MONTAVUE

MTT180-FC-AI-SMD4
2×4MP Full-color Duo Splicing Montavue Network Camera

- Outputs 180° wide angle splicing image.
- Outputs max. 8 MP (4096 × 1800)@25 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light, and the max. illumination distance is 40 m.
- ROI, SMART H.264 +/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 512 G Micro SD card, built-in Mic and speaker, support two-way talk.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- EPTZ: Enlarge and track the targets of intelligent alarms.
- SMD.

| 8Mp | 180° Wide Angle | EPTZ | Perimeter Protection | People Counting | Full Color |

System Overview

With starlight solution and deep learning algorithm, Montavue Montavue 5 Series network camera has various intelligent functions, including face capture, perimeter protection and people counting, which greatly improve the accuracy of video analysis.

Functions

EPTZ
With advanced target detection and tracking algorithms, Montavue EPTZ technology can simultaneously zoom in and track multiple humans and vehicles that trigger alarms. It provides rich details and a panoramic view at the same time.

Perimeter Protection
With deep learning algorithm, Montavue Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

People Counting
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 yearly/monthly/daily reports to meet your requirements.

ePoE
Montavue's innovative ePoE technology offers a new solution to transmit power and data over long distances between cameras and network switch, allowing more flexible design of surveillance system, improving reliability, reducing installation time and saving money. ePoE technology encompasses pure network systems where a single CAT6 cable can carry signals up to 300 m (984 ft) at 100 Mbps, 800 m (2625 ft) at 10 Mbps.

Cyber Security
Montavue 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.

Protection (IP67, wide voltage)
IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.
Wide voltage: The camera allows ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

MTT180-FC-AI-SMD4

Technical Specification

Camera

Image Sensor	Dual 1/1.8" CMOS
Max. Resolution	4096 (H) × 1800 (V)
ROM	128 MB
RAM	1 GB
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Scanning System	Progressive
Min. Illumination	0.0005 lux@F1.0 (Color, 30 IRE) 0.0002 lux@F1.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	40 m (131.23 ft)
Illuminator On/Off Control	Auto
Illuminator Number	4 (Warm light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 4°–90° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Lens Mount	M16
Focal Length	3.6 mm
Field of View	Horizontal: 180°; Vertical: 48°
Max. Aperture	F1.0
Iris Control	Fixed
Close Focus Distance	3.6 m (11.81 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	3.6 mm	70.3 m (230.64 ft)	28.1 m (92.19 ft)	14.1 m (46.26 ft)	7.0 m (22.97 ft)

Intelligence

IVS (Perimeter Protection)	Intrusion, tripwire, fast moving (the three functions support the classification and accurate detection of vehicle and human); loitering detection, people gathering, and parking detection
Heat Map	Yes
Smart Object Detection	Smart abandoned object; smart missing object
People Counting	Support the counting of enter number, leave number and pass number, and displaying and outputting yearly/monthly/daily reports. Support the counting of number in area, and 4 rules configuration. Count number of people or stay time and link alarm. Support queue management, and 4 rules configuration. Count number of people or stay time and link alarm.

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)
Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265; AI H.264
Video Frame Rate	WDR Off: Main stream: 4096 × 1800 @ (1–25 fps) sub stream: 1024 × 452 @ (1–25 fps) third stream: 1920 × 832 @ (1–25 fps) WDR On: Main stream: 4096 × 1800 @ (1–20 fps) sub stream: 1024 × 452 @ (1–20 fps) third stream: 1920 × 832 @ (1–20 fps) *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
Resolution	8M (4096 × 1800); 6.5M (3840 × 1680); 4M (3840 × 1080); 4M (2880 × 1264); 1.6M (1920 × 832); 0.7M (1280 × 560); 0.5M (1024 × 452)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 9 kbps–8192 kbps H.265: 9 kbps–8192 kbps
Day/Night	Color/B/W
BLC	Yes
HLC	Yes
WDR	140 dB
Scene Self-adaptation (SSA)	Yes
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)
Privacy Masking	4 areas
Defog	Yes

Audio

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

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; fast moving; abandoned object; missing object; loitering detection; people gathering; parking detection; scene changing; audio detection; voltage detection; external alarm; SMD; people counting in area; stay detection; people counting; security exception

MTT180-FC-AI-SMD4

Network

Network Port	RJ-45 (10/100 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; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone
User/Host	20 (Total bandwidth: 80 M)
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE 8 and later Chrome Firefox
Management Software	MontavueGo
Mobile Client	iOS; Android

Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channels in: 5 mA 3 V–5 VDC
Alarm Output	1 channel out: 300 mA 12 VDC

Power

Power Supply	12 VDC (±30%)/PoE+ (802.3at)/ePoE
Power Consumption	Basic: 4.8 W (12 VDC); 5.5 W (PoE) Max. (WDR + intelligence + warm light + SPK): 10.5W (12 VDC); 11.8 W (PoE)

Environment

Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Operating Humidity	≤ 95%
Storage Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Protection	IP67

Structure

Casing	Metal
Product Dimensions	⌀122 mm × 131.9 mm (⌀4.80" × 5.19")
Net Weight	990 g (2.18 lb)
Gross Weight	1150 g (2.54 lb)

Accessories

Type	Model	Description
8MP Camera	MTT180-FC-AI-SMD4	4MP 25x Starlight IR Montavue Network PTZ Camera
Accessories (Optional)	MAM137	Junction Box
	MAM203W	Wall Mount Bracket
	MAM152-E	Pole Mount Bracket

Dimensions (mm[inch])