

MTF12360-AI

12MP IR Fisheye Camera



- 12 MP 1/1.7" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 12M (4000 × 3000)@25 fps; supports 8M (3280 × 2480)@25/30 fps.
- Built-in IR LED, and the max. illumination distance is 10 m.
- Intelligent monitoring: Intrusion, tripwire, heat map, and people counting.
- SMART 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 G Micro SD card; built-in dual-array Mic and speaker.
- 12 VDC/PoE power supply.
- IP67 and IK10 protection.



Queue Management

With advanced image processing technology and deep learning algorithm, Montavue Queue Management technology counts people quantity in selected area in real time to realize queue management. It supports multiple polygon areas. When No. in area/strand time is not smaller or not larger than the threshold, it triggers alarm.

Heat Map

With deep learning algorithm, Montavue People Counting technology can track and process moving human body targets to realize the accurate statistics of enter No., leave No., and In Area No. Working with management platform, it outputs reports to meet your requirements.

Protection (IP67, IK10, Wide Voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normal after soaking in 1 m deep water for 30 minutes.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 cm (Impact energy is 20J).

Wide voltage: The camera allows $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Cyber Security

Montavue's network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Series Overview

With fisheye lens, Montavue Fisheye series camera can realize 360° surveillance, and it is widely applied in various scenes such as airports, shopping centers, banks and hotels.

Functions

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Montavue smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

Fisheye VR

With intelligent algorithm, Montavue Fisheye VR technology provides interactive 3-dimensional dynamic view through fisheye image. Montavue fisheye VR supports various interactive modes, such as original, bowl, cylinder and asteroid, providing more interactive experience.

People Counting

With advanced stereo image technology and deep learning algorithm, Montavue In Area No. technology recognizes human targets accurately to count people in area in real-time. You can set people quantity threshold, when the number larger or smaller than the threshold, it triggers linkage. It is applicable in the scene that has limit on people quantity.

Technical Specification

Camera

Image Sensor	1/1.7" CMOS
Max. Resolution	4000 (H) × 3000 (V)
ROM	2 GB
RAM	4 GB
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Scanning System	Progressive
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	10 m (32.81 ft) (IR)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	3 (IR LED)

Lens

Lens Type	Fixed-focal			
Lens Mount	M12			
Focal Length	1.85mm			
Max. Aperture	F2.0			
Field of View	Horizontal: 185°; Vertical: 180°			
Iris Control	Fixed			
Close Focus Distance	0.4 m (1.31 ft)			
DORI Distance	Detect	Observe	Recognize	Identify
	40.0 m (131.23 ft)	16.0 m (52.49 ft)	8.0 m (26.2 ft)	4.0 m (13.12 ft)

Smart Event

Heat Map	Yes
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Intelligence

IVS (Perimeter Protection)	Intrusion; Tripwire
People Counting	Supports 4 rules to count the number of people entering, exiting, and staying separately. It will trigger alarm linkage when the number of people who entering, exiting or staying exceeds the threshold. It can display and export reports based on year, month, day, week, day or custom time. Supports 4 rules to count the number of people in area and will trigger alarm linkage when the average strand time or people number in the area exceeds the threshold. It can display and export reports based on year, month, day, week, day or custom time. Supports 4 queue management rules to count number of people queuing and queue time in real time, and it will trigger alarm linkage when the number of people queued or queue time exceeds the threshold. It can display and export reports based on year, month, day, week, day or custom time.

Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
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Video

Video Compression	H.265; H.264; H.264H; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
Resolution	4000 × 3000; 3280 × 2480; 2880 × 2160; (3M) 2048 × 1536; 1.3M (1280 × 960); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
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 mode: 1O (4000 × 3000) 1P (4096 × 1024) 2P (2432 × 2432) 1R (1216 × 1216) 2R (2432 × 2432) 4R (2432 × 2432) 1O + 3R (2432 × 2432) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Stream Capability	3 streams
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 8 kbps–16384 kbps H265: 3 kbps–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	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Defog	Yes
Privacy Masking	4 areas

Audio

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

Alarm

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

Network Port	RJ-45 (10/100/1000 Base-T)
SDK and API	Yes
Cyber Security	Video encryption; firmware encryption; configuration encryption; 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 G); NAS
Browser	IE: IE11, IE10 Chrome: 48.0.2564.116 Firefox: 48.0.2 Edge: 42.17134.1.0
Management Software	MontavueGo

Certification

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
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Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	2 channel in: 5mA 3V–5 VDC
Alarm Output	2 channels out: 1,000mA 30 VDC/500mA 50 VDC

Power

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

Structure

Casing	–30 °C to +70 °C (–22 °F to +158 °F)
Product Dimensions	59.8 mm × Ø149.8 mm (2.35" × Ø5.90")
Net Weight	0.79 kg (1.74 lb)
Gross Weight	1.21 kg (2.67 lb)

Accessories

Optional



MAM300C
Ceiling-mount Bracket



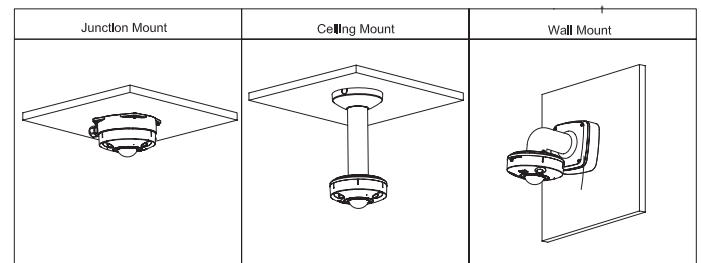
MAM100
Adapting Plate



MAM302S
Wall-mount Bracket



MAM132-E
Junction Box



Dimensions (mm[inch])

