



HIKMICRO

HM-TD7068-15C4L/T2 Thermal Panoramic Mini Scanner



HIKMICRO HM-TD7068-15 Thermal Panoramic Scanner is equipped with intelligent GPU and continuously spinning to support 360° panoramic perimeter detection and dynamic fire detection. In addition, it could link PTZ to ensure precise alarm by video verification. It is applied in coastal security and critical infrastructure like oilfield, airports etc.

▪ Features

- 360° panoramic view with built-in bi-spectrum PTZ
- 640 × 512 resolution 12 μm , VOx UFPA, NETD $\leq 25 \text{ mK}$ (25 °C, F# = 1.0)
- Perimeter detection based on intelligent algorithm: intrusion, region entrance and exit
- The built-in bi-spectrum PTZ can ensure precise alarm by video verification
- Built-in TPM2.0 encryption module for cybersecurity
- Pre-configured in factory, calibration free on-site
- NEMA-4X Standard, Anti-corrosion coating

▪ Specification

Panoramic	
Image Sensor	VOx Uncooled Focal Plane Arrays
Pan Speed	1.7s/360°
Resolution	640 x 512
Pixel Pitch	12 μm
NETD	≤ 20 mK (@25° C, F# = 1.0)
Focal Length	15mm
Focus Mode	Athermalized
IFOV	0.8 mrad
Aperture	F1.0
Field of View	360°x 24.6°(HxV)
Min. Focusing Distance	70 m
Spectral Range	8-14 μm
Thermal Module	
Image Sensor	VOx Uncooled Focal Plane Arrays
Resolution	640 x 512
Pixel Pitch	12 μm
NETD	≤ 20 mK (@25° C, F# = 1.0)
Focal Length	25 mm
Focus Mode	Athermalized
IFOV	0.8 mrad
Aperture	F1.0
Field of View	17.4°(H) × 13.9°(V)
Min. Focusing Distance	70 m
Spectral Range	8-14 μm
Optical Module	
Image Sensor	1/1.8" Progressive Scan CMOS
Resolution	2688 × 1520, 4 MP
Min. Illumination	Color: 0.005 Lux @ (F1.3 , AGC ON), B/W: 0.001 Lux @ (F1.3 , AGC ON)
Field of View	56.6 ° × 33.7 °(H × V) to 1.8 ° × 1.0 ° (H × V)
Focal Length	6-336mm
Aperture (Range)	F1.3-F4.6
Shutter Speed	1 s to 1/30,000 s
WDR	120 dB
Optical Defog	Yes
Image Effect	
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	Optical Module
PTZ	
Movement Range	Pan: 360° Continuous Rotate;
Pan Speed	Speed Dome: Configurable, From 0.1 °/s to 200 °/s, Preset Speed: 240 °/s

Tilt Speed	Configurable, From 0.1 °/s to 105 °/s, Preset Speed: 200 °
Proportional Zoom	Yes
Presets	300 in total, 273 are configurable
Patrol Scan	8; Up to 32 Presets Per Patrol
Pattern Scan	4; More Than 10 Minutes Per Pattern
Power Off Memory	Yes
Park	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan
PT Status	Turn On/Turn Off
Scheduled Task	Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Doom Reboot/Doom Adjust/AuxOutput
Illuminator	
Laser Distance	500m
Smart Function	
VCA	Support 4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), up to 200 VCA rules
Video and Audio	
Main Stream	Optical channel 50 Hz: 25 fps (2688 × 1520 , 1920 × 1080, 1280 × 960, 1280 × 720) 60 Hz: 30 fps (2688 × 1520 , 1920 × 1080, 1280 × 960, 1280 × 720) Thermal channel 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 512, 384 × 288)
Sub-stream	Optical channel 50 Hz: 25fps (704 × 576, 352 × 288) 60 Hz: 30 fps (704 × 576, 352 × 288) Thermal channel 25 fps (704 × 576, 640 × 512, 384 × 288)
Video Compression	Main stream: H.265/H.264 Sub-stream: H.265/H.264/MJPEG
Audio Compression	G .711u/G.711a/G.722.1/MP2L2/G.726/PCM
Video and Image	
Color Palettes	15 palettes (White hot, Black hot, Fusion 1, Rainbow, Fusion 2, Ironbow 1, Ironbow 2, Sepia, Color 1, Color 2, Icefire, Rain, Red hot, Green hot, Dark blue)
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
Network Storage	MicroSD/SDHC/SDXC card (up to 512 G) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
API	ISAPI, ISUP, HIKVISION SDK, third-party management platform, 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 PW), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering
Client	iVMS-4200, Hik-Connect

Web Browser	Live view (plug-in allowed) : Internet Explorer 11 Live view (plug-in free) : Chrome 57.0 +, Firefox 52.0 + Local service : Chrome 57.0+, Firefox 52.0 +
Interface	
Alarm Input	7-ch inputs (0-5 VDC)
Alarm Output	2-ch relay outputs, alarm response actions configurable
Alarm Action	Preset/Patrol Scan/Pattern Scan/SD Card Record/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 Ω $\pm$ 10%
Audio Output	Linear Level; Impedance: 600 Ω
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface. 1, RS-485 interface
Analog Output	1.0 V [p-p]/75 Ω , BNC for thermal channel
General	
Power Supply	36VDC $\pm$ 20%, two-core terminal block
Power Consumption	7 A, max. 150 W
Working Temperature/Humidity	-40 $^{\circ}$ C~70 $^{\circ}$ C , < 90% RH
Wiper	Yes
Protection Level	IP66 Standard; TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Dimensions	543.8mm $\times$ 399.7mm $\times$ 390.3 mm (21.41" $\times$ 15.74" $\times$ 15.37")
Weight	$\leq$ 13kg
Mount	Pole Mount
Detection Range Table	
VCA Range for Humans	300m
VCA Range for Vehicles	600m
Approval	
EMC	CE-EMC
Safety	CB
Environment	CE-RoHS
Protection	IP66
Anti-Corrosion Protection	NEMA 4X

