MT-IPFH1200AI

12 MP IR Fisheye AI Network Camera with Panomorph Lens

360° Panoramic Coverage	12 MP Ultra-High Resolution	AI Analytics	Industrial Grade
Fisheye VR with original, bowl, cylinder and asteroid interactive modes	1/1.7" CMOS, 4000×3000 @25 fps, 185° horizontal FoV	People counting, queue management, heat map, intrusion, tripwire	IP67 & IK10, -40 °C to +60 °C, metal casing

360° Intelligent Surveillance with Panomorph Lens

Advanced fisheye camera providing complete 360° panoramic coverage with a single unit. The Panomorph lens ensures superior compatibility with third-party platforms, while built-in AI analytics deliver real-time people counting, queue management, and heat map analysis. Ideal for airports, shopping centers, banks, warehouses and hotels.

FEATURES

• 12 MP 1/1.7" CMOS image sensor, low luminance, high definition image

• Outputs max. 12M (4000 × 3000) @25 fps; supports 8M (3280 × 2480) @25/30 fps

• Built-in IR LED, max. illumination distance 10 m

• Intelligent monitoring: Intrusion, tripwire, heat map, and people counting

• H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments

• Alarm: 2 in, 2 out; Audio: 1 in, 1 out; supports max. 256 GB Micro SD card

• Built-in dual-array microphone and speaker

• 12 VDC/PoE+ power supply

• IP67 and IK10 protection

• Panomorph Lens RPL: B9VVT, superior third-party platform compatibility

www.mtechnology.biz

TECHNICAL SPECIFICATIONS

Camera

Image Sensor	1/1.7" CMOS
Max. Resolution	4000 (H) × 3000 (V)
ROM	4 GB
RAM	2 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.01 Lux@F2.0 (Color, 30 IRE) 0.001 Lux@F2.0 (B/W, 30 IRE) 0 Lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	Up to 10 m (32.81 ft) (IR)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	3 (IR LED)

Video

Video Compression	H.265; H.264; H.264H; MJPEG (Only supported by the sub stream)
Advanced Codec	H.265+ / H.264+
Video Frame Rate	Main stream: 4000 × 3000 @(1–25/25 fps) Sub stream: 704 × 576 @(1–25/30 fps) Third stream: 1280 × 960 @(1–17/17 fps)
Fisheye Modes	1O (4000×3000), 1P (4096×1024), 2P (2432×2432), 1R (1216×1216), 2R (2432×2432), 4R (2432×2432), 1O+3R (2432×2432)
Stream Capability	3 streams
Resolution	4000×3000; 3280×2480; 2880×2160; 2048×1536; 1280×960; 704×576/704×480; 352×288/352×240
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 8–16384 kbps; H.265: 3–16384 kbps
Day/Night	Auto (ICR) / Color / B/W
BLC	Yes
HLC	Yes
WDR	DWDR
White Balance	Auto; Natural; Street Lamp; Outdoor; Manual; Regional Custom
Gain Control	Auto
Noise Reduction	3D NR
Motion Detection	ON/OFF (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Defog	Yes
Privacy Masking	4 areas

Power

Power Supply	12 VDC / PoE+
Power Consumption	Basic: 6.5 W (12 VDC); 6.1 W (PoE) Max. (ICR + IR): 13 W (12 VDC); 13.9 W (PoE) Heating: 3 W (12 VDC); 3 W (PoE)

Environment

Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Operating Humidity	≤95%
Storage Temperature	−30 °C to +70 °C (−22 °F to +158 °F)
Protection	IP67; IK10

Lens

Lens Type	Fixed-focal	
Lens Mount	M12	
Focal Length	1.29 mm	
Max. Aperture	F2.0	
Field of View	Horizontal: 185°; Vertical: 180°	
Iris Control	Fixed	
Close Focus Distance	0.2 m (0.66 ft)	
DORI Distance	Detect	27.9 m (91.54 ft)
	Observe	11.2 m (36.75 ft)
	Recognize	5.6 m (18.37 ft)
	Identify	2.8 m (9.19 ft)

