

## HM-TD5528T-15/W

Thermographic Thermal & Optical Bi-spectrum Network MINI Positioning System



HIKMICRO HM-TD5528T-15/W Thermographic Thermal & Optical Bi-spectrum Network MINI Positioning System equipped with built-in GPU which supports intelligent behavior analysis algorithm, can realize high-precision VCA detection and real-time alarm. It is applied to fire-prevention purposes in scenes such as transformer substation, recycling center, gas station, and factory. The pre-alarm system helps you discover unexpected events immediately and protects your property.

### Key Feature

- Behavior analysis function, based on deep learning algorithm: line crossing, intrusion, region entrance & exit
- Temperature exception alarm for fire prevention
- Fire detection algorithm
- 256 × 192 resolution 12 μm, VOx UFPA, NETD ≤ 35 mK (25°C, F# = 1.0)
- Image processing technology: Liner, histogram, and 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	256 × 192
Pixel Pitch	12 μm
Spectral Range	8 μm to 14 μm
NETD	≤ 35 mK (25°C, F# = 1.0)
Focal Length	15 mm
IFOV	0.8 mrad
Aperture	F1.0
Field of View	11.69° × 8.78° (H × V)
Min. Focusing Distance	2.5 m
Digital Zoom	× 2, × 4, × 8
Optical Module	
Image Sensor	1/2.8" Progressive Scan CMOS
Resolution	2688 × 1520, 4 MP
Min. Illumination	Color: 0.05 Lux @ (F1.6, AGC ON), B/W: 0.01 Lux @ (F1.6, AGC ON)
Field of View	58.4° × 33.8° (H × V) to 2.14° × 1.2° (H × V)
Focal Length	4.8 mm to 153 mm, 32 ×
Aperture (Range)	F1.2 to F4.4
Focus Mode	Semi-auto, manual
Digital Zoom	× 2, × 4, × 8, × 16
Shutter Speed	1 s to 1/100,000 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.
PTZ	
Movement Range	Pan: 360° Continuous Rotate; Tilt: From -90° to +90° (auto flip)
Pan Speed	Configurable, From 0.5°/s to 90°/s
Tilt Speed	Configurable, From 0.5°/s to 40°/s
Proportional Zoom	Yes
Presets	300
Patrol Scan	8 Patrols; Up to 32 Presets Per Patrol
Power Off Memory	Yes
Park	Preset/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan
PT Status	Turn On/Turn Off
Scheduled Task	Preset/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama Scan/Dome Reboot/Dome Adjust/Aux Output
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), 10 scenes and 8 VCA rules for each scene.
Temperature Measurement	3 temperature measurement rule types, 273 presets as scene, 21 rules of each scene (10 points, 10 areas, and 1 line)
Temperature Range	-20°C to 550°C (-4°F to 1022°F)
Temperature Accuracy	Max. ( $\pm 2^{\circ}\text{C}$ , $\pm 2\%$ )
Fire Detection	Dynamic fire and smoke detection, up to 10 fire points and 10 smoke points detectable.
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 50 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 50 fps (704 × 576, 640 × 512, 384 × 288)
Video Compression	Main stream: H.265+/H.265/H.264+/H.264 Sub-stream: H.265/H.264/MJPEG
Audio Compression	G.711alaw/G.711ulaw/G.722.1/G.726/MP2L2/AAC/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
Network Storage	MicroSD/SDHC/SDXC card (up to 128 GB) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)
API	ISAPI, 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 Password), MAC address binding, HTTPS encryption, IEEE 802.1x (EAP-MD5, EAP-TLS), 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	2-ch inputs (0 to 5 VDC)
Alarm Output	2-ch relay outputs, alarm response actions configurable
Alarm Action	Preset/patrol scan/SD card record/relay output/smart capture/FTP upload/email linkage
Audio Input	1
Audio Output	1

Communication Interface	1, RJ45 10 M/100 M self-adaptive Ethernet interface. 1, RS-485 interface
<b>General</b>	
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 VDC
Power Consumption	20 W
Working Temperature/Humidity	-40°C to 70°C (-40°F to 158°F) 90% or less
Wiper	Yes
Protection Level	IP67 Standard TVS 6000 V lightning protection, surge protection, voltage transient protection
Dimensions	321 mm × 194 mm × 153 mm (12.64" × 7.64" × 6.02")
Weight	Approx. 4.8 kg (10.582 lb)

