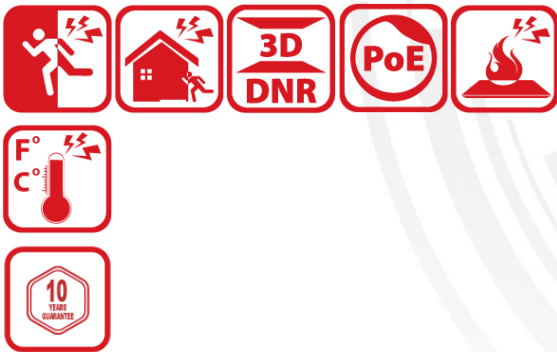# HM-TD2638-25/G0/T1Y
Thermal & Optical Bi-spectrum Network Bullet Camera

HM-TD2638-25/G0/T1Y Anti-corrosion Bi-spectrum Network Bullet Camera is applied to perimeter protection and fire-prevention purposes in critical infrastructures such as: airport, railway, prison, power station, 4S stores, and so on. With the vanadium oxide uncooled focal plane sensor, it enhances the thermal image quality. It adopts anti-corrosion coating to meet the requirements of used in anti-corrosion environment.

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

- Video content analysis: vehicle/human classification

- Temperature exception alarm for fire prevention, -20°C to 150°C (-4°F to 302°F), ± 8°C (± 14.4°F)

- Fire detection Algorithm

- Support sun-reflection filter algorithm

- 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	25 mm
IFOV	0.48 mrad
Aperture	F1.0
Field of View	10.5° × 7.9° (H × V)
Min. Focusing Distance	23 m
Digital Zoom	×2, ×4，×8

Optical Module	
Image Sensor	1/2.7" Progressive Scan CMOS
Resolution	2688 × 1520
Min. Illumination	0.0089Lux @(F1.6,AGC ON) ,0 Lux with IR
Field of View	24.6° × 14° (H × V)
Focal Length	12.4 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 channle supports EIS, exclusive with all smart functions

Illuminator	
IR Distance	Up to 100 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 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

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

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 256 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)
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. 14 W 12 VDC ± 25%: 0.8 A to 1.33 A, max. 12 W PoE (802.3af, class 3): 36 V to 57 V, 0.33 A to 0.21 A, max. 12 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	376.1 mm × 119.1 mm × 118.1 mm (14.81" × 4.68" × 4.65")
Weight	1.82 kg (4.01 lb)

▪ Range Table

VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 0.2 × 0.2 m)	Fire Detection (Object: 0.2 × 0.2 m)*
750m	250m	46.2m	184.8m

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

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* 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.
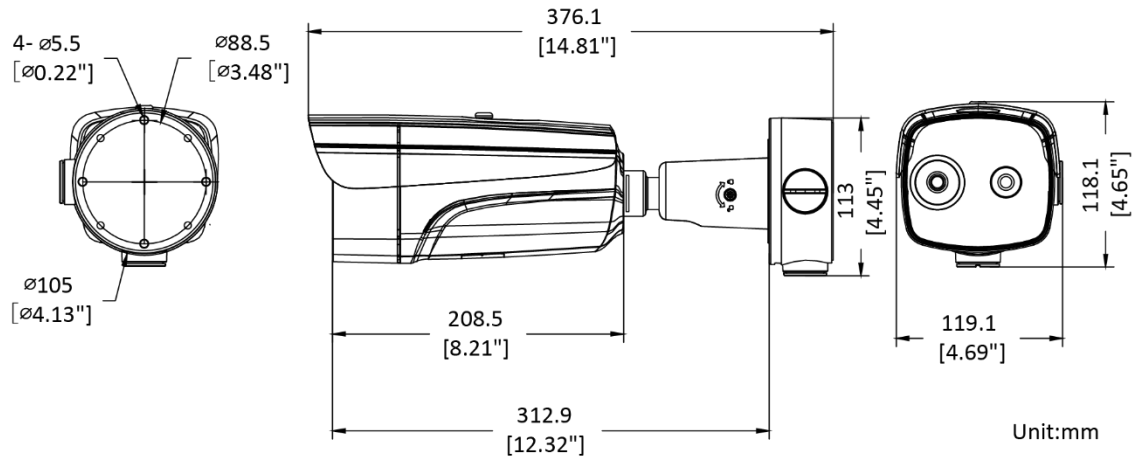
Detection Range (Vehicles: 1.4 × 4.0 m)	Detection Range (Humans: 1.8 × 0.5 m)	Recognition Range (Vehicles: 1.4 × 4.0 m)	Recognition Range (Humans: 1.8 × 0.5 m)	Identification Range (Vehicles: 1.4 × 4.0 m)	Identification Range (Humans: 1.8 × 0.5 m)

3194m	1042m	799m	260m	399m	130m

▪ Available Model

HM-TD2638-25/G0/T1Y

▪ Dimension

4- ⌀5.5 [⌀0.22"]
⌀88.5 [⌀3.48"]
⌀105 [⌀4.13"]
376.1 [14.81"]
208.5 [8.21"]
312.9 [12.32"]
113 [4.45"]
118.1 [4.65"]
119.1 [4.69"]
Unit:mm

▪ Accessory

▪ Included

DS-1260ZJ-AC#SA Junction box

▪ Optional

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