

# HM-TD2168-5/G0/T1Y Anti-corrosion Thermography Bullet Camera







HM-TD2168-5/G0/T1Y Anti-corrosion Thermography 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.

- 640 × 512 resolution, 12 μm, VOx UFPA, NETD < 25 mK (25 °C, F1.0)</li>
- 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 and smoking detection Algorithm
- Buit-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 × 512				
Pixel Pitch	12 μm				
NETD	≤ 25 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, exclusive with all smart functions				
Smart Function					
	4 VCA rule types (line crossing, intrusion, region entrance, and region exiting),				
VCA	up to 8 VCA rules in total.				
	3 temperature measurement rule types, 21 rules in total (10 points, 10 areas,				
Temperature Measurement	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				
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)				
	Main Stream: H.265/H.264				
Video Compression	Sub-Stream: H.265/H.264/MJPEG				
·	Third Stream:H.265/H.264/MJPEG				
Audio Compression	G.722.1/G.711ulaw/G.711alaw/MP2L2/G.726/PCM				
Network					
	IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS,				
Protocols	NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP,				
	PPPoE,TP,Bonjour,SFTP,SRTP,TLS				
Natural Otana	MicroSD/SDHC/SDXC card (up to 256 G) local storage, NAS (NFS, SMB/CIFS),				
Network Storage	Auto Network Replenishment (ANR)				
ADI	ISAPI,ISUP, HIKVISION SDK, and third-party management platform, Open				
API	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				
Coough	User authentication (ID and password), MAC address binding, HTTPS				
Security	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 K $\Omega$ ± 10%				
Audio Output	Linear level, impedance: $600~\Omega$				
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: -40 °C to 70 °C (-40 °F to 158 °F)				
Temperature/Humidity	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)				



## 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)	Smoking Detection
156 m	52 m	15.6 m	62.4 m	7.8 m

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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.

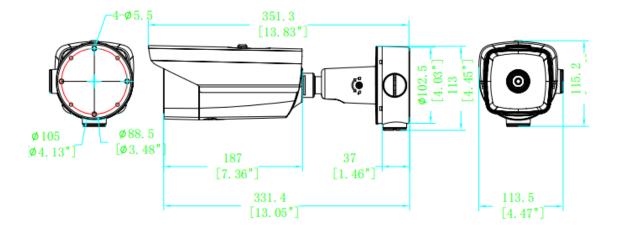
<b>Detection Range</b>	<b>Detection Range</b>	Recognition	Recognition	Identification	Identification
(Vehicles: 1.4 ×	(Humans: 1.8 ×	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
4.0>	0.5)	4 4 4 0	4.00.5)	1 4 4 0)	4005
4.0 m)	0.5 m)	1.4 × 4.0 m)	1.8 × 0.5 m)	1.4 × 4.0 m)	1.8 × 0.5 m)

### Typical Application

#### Available Model

HM-TD2168-5/G0/T1Y

#### Dimension



Unit:mm[Inch]



- Accessory
- Included



Optional

