HM-TD2138-8/G0/T1Y(L)
Thermal　Network Bullet Camera

HM-TD2138-8/G0/T1Y(L) Thermal Network Bullet Camera can be applied in critical infrastructures such as: substations, hydropower stations, waste incineration plants, manufacturing workshops, etc. With the vanadium oxide uncooled focal plane sensor, it enhances the thermal image quality.

- 384 × 288 resolution, 12 µm, VOx UFPA, NETD ≤ 25 mK (25°C, F1.0)

- Image processing technology: linear, histogram, self-adaptive thermal AGC mode, DDE, 3D DNR

- High quality detector with 10 years guarantee

· Specification

Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Resolution	384 x 288
Pixel Pitch	12 µm
NETD	≤ 25 mK　(@25° C,F# = 1.0)
Focal Length	7.6 mm
IFOV	1.58 mrad
Aperture	F1.0
Field of View	35° × 26.1° (H × V)
Min. Focusing Distance	1 m
Digital Zoom	×2, ×4，×8

Image Effect	
EIS	Support

Video and Audio	
Main Stream	25 fps (1280 × 720P, 704 × 576, 352 × 288, 384 × 288)
Sub-stream	25 fps (704 × 576, 352 × 288, 384 × 288)
Third Stream	25 fps(1280 × 720P, 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, 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, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE,TP,Bonjour,SFTP,SRTP,TLS
Network Storage	MicroSD/SDHC/SDXC card (up to 512 G) local storage, NAS (NFS, SMB/CIFS), Auto Network Replenishment (ANR)
API	ISAPI,ISUP, HIKVISION SDK, and third-party management platform, Open Network Video Interface,ONVIF (Profile S, Profile G, Profile T)
Simultaneous Live View	Up to 20 channels
User/Host level	Up to 32 users, 3 levels: Administrator, Operator, User
Security	User authentication (ID and password), MAC address binding, HTTPS encryption, IEEE 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

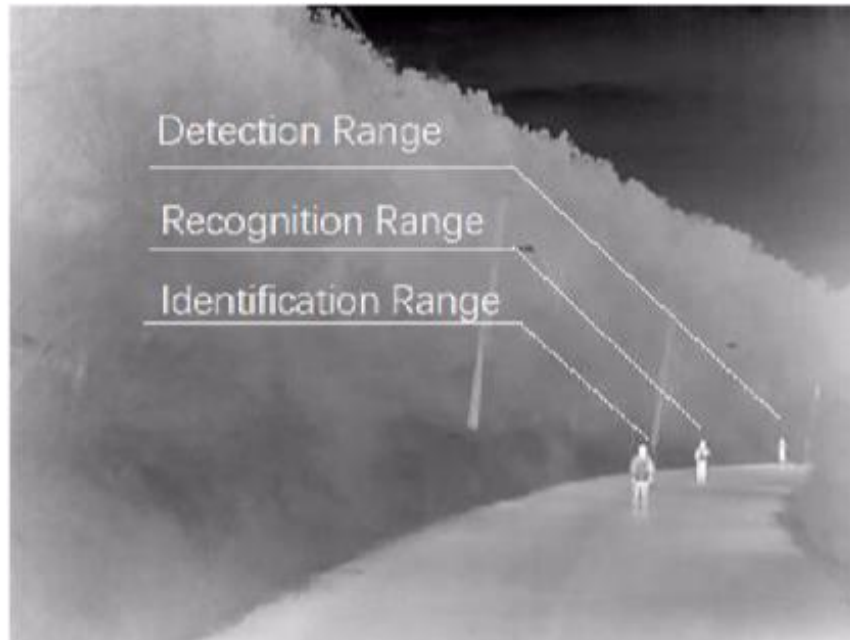| Audio Input	1, 3.5 mm Mic in/Line in interface
	Line input: 2 - 2.4 V [p-p], output impedance: 1 KΩ ± 10%
Audio Output	Linear level, impedance: 600 Ω
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface.
	1, RS-485 interface (half duplex)
Analog Output	1.0V [p-p]/75Ω, PAL/NTSC/BNC
General	
Menu Language	32 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)
Power Supply	24 VAC ± 25%, 12 VDC ± 25%,24VDC two-core terminal block
	PoE (802.3af, class 3)
Power Consumption	24 VAC ± 25%: 0.33 A to 0.55 A, max. 6.2 W
	12 VDC ± 25%: 0.8 A to 1.33 A, max. 5.3 W
	PoE (802.3af, class 3): 36 V to 57 V, 0.33 A to 0.21 A, max.5.8 W
Working Temperature/Humidity	Temperature: -40°C to 70°C (-40°F to 158°F)
	Humidity: 95% or less
Protection Level	IP67 Standard
	TVS 4000V lightning protection, surge protection, voltage transient protection
	IK10-rated housing
	NEMA 4X anti-corrosion housing
Dimensions	351.3 mm × 113.5 mm × 115.2 mm (13.83" × 4.47" × 4.53")
Weight	Approx. 1.77 kg (3.90 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;
	BIS: IS 13252 (Part 1): 2010/ IEC 60950-1: 2005
	LOA: SANS/IEC 60950-1
Environment	CE-RoHS：2011/65/EU,
	WEEE: 2012/19/EU,
	Reach：Regulation(EC) No 1907/2006
Protection	IP67: IEC 60529-2013
	IK10: IEC 62262-2002
Anti-Corrosion Protection	NEMA 4X (NEMA 250-2018)

