



VORTEX Series

MA232-EHTV

5MP x 4CH Multi-Directional
Panoramic AI Camera



Technical Specifications

Camera Specifications	
Image Sensor	1/2.8" Progressive CMOS
Max. Resolution	Each lens: SD: 1280x960 HD: 2560x1920
Lens Type	Motorized, Vari-focal, Remote Focus
Focal Length	f = 3.2 ~ 7.7 mm
Aperture	F1.85 ~ F2.4
Iris Type	Fixed Iris
Field of View	94.0° ~ 43.0° (Horizontal) 67.0° ~ 33.0° (Vertical) 129.0° ~ 54.0° (Diagonal)
Shutter Time	1/30 sec. to 1/32,000 sec.
WDR Technology	WDR Pro
Day/Night	Yes
Removable IR-cut filter	Yes
Illuminators	Built-in IR illuminators up to 30 meters with Smart IR, IR LED*8
Minimum Illumination	0.07 lux @ F1.85 (Color) 0.005 lux @ F1.85 (B/W) 0 lux with IR illumination on
Tilt Range	0° ~ 105° each lens
Rotation Range	±90° each lens
Storage	MicroSD/SDHC/SDXC card slot (Built-in 1TB industrial SDCard)
Video	
Video stream settings	HD Video 2560 x 1920@15fps 1.2Mbps upload SD Video 1280 x 960@15fps 300Kbps upload

Audio	
Audio Capability	Two-way Audio (full duplex)* * Requires AO-006 cable
Interface	Built-in microphone External microphone input* External line output* * Requires AO-006 cable.
Effective Range	5 meters

Network	
Users	Up to 20 clientsLive viewing for 20 clients*Live viewing up to 16 clients and playback 4 clients
Security	Secure boot, Signed firmware, HTTPS/TLS encryption, Video encryption
Protocols	ARP, DHCP, DNS, HTTP, HTTPS, ICMP, IPv4, NTP, RTSP/RTP/RTCP, SSL, TCP/IP, TLS 1.2, UDP, WebRTC
Interface	10BASE-T/100BASE-TX/1000BASE-T Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.

General	
Connectors	RJ-45 cable connector for 10/100/1000 Mbps Network/PoE connection Audio line input * Audio line output * AC 24V power input * Digital input * Digital output (DO+: 12V, 10mA; DO-: 30V, Open Drain, 1A)* * Requires AO-006 cable.
LED Indicator	System power and status indicator
Power Input	AC 24V*, IEEE 802.3at PoE Class 4 * Requires AO-006 cable.
Power Consumption	Max 25.5W
Dimensions	275 (D) x 118 (H) mm
Weight	2.7 kg
Certifications	EMC CE (EN 55032 Class A, EN 55035), UKCA (BS EN 55032:2015+A11:2020, BS EN 55035:2017+A11:2020), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A), ICES-003 Issue 7 Safety UL (UL 62368-1), CB (IEC/EN 62368-1 including annex Y, IEC/EN 62471) Environment NEMA (NEMA 250 Type 4X), IK10 (IEC 60529), IP66 (IEC 60529) IA BIS (IS 13252), BSMI (EMC: CNS 15936, Safety: CNS 15598-1)
Operating Temperature	Starting Temperature: -30°C ~ 55°C (-22°F ~ 131°F) Working Temperature: -40°C ~ 55°C (-40°F ~ 131°F) (IR off) -40°C ~ 50°C (-40°F ~ 122°F) (IR on)
Humidity	98% RH (non-condensing)
Warranty	Up to 60 months (Depends on license type)

Included Accessories	
Packing Contents	Quick installation guide, alignment sticker, screw driver, screw pack, desiccant bag

VORTEX AI Analytics	
Application	Intrusion detection Line crossing detection Loitering detection Unattended object detection Missing object detection
Audio detection	Yes
Camera tampering detection	Yes
AI Hub (xPro license required)	Attribute search Scene search Re-search Profile search LPR search Think search Event insight Facial recognition