## DRI Range Table

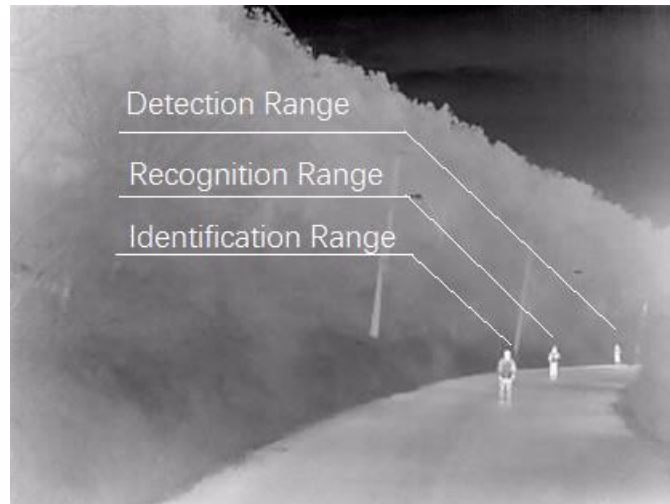
\* The table is only for reference and the performance may vary according to different environment.

\* The optimal 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)
1917 m	625 m	479 m	156 m	240 m	78 m

## Smart Function Table

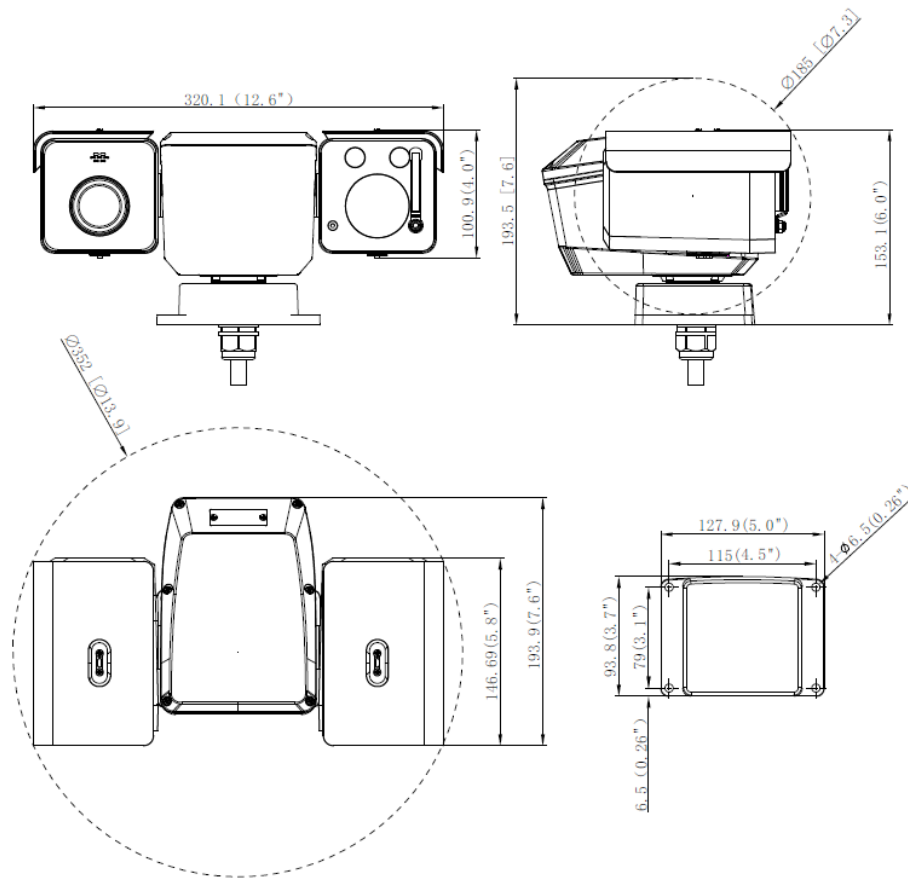
\* The table is only for reference and the performance may vary according to different environment.

VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	Temperature Measurement (Object: 2 × 2 m)	Temperature Measurement (Object: 1 × 1 m)	Fire Detection (Object: 2 × 2 m)	Fire Detection (Object: 1 × 1 m)
450 m	150 m	500 m	250 m	1250 m	625 m

## Available Model

HM-TD5528T-15/W

## Dimension



Unit:mm (inch)

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