▪ 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 × 4.0 m)	Detection Range (Humans: 1.8 × 0.5 m)	Recognition Range (Vehicles: 1.4 × 4.0 m)	Recognition Range (Humans: 1.8 × 0.5 m)	Identification Range (Vehicles: 1.4 × 4.0 m)	Identification Range (Humans: 1.8 × 0.5 m)
971 m	317 m	243 m	79 m	121 m	40 m

▪ Typical Application

HIKMICRO 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 MODERATE PROTECTION.

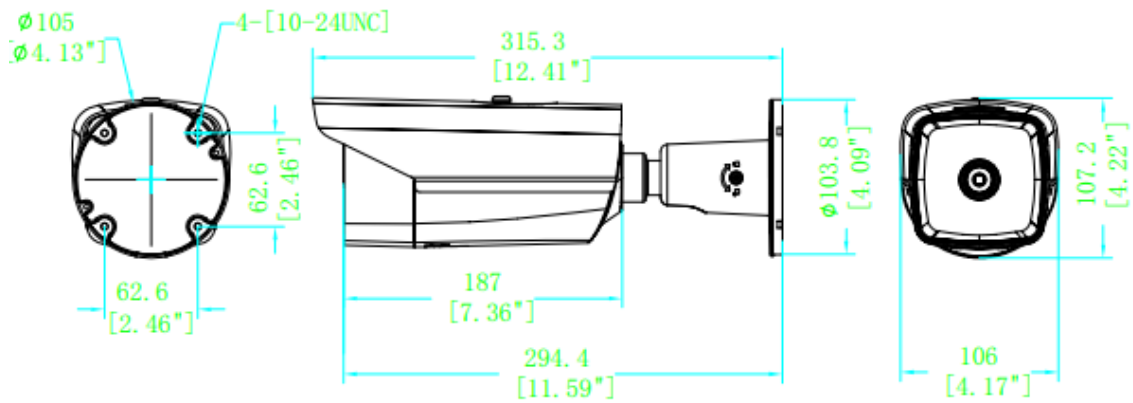| Level	Description
Top-level Protection	HIKMICRO products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Usually it is used in salt-spray and sulfur dioxide (with a concentration volume ratio of less than 0.67%) environment, such as chemical plants and coastal lines.
Moderate Protection	HIKMICRO products at this level are equipped for use in areas with moderate anti-corrosion demands. Typical application scenarios include coastal areas about 2 kilometers (1.24 miles) away from coastlines, as well as areas affected by acid rain.

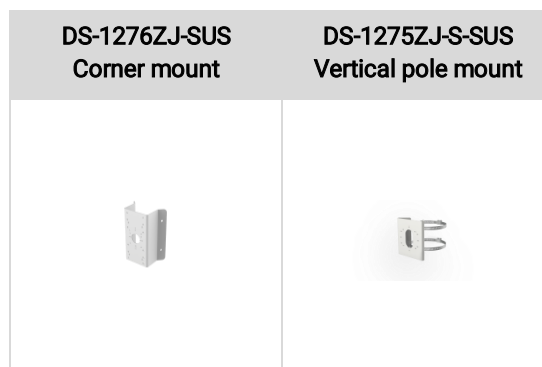|	
No Specific Protection	HIKMICRO products at this level are equipped for use in areas where no specific anti-corrosion protection is needed.

▪ Available Model
HM-TD2138-8/G0/T1Y(L)

▪ Dimension

▪ Accessory

▪Included

DS-1260ZJ-AC#SA Junction box

▪Optional

DS-1276ZJ-SUS Corner mount	DS-1275ZJ-S-SUS Vertical pole 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.