Intelligent

Heat Map	Yes
IVS (Perimeter Protection)	Tripwire, intrusion (the two functions support accurate detection of human)
People Counting	Supports 4 rules to count people entering, exiting, and staying separately. Triggers alarm when threshold exceeded. Supports area-based counting and queue management with reports by year, month, week, day or custom time.
Smart Search	AI-powered quick target search (find specific person or vehicle in seconds)

Audio

Built-in MIC	Yes, built-in dual Mic
Audio Compression	PCM; G.711A; G.711Mu; G.726; G.723

Alarm Event

Alarm Event	No SD card; SD card full; SD card durability warning; SD card error; network disconnection; IP conflict; illegal access; Intelligent Motion Detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; external alarm; people counting in area; stay detection; people counting; security exception

Network

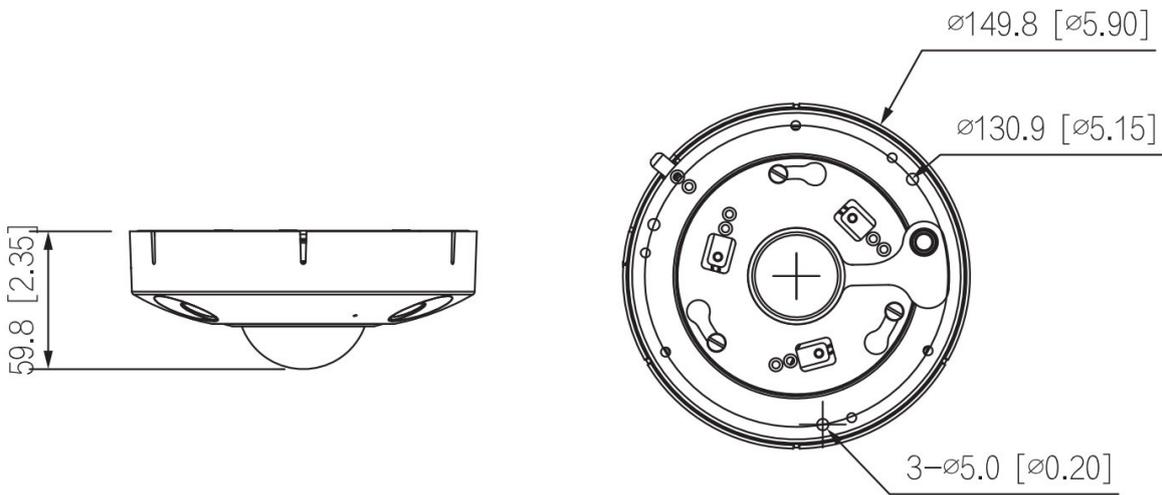|	
Network Port	RJ-45 (10/100/1000 Base-T)
SDK and API	Yes
Security	Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P (Only supported by general version)
User/Host	20
Storage	FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE: IE11, IE10; Chrome: 48.0.2564.116; Firefox: 48.0.2; Edge: 42.17134.1.0
Management Software	ONVIF (Profile S/G/T), CGI, compatible VMS

TECHNICAL SPECIFICATIONS

Structure	
Casing	Metal
Product Dimensions	59.8 mm × Φ149.8 mm (2.35" × Φ5.90")
Net Weight	0.79 kg (1.74 lb)
Gross Weight	1.21 kg (2.67 lb)

Port	
Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channels in: wet contact, 5 mA 3V–5 VDC
Alarm Output	2 channels out: dry contact, 1000 mA 30 VDC / 500 mA 50 VDC

Certifications	
CE-LVD	EN62368-1
CE-EMC	Electromagnetic Compatibility Directive 2014/30/EU
FCC	47 CFR FCC Part 15, Subpart B
UL/CUL	UL62368-1 & CAN/CSA C22.2 No. 62368-1-14

DIMENSIONS

Ø149.8 [Ø5.90]
Ø130.9 [Ø5.15]
3−Ø5.0 [Ø0.20]
59.8 [2.35]

Unit: mm [inch]

www.mtechnology.biz