

#### DS-2TD2528T-7/Q(C)

**Explosion-Proof Optical & Thermal Network Bullet Camera** 















Hikvision DS-2TD2528T-7/Q(C) 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 304L stainless steel + anti-corrosion coatings to meet the requirements of used in explosion-proof environment. The accurate temperature measurement system sends you alarms to protect your property.

- 256 × 192 resolution, 12 μm, VOx UFPA, NETD ≤ 40 mK (25°C, F1.0)
- Temperature exception alarm for fire prevention, -20 °C to 650 °C (-4 °F to 1202 °F), Max. (± 2 °C, ± 2%)
- Support Fire detection and smoke detection Algorithm
- Support sun-reflection filter and forklift alarm filter algorithm (forklift alarm filter is exclusive with VCA function)
- Powerful perimeter protection functions, based on intelligent algorithm: Line crossing, intrusion, region entrance & exit
- 316L Stainless Steel enclosure, protecting camera in corrosive environments
- 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
- High quality detector with 10 years warranty



# Specification

Thermal Module				
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays			
Resolution	256 x 192			
Pixel Pitch	12 μm			
NETD	≤ 40 mK (@25° C,F# = 1.0)			
Focal Length	6.9 mm			
IFOV	1.74 mrad			
Aperture	F1.0			
Field of View	24.9° × 18.7° (H × V)			
Min. Focusing Distance	0.5 m			
Digital Zoom	×2, ×4			
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	84.0° × 44.8°(H × V)			
Focal Length	4 mm			
Shutter Speed	1 s to 1/100,000 s			
Day & Night Mode	IR Cut Filter with Auto Switch			
WDR	120 dB			
Image Effect				
Bi-spectrum Image Fusion	Display the details of optical channel on thermal channel			
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.			
Illuminator				
IR Distance	Up to 30 m			
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 in total.			
Temperature Measurement	3 temperature measurement rule types, 21 rules in total (10 points, 10 areas, and 1 line)			
Temperature Range	-20 °C to 650 °C (-4 °F to 1202 °F)			
Temperature Accuracy	Max (± 2 °C, ±2 %)			
Fire Detection	Dynamic fire detection, up to 10 fire points detectable			
Smoking Detection	Up to 10 smoking points detected			
Smoke Detection	Support smoke detection on optical channel			
Video and Audio				
	Optical channel			
	50 HZ: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720)			
Main Stream	60 HZ: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720)			
	Thermal channel			
	25 fps (1280×720, 704×576, 640×512, 320×240)			



	Optical channel		
Sub-stream	50 HZ: 25 fps (704 × 576, 352 × 288)		
	60 HZ: 30 fps (704 × 480, 352 × 240)		
	Thermal channel		
	25 fps (704 × 576, 352 × 288, 384 × 288)		
Video Compression	Main Stream: H.265/H.264		
	Sub-Stream: H.265/H.264/MJPEG		
Audio Compression	G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM		
Video and Image			
Color Palettes	17 types (White hot, Black hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2,		
Color Falctics	Sepia, Color 1, Color 2, Ice fire, Rain, Red hot, Green hot, Dark blue, Winter, Summer)		
Network			
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP,		
FIOLOCOIS	RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE, TP, Bonjour, SFTP, SRTP, TLS		
Network Storage	MicroSD/SDHC/SDXC card (up to 512G) local storage, NAS (NFS, SMB/CIFS), Auto		
Network Storage	Network Replenishment (ANR)		
ADI	ISAPI,ISUP, HIKVISION SDK, and third-party management platform, Open Network		
API	Video Interface,ONVIF (Profile S, Profile G, Profile T, Profile M), OTAP		
Simultaneous Live View	Up to 20 channels		
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User		
	User authentication (ID and password), MAC address binding, HTTPS encryption, IEEE		
Security	802.1x access control, IP address filtering		
Client	iVMS-4200, Hik-Connect		
Interface			
Alarm Input	2, alarm input (0-5 VDC)		
Alarm Output	2-ch, relay outputs (alarm response actions configurable)		
Alarm Action	SD recording/Relay output/Smart capture/FTP upload/Email linkage		
	1, 3.5 mm Mic in/Line in interface		
Audio Input	Line input: 2 - 2.4 V [p-p], output impedance: 1 K $\Omega$ ± 10%		
Audio Output	Linear level, impedance: $600 \Omega$		
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface		
General			
- Concrui	32 languages English, Russian, Estonian, Bulgarian, Hungarian, Greek, German, Italian,		
	Czech, Slovak, French, Polish, Dutch, Portuguese, Spanish, Romanian, Danish, Swedish,		
Menu Language	Norwegian, Finnish, Croatian, Slovenian, Serbian, Turkish, Korean, Traditional Chinese,		
	Thai, Vietnamese, Japanese, Latvian, Lithuanian, Portuguese (Brazil)		
Power Supply	100 to 240 VAC, PoE (802.3af)		
Power Consumption	100 to 240 VAC, PoE (802.3af), max.8W		
Tower consumption	Temperature: -40°C to 60°C (-40°F to 140°F)		
Working Temperature/Humidity	Humidity: 90% or less		
	IP68 Standard		
Protection Level	TVS 6000V lightning protection, surge protection, voltage transient protection		
	IK10-rated housing		
Dimensions	NEMA 4X anti-corrosion housing		
Dimensions	286.7 mm × 175.2 mm × 150.1 mm (11.29" × 6.9" × 5.91")		
Weight	Approx. 5.85 kg (12.90 lb)		



