

HM-TD6338-50C4L/G0/T2Y

Thermal & Optical Bi-spectrum Network Positioning System

















HIKMICRO HM-TD6338-50C4L/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.

Features

- 384 × 288 resolution 12 μm, NETD≤ 20mK (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 TPM2.0 encryption module for cybersecurity
- 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	384 × 288		
Pixel Interval	12 μm		
Response Waveband	8 μm to 14 μm		
NETD	≤20 mK (@25° C,F# = 1.0)		
Focal Length	50 mm		
Focus Mode	Athermalized		
IFOV	0.24 mrad		
Aperture	F1.0		
Field of View	5.3° (H) *4.0° (V)		
Min. Focusing Distance	33m		
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	55.2°(H)*31.84°(V)~1.84°(H)*1.04°V)		
Focal Length	6 to 336 mm, 56x		
Aperture (Range)	F1.36-4.6		
Focus Mode	Auto & Semi-auto & Manual		
Shutter Speed	1.1 s to 1/30,000 s		
WDR	120 dB		
Optical Defog	No, support Algorithmic defog		
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	Both channels support EIS.		
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		
Illuminator			
Laser Distance	Up to 2000m		
IR Intensity and Angle	Automatically adjusted		
Smart Function			
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		
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 x 576, 640 x 512, 384 x 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		
ALI	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) :		
Tros Browers	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		
Alaim Action	capture/FTP upload/Email linkage		
Audia Innut	1, 3.5 mm Mic in/Line in interface. Line input: 2 - 2.4 V [p-p], output impedance:		
Audio Input	$1 \text{ K}\Omega \pm 10\%$		
Audio Output	Linear Level; Impedance: 600 Ω		
O-manaration Intent	1, RJ45 10 M/100 M Self-adaptive Ethernet interface.		
Communication Interface	1, RS-485 interface		
Analog Video Output	1.0 V [p-p]/75 Ω , BNC for thermal channel		
General			
Power	36VDC ± 20%, 48VDC ± 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		
Duntantian Lavel	IP66 Standard; TVS 6000V Lightning Protection, Surge Protection and Voltage		
Protection Level	Transient Protection		
Dimension	543.8mm × 399.7mm × 390.3 mm (21.41" × 15.74" × 15.37")		
Weight	Approx. 27.5 kg (60.627 lb)		
Detection Range Table			
VCA Range for Humans	650m		
VCA Range for Vehicles	1500m		
Approval			
	CE-EMC (EN 55032: 2015, EN 61000-3-2:2019, EN 61000-3-3: 2013+A1:2019,		
EMC	EN50130-4: 2011+A1: 2014);		
	IC (ICES-003: Issue 7)		
Cofoty	CB: IEC 62368-1: 2014+A11;		
Safety	CE-LVD: EN 62368-1: 2014/A11: 2017;		



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

Range Table

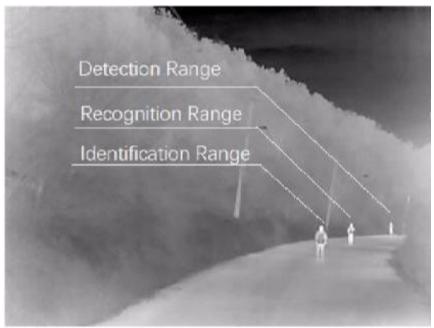
*The table is only for reference and the performance may vary according to different environment.

VCA Range	VCA Range	VCA Range	Temperature Measurement (Object: 1 × 1 m)	Fire Detection	Smoke Detection
(Vehicles: 1.4 ×	(Humans: 1.8 ×	(Vessels: 10 ×		(Object: 1 × 1	(Object: 5 × 5
4.0 m)	0.5 m)	5 m)		m)	m)
1500m	650m	2000m	833m	2000m	6000m

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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	Detection Range	Recognition	Recognition	Identification	Identification
(Vehicles: 1.4 ×	(Humans: 1.8 ×	Range (Vehicles:	Range (Humans:	Range (Vehicles:	Range (Humans:
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)
6389m	2083m	1597m	521m	799m	260m

^{*}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.



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
	HIKMICRO products at this level are equipped for use in
	areas where professional anti-corrosion protection is a
Top-level Protection	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.
	HIKMICRO products at this level are equipped for use in
	areas with moderate anti-corrosion demands. Typical
Moderate Protection	application scenarios include coastal areas about 2
	kilometers (1.24 miles) away from coastlines, as well as
	areas affected by acid rain.
	HIKMICRO products at this level are equipped for use in
No Specific Protection	areas where no specific anti-corrosion protection is
	needed.

Available Model

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Dimension