▪ Range Table

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

VCA Range (Vehicles: 1.4 $\times$ 4.0 m)	VCA Range (Humans: 1.8 $\times$ 0.5 m)
600m	300m

▪ DORI

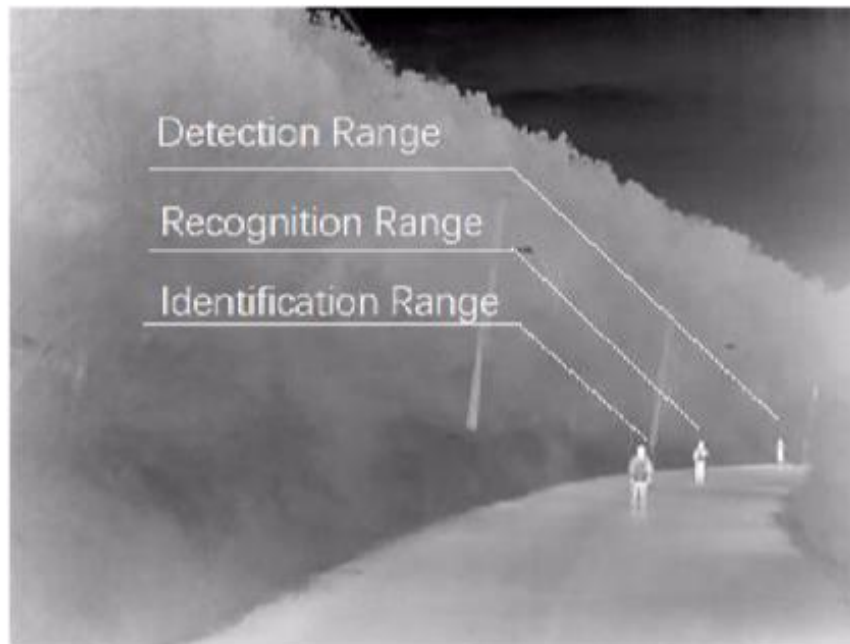
**The table is only for reference and the performance may vary according to different environment.*

**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)
1968m	642m	492m	160m	246m	80m

▪ 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.

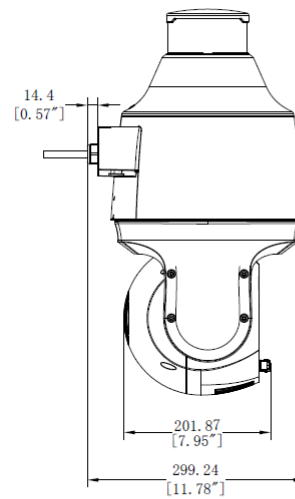
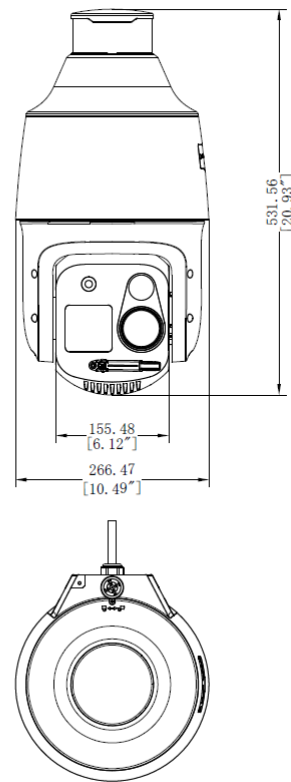
No products could be used under HYDROGEN FLUORIDE environment. This model has MODERATE PROTECTION.

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.

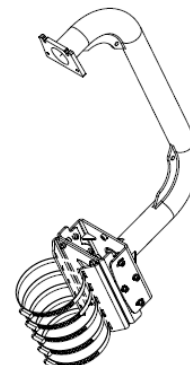
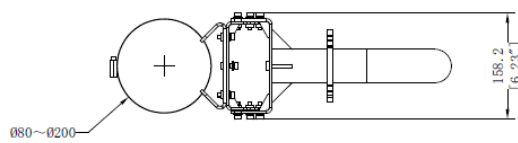
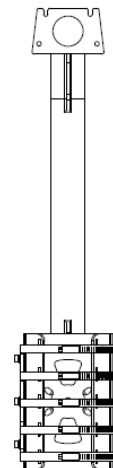
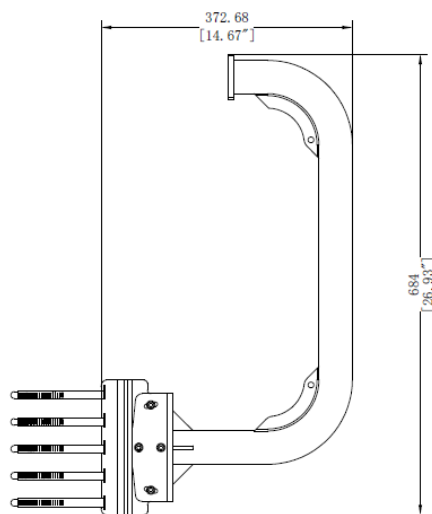
▪ Available Model

HM-TD7068-15C4L/T2

▪ Dimension



Unit:mm [Inch]



Unit:mm [Inch]

