HM-TD2638-4/G1/T3Y
Thermal & Optical Bi-spectrum Network Bullet Camera





HM-TD2638-4/G1/T3Y Anti-corrosion Bi-spectrum Network Bullet Camera supports video analysis based on GUANLAN Large Scale AI Model for perimeter protection, and temperature exception alarm. It can be widely used in critical infrastructures such as: solar farm, car dealership, factory, railway, and so on. It adopts anti-corrosion coating to meet the requirements of used in anti-corrosion environment.

▪ Features

- 384 × 288 resolution, 12 μm, VOx UFPA, NETD ≤ 20 mK (25°C, F1.0)
- Extended human/vehicle detection distance and ultra low false alarm with GUANLAN Large-Scale AI Model
- Temperature exception alarm, -20°C to 150°C (-4°F to 302°F), ± 8°C (± 14.4°F)
- Fire detection and smoking detection Algorithm
- Built-in TPM2.0 encryption module for cybersecurity
- 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	≤ 20 mK (@25° C,F# = 1.0)
Focal Length	4.4 mm
IFOV	2.73 mrad
Aperture	F1.0
Field of View	60.2° × 40.6° (H × V)
Min. Focusing Distance	0.6 m
Digital Zoom	×2, ×4, ×8
Optical Module	
Image Sensor	1/2.7" Progressive Scan CMOS
Resolution	2688 × 1520
Min. Illumination	0.0176Lux @(F2.25,AGC ON) ,0 Lux with IR
Field of View	109.8° × 64.5° (H × V)
Focal Length	2.2 mm
Shutter Speed	1 s to 1/100,000 s
White Balance	MWB/AWB1/Locked WB/Fluorescent Lamp/Incandescent Lamp/Warm Light Lamp/Natural Light
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.
EIS	Thermal channel supports EIS, exclusive with all smart functions
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 (point, area, line), 21 rules in total
Temperature Range	-20 °C to 150 °C (-4 °F to 302 °F)
Temperature Accuracy	± 8 °C (±14.4 °F)
Fire Detection	Dynamic fire detection, up to 10 fire points detectable
Smoking Detection	Up to 10 smoking points detected

Video and Audio	
Main Stream	Optical channel 50 HZ: 25 fps (2688 × 1520, 1920 × 1080, 1280 × 720) 60 HZ: 30 fps (2688 × 1520, 1920 × 1080, 1280 × 720) Thermal channel 25 fps (1280×720P， 704×576， 352×288， 384×288)
Sub-stream	Optical channel 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, 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, Profile M), OTAP
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. 12.1W 12 VDC ± 25%: 0.8 A to 1.33 A, max. 11.3W PoE (802.3af, class 3): 36 V to 57 V, 0.33 A to 0.21 A, max. 11.8W
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	376.1 mm × 119.1 mm × 118.1 mm (14.81" × 4.68" × 4.65")
Weight	1.82 kg (4.01 lb)
Detection Range Table	
VCA Range for Humans	52 m
VCA Range for Vehicles	120 m
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) KC (KSC9832: 2019; KSC9835: 2019)
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)

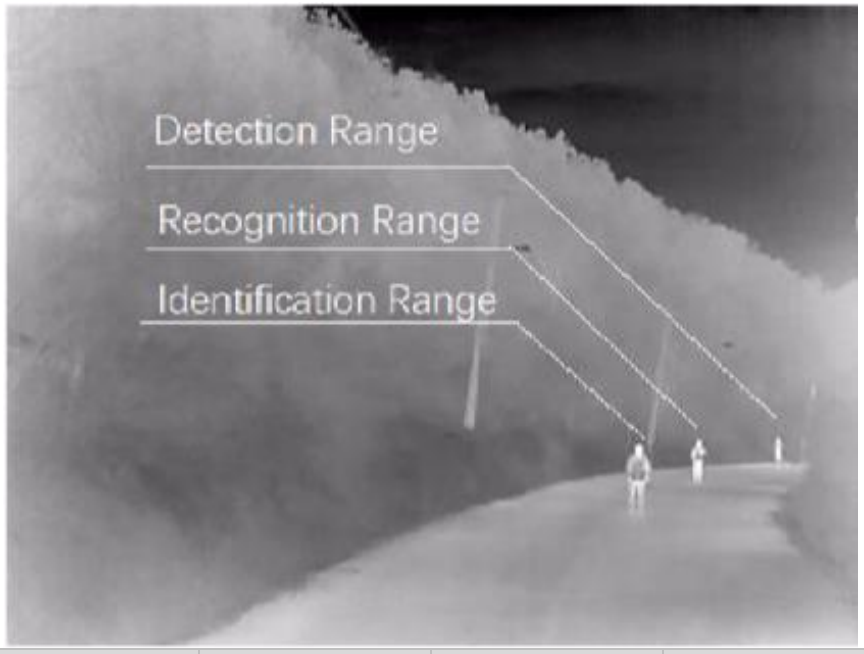
▪ Range Table

**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: 0.2 × 0.2 m)	Temperature Measurement (Object: 0.5 × 0.5 m)	Fire Detection (Object: 0.5 × 0.5m)	Smoking Detection
120 m	52 m	13.2m	33m	13.2m	6.6m

▪ DORI

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)
562 m	183 m	141 m	46 m	70 m	23 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.

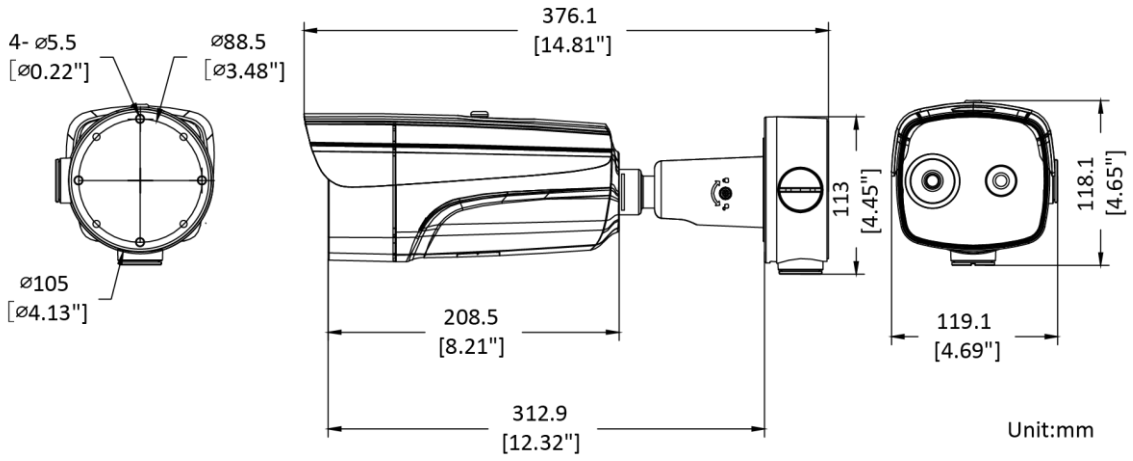
Level	Description
Top-level Protection	HIKMICRO products at this level are equipped for use in areas where professional anti-corrosion protection is a must. Usually it is used in salt-spray and sulfur dioxide (with a concentration volume ratio of less than 0.67%)

	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-TD2638-4/G1/T3Y

▪ Dimension



▪ Accessory

▪ Included

DS-1260ZJ-AC#SA

Junction box



- Optional

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

HIKMICRO

Building A1, No. 299, Qiushi Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou, Zhejiang

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