



V Series

MA9322-EHTV

20MP Multi-Directional Panoramic Camera



Technical Specifications

System Information

CPU	Multimedia SoC (System-on-Chip)
Flash	8 GB
RAM	4 GB

Camera Specifications

Image Sensor	1/2.7" Progressive CMOS
Max. Resolution	2688x1920 (5MP) x 4
Lens Type	Motorized, Vari-focal, Remote Focus
Focal Length	f = 3.7 ~ 7.7mm
Aperture	F1.9 ~ F2.9
Iris Type	Fixed Iris
Field of View	84.4° ~ 40.0° (Horizontal) 59.8° ~ 28.6° (Vertical) 104.5° ~ 49.2° (Diagonal)
Shutter Time	1/5 sec. to 1/32,000 sec.
WDR Technology	WDR Pro
Day/Night	Yes
Removable IR-cut filter	Yes
Illuminators	Built-in IR illuminator up to 30 meters with Smart IR, IR LED*8
Minimum Illumination	0.095 lux @ F1.9 (Color) 0.005 lux @ F1.9 (B/W) 0 lux with IR illumination on
Tilt Range	0° ~ 105° each lens
Rotation Range	±90° each lens
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)

Storage	Seamless Recording to MicroSD/SDHC/SDXC card (256GB capacity supported) and recording to network-attached storage (NAS)
Built-in Installation Aids	Remote Focus, Remote Zoom

Video	
Compression	H.265, H.264, MJPEG
Maximum Frame Rate	30 fps @ (2688x1920) x 4
Maximum Streams	3 simultaneous streams
S/N Ratio	67 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constrained bit rate control, , Smart Stream III
Image Settings	General settings video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings Illuminators illuminators, anti-overexposure Image settings white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, HLM, DIS, scene mode (auto, deblur) Exposure BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR Privacy mask Scheduled profile settings

Audio	
Audio Capability	Two-Way Audio (full duplex)
Compression	G.711, G.726
Interface	Built-in microphone External microphone input* External line output* * Requires AO-006 cable.
Effective Range	5 meters

Network	
Users	Live viewing for up to 10 clients
Security	Access list, digest authentication, HTTPS, IEEE 802.1x, Password protection, Trend Micro IoT Security (brute force attack event, cyberattack event, quarantine event), user access log, user account management
Protocols	802.1X, ARP, CIFS/SMB, DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS, UDP, UPnP
Interface	10 Base-T/100 BaseTX/1000 Base-T Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.
ONVIF	Profile G, S supported, specification available at www.onvif.org

Solution Integration	
VADP Package	Genetec, Trend Micro IoT Security (3-year free trial)

Video Motion Detection	Motion Detection (Five-window video motion detection)
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Alarm and Event	
Event Trigger	Audio detection*, camera tampering detection, digital input*, manual trigger, motion detection, periodical trigger, recording notification, SD card life expectancy, system boot * Requires AO-006 cable.
Event Action	Event notification via audio clip*, camera link, digital output, email, HTTP, FTP, NAS server, SD card File upload via email, HTTP, FTP, NAS server, SD card * Requires AO-006 cable.

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, 50mA; DO-: 30V, Open Drain, 1A)* * Requires AO-006 cable.
LED Indicator	System power and status indicator
Power Input	AC 24V*, IEEE 802.3 at PoE Class 4 * Requires AO-006 cable.
Power Consumption	Max: 25.5/13.84 W (IR on/off)
Dimensions	ø 275x118 mm
Weight	2.7 kg
Certifications	EMC CE (EN 55032 Class A, EN 55024), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A) Safety UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471) Environment IK10 (IEC 62262), IP66 (IEC 60529) IA BIS (IS 13252)
Operating Temperature	Start Temperature: -30°C ~ 60°C (-22°F ~ 140°F) Working temperature: -40°C ~ 65°C (-40°F ~ 149°F) (IR off) -40°C ~ 60°C (-40°F ~ 140°F) (IR on)
Humidity	90% RH (non-condensing)

System Requirements	
Operating System	Microsoft Windows 10/8/7 Mac 10.12 (Chrome only)
Web Browser	Chrome 58.0 or above Internet Explorer 10/11
Other Players	VLC: 1.1.11 or above

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