Detection Range Table			
VCA Range for Humans	56 m		
VCA Range for Vehicles	168 m		
Approval			
	CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019,		
EMC	EN50130-4: 2011+A1: 2014);		
	RCM (AS/NZS CISPR 32: 2015);		
	IC (ICES-003: Issue 7)		
Safety	CB: IEC 62368-1: 2014+A11;		
Salety	CE-LVD: EN 62368-1: 2014/A11: 2017;		
Protection	IP68: IEC 60529-2013		
	IK10: IEC 62262-2002		
Anti-Corrosion Protection	NEMA 4X (NEMA 250-2018), C5		

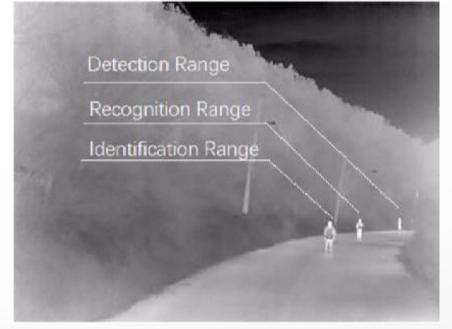
### Range Table

VCA Range (Vehicles: 1.4 x 4.0 m)	VCA Range (Vehicles: 1.4 x 4.0 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: 0.5m x 0.5m)	Smoking Detection
168m	56m	23m	58m	70m	12m	10.5m

#### 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.





<b>Detection Range</b>	<b>Detection Range</b>	Recognition	Recognition	Identification	Identification
(Vehicles: 1.4 x	(Humans: 1.8 x	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
4.0 m)	0.6 m)	1.4 x 4.0 m)	1.8 x 0.6 m)	1.4 x 4.0 m)	1.8 x 0.6 m)
,	0.0,	214 X 410 111)	1.0 X 0.0 III)	1.4 X 4.0 III)	1.0 X 0.0 III)

## Typical Application

Hikvision products are classified into three levels according to their anti-corrosion performance. Refer to the following description to choose for your using environment.

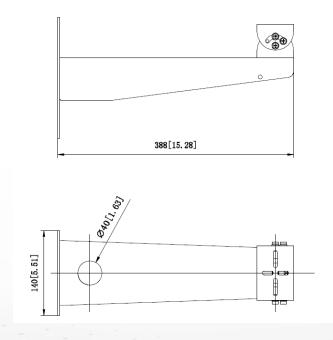
No products could be used under HYDROGEN FLUORIDE environment. This model has Top-level PROTECTION.

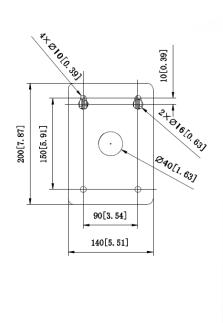
Level	Description	
	Hikvision products at this level are equipped for use in	
	areas where professional anti-corrosion protection is a	
Top-level Protection	must. Usually it is used in salt-spray and sulfur dioxide (with	
	a concentration volume ratio of less than 0.67%)	
	environment, such as chemical plants and coastal lines.	
	Hikvision products at this level are equipped for use in	
	areas with moderate anti-corrosion demands. Typical	
Moderate Protection	application scenarios include coastal areas about 2	
	kilometers (1.24 miles) away from coastlines, as well as	
	areas affected by acid rain.	
No Specific Protection	Hikvision products at this level are equipped for use in	
No Specific Protection	areas where no specific anti-corrosion protection is needed.	

#### Available Model

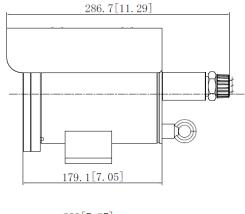
DS-2TD2528T-7/Q(C)

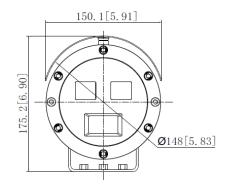
#### Dimension

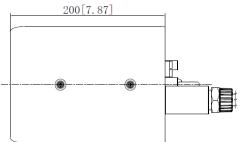












Unit: mm(Inch)

## Accessory

### Optional



# See Far, Go Further



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