HM-TD2168T-5/G0/T1Y
Thermography Bullet Camera

HM-TD2168T-5/G0/T1Y Anti-corrosion Thermography Bullet Camera can be applied to warehouses, construction sites, waste incineration plants, manufacturing workshops, etc. The accurate temperature measurement device sends temperature exception alarms for loss prevention.

- 640 × 512 resolution, 12 μm, VOx UFPA, NETD ≤ 20 mK (25°C, F1.0)
- Video content analysis 3.0 (VCA3.0): high accuracy vehicle/human detection and classification
- Temperature exception alarm for fire prevention, -20 °C to 650 °C (-4 °F to 1202 °F), Max. (± 2 °C, ± 2%)
- Fire detection and smoking detection Algorithm
- Support forklift alarm filter 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	640 x 512
Pixel Pitch	12 μm
NETD	≤ 20 mK (@25° C,F# = 1.0)
Focal Length	5.2 mm
IFOV	2.31 mrad
Aperture	F1.0
Field of View	90° × 70.1° (H × V)
Min. Focusing Distance	0.8 m
Digital Zoom	×2, ×4， ×8
Image Effect	
Target Coloration	Yes. Supported in white hot and black hot mode.
EIS	Support, mutually exclusive with all smart functions except VCA function
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
Video and Audio	
Main Stream	25 fps (1280×720P， 704×576， 640×512，352×288)
Sub-stream	25 fps (704 × 576, 640 × 512, 384 × 288)
Third Stream	25 fps (1280×720P， 704×576， 640×512，352×288)
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. 6.9 W 12 VDC ± 25%: 0.8 A to 1.33 A, max. 6.1 W PoE (802.3af, class 3): 36 V to 57 V, 0.33 A to 0.21 A, max. 6.6 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 × 115.2 mm × 113.9 mm
Weight	1.77 kg (3.9 lb)
Detection Range Table	
VCA Range for Humans	65 m
VCA Range for Vehicles	150 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)
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: 0.2 × 0.2 m)
150 m	65 m	15.6m	39m	62.4m

▪ 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)
664m	217m	166m	54m	83m	27m

▪ 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.

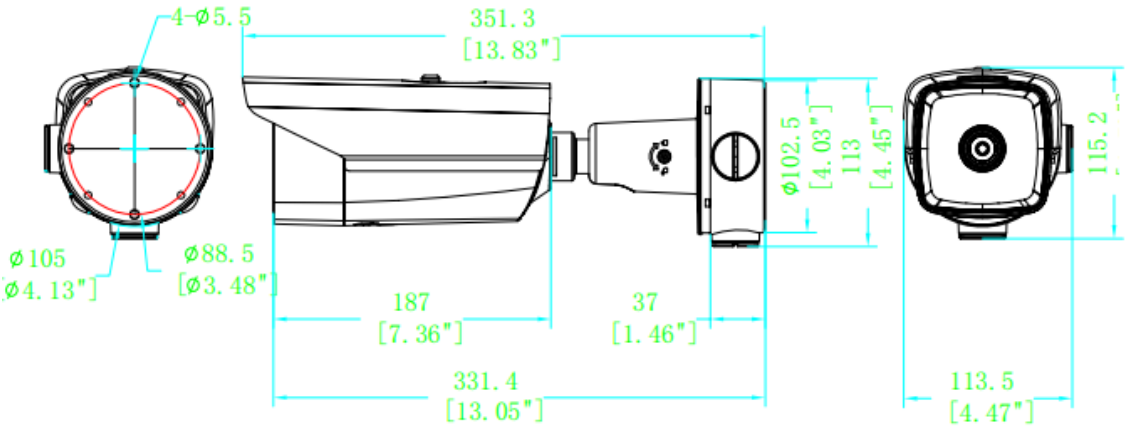
No products could be used under HYDROGEN FLUORIDE environment. This model has MODERATE PROTECTION.

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-TD2168T-5/G0/T1Y

▪Dimension



Unit:mm[Inch]

▪ 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.

HIKMICRO

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