

## HM-TD6368-130ZC4L/G0/T2Y

### Thermal & Optical Bi-spectrum Network Positioning System



HIKMICRO HM-TD6368-130ZC4L/G0/T2Y Anti-corrosion Thermal Optical Bi-spectrum Network Positioning System is applied to perimeter protection and fire-prevention purposes in scenes such as port, dock, island, aquafarm. The coating technology can meet the use requirements in anti-corrosion environment.

- 640 × 512 resolution 12 μm, NETD < 35 mK (25 °C, F# = 1.0)
- Perimeter protection function, based on intelligent algorithm: line crossing, intrusion, region entrance and exit
- Temperature exception alarm for fire prevention
- Fire detection and smoke detection algorithm
- Built-in self-cleaning module for clear lens
- High quality detector with 10 years guarantee
- NEMA-4X Standard, Anti-corrosion coating

## ▪ Specification

Thermal Module	
Image Sensor	VOx Uncooled Focal Plane Arrays
Resolution	640 × 512
Pixel Interval	12 μm
Response Waveband	8 μm to 14 μm
NETD	Less than 35 mK (@25 °C,F#=1.0)
Focal Length	13~130 mm
Focus Mode	Semi-auto & Manual
IFOV	0.092~0.92 mrad
Aperture	F0.8~F1.25
Field of View	Wide: 34.3° (H) *27.3° (V) Tele: 3.4° (H) *2.7° (V)
Min. Focusing Distance	Wide: 0.5m; Tele: 10m
Digital Zoom	x2, x4, x8
Optical Module	
Image Sensor	1/1.8" Progressive Scan CMOS
Resolution	2688 × 1520, 4 MP
Min. Illumination	Color: 0.002 Lux @(F1.5, AGC ON), B/W: 0.0002 Lux@ (F1.5, AGC ON) ,0 Lux with IR
Field of View	55.56°(H)*32.4°(V)~1.86°(H)*1.06°(V)
Focal Length	6-360mm, 60x
Aperture (Range)	F1.59-5.42
Focus Mode	Auto & Semi-auto & Manual
Shutter Speed	1.1 s to 1/30,000 s
WDR	120 dB
Optical Defog	Yes
Digital Zoom	x2, x4, x8, x16
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.
Image Stabilization	Thermal channel supports EIS. Optical channel supports OIS.
PTZ	
Movement Range	Pan: 360° Continuous Rotate; Tilt: From -85° to + 85° (auto flip)
Pan Speed	Configurable, From 0.01°/s to 110°/s
Tilt Speed	Configurable, From 0.01°/s to 50°/s
Proportional Zoom	Yes
Presets	300 in total

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/Aux Output
<b>Illuminator</b>	
IR Distance	Up to 2000 m
IR Intensity and Angle	Automatically adjusted
<b>Smart Function</b>	
VCA	Support 4 VCA rule types (Line Crossing, Intrusion, Region Entrance, and Region Exiting), up to 10 scenes and 8 VCA rules for each scene
Temperature Measurement	Support 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 150 °C (-4 °F to 302 °F)
Temperature Accuracy	± 8 °C (±14.4 °F)
Fire Detection	Dynamic fire point detection, up to 10 fire points detectable.
Smoke Detection	Up to 6km detection ability with 5m*5m smoke
<b>Video and Audio</b>	
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 .711u/G.711a/G.722.1/MP2L2/G.726/PCM
<b>Video and Image</b>	
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)

<b>Network</b>	
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, 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 +
<b>Interface</b>	
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 $\Omega$ $\pm$ 10%
Audio Output	Linear Level; Impedance: 600 $\Omega$
Communication Interface	1, RJ45 10 M/100 M Self-adaptive Ethernet interface. 1, RS-485 interface
Analog Video Output	1.0 V [p-p]/75 $\Omega$ , BNC for thermal channel
<b>General</b>	
Power	36VDC $\pm$ 20%, 48VDC $\pm$ 20%, two-core terminal block
Power Consumption	7 A, max. 150 W
Work Temperature/Humidity	From -40°C to 70°C (-40°F to 158°F); Humidity: 95% or Less
Wiper	Yes
Protection Level	IP66 Standard; TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Dimension	543.8mm $\times$ 399.7mm $\times$ 390.3 mm (21.41" $\times$ 15.74" $\times$ 15.37")
Weight	Approx. 27.5 kg (60.627 lb)
<b>Detection Range Table</b>	
VCA Range for Humans	1300m
VCA Range for Vehicles	3900m

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
Environment	CE-RoHS: 2011/65/EU, WEEE: 2012/19/EU, Reach: Regulation(EC) No 1907/2006
Protection	IP66: IEC 60529-2013
Other	NEMA 4X (NEMA 250-2018)

## ▪ Range Table

VCA Range (Vehicles: 1.4 × 4.0 m)	VCA Range (Humans: 1.8 × 0.5 m)	VCA Range (Vessels: 10 × 5 m)	Temperature Measurement (Object: 1 × 1 m)	Fire Detection (Object: 1 × 1 m)	Smoke Detection (Object: 5 × 5 m)
3900m	1300m	5200m	2167m	5200m	6000m

