × 177.5 mm × 152.0 mm (11.44" × 6.99" × 5.98")
Weight	Approx. 6.5 kg (14.33 lb)

Approval	
EMC	CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019, EN50130-4: 2011+A1: 2014); RCM (AS/NZS CISPR 32: 2015); IC (ICES-003: Issue 7)
Safety	CB: IEC 62368-1: 2014+A11; CE-LVD: EN 62368-1: 2014/A11: 2017
Protection	IP68: IEC 60529-2013
Explosion-Proof Protection	ATEX: II 2 G Ex db IIC T6 Gb/II 2 D Ex tb IIIC T80°C Db IECEx: Ex db IIC T6 Gb/ Ex tb IIIC T80°C Db
Anti-Corrosion Protection	NEMA 4X (NEMA 250-2018), C5

▪ Range Table

VCA Range (Vehicles: 1.4 x 4.0 m)	VCA Range (Humans: 1.8 x 0.6 m)	Temperature Measurement (Object: 0.2 x 0.2 m)	Temperature Measurement (Object: 0.5 x 0.5 m)	Fire detection(Object : 0.2 x 0.2m)	Smoke detection (Object: 0.5 x 0.5m)
150 m	50 m	15 m	40 m	60 m	7 m

▪ DORI

* 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 (Vehicles: 1.4 x 4.0 m)	Detection Range (Humans: 1.8 x 0.6 m)	Recognition Range (Vehicles: 1.4 x 4.0 m)	Recognition Range (Humans: 1.8 x 0.6 m)	Identification Range (Vehicles: 1.4 x 4.0 m)	Identification Range (Humans: 1.8 x 0.6 m)
652 m	213 m	163 m	53 m	81 m	27 m

▪ Available Model

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▪Dimension

Unit: mm(Inch)

▪ Accessory

▪ Optional

DS-1677ZJ-XS-1.0(D) Others	DS-2780ZJ-X(OS)(O-STD)/316L Junction box

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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