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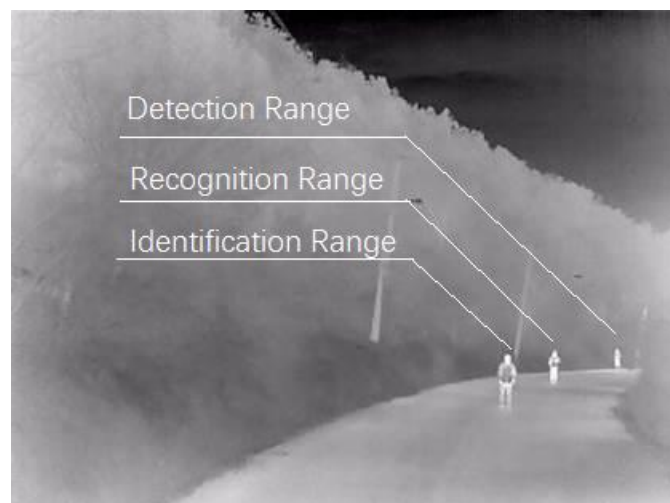
\* The table is only for reference and the performance may vary according to different environment.

\* 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.

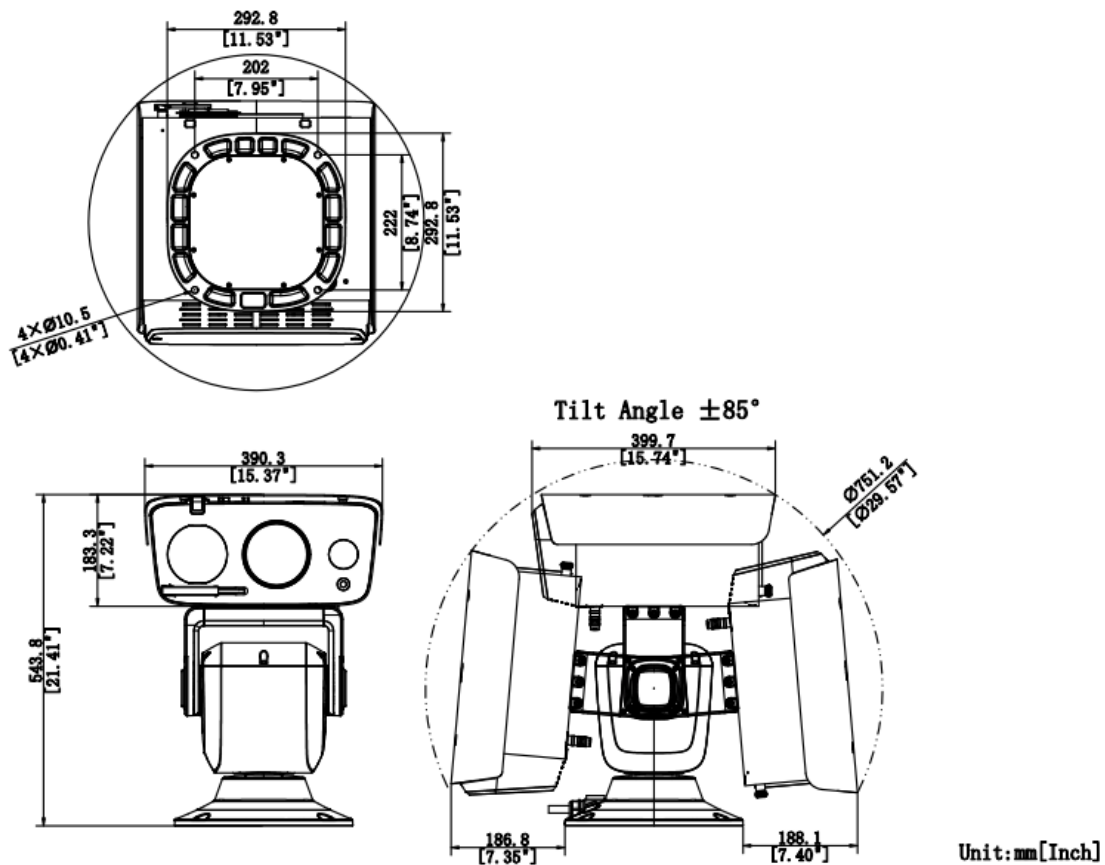


Detection Range (Vehicles: 1.4 × 4.0 m)	Detection Range (Humans: 1.8 × 0.5 m)	Recognition Range (Vehicles: 1.4 × 4.0 m)	Recognition Range (Humans: 1.8 × 0.5 m)	Identification Range (Vehicles: 1.4 × 4.0 m)	Identification Range (Humans: 1.8 × 0.5 m)
16611m	5417m	4153m	1354m	2076m	677m

## ▪ Available Model

HM-TD6368-130ZC4L/G0/T2Y

## ▪ Dimension



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