VIVOTEK
A Delta Group Company

V Series

MA9322-EHTVL

20MP Multi-Directional Panoramic Camera

Technical Specifications

System Information	
CPU	Multimedia SoC (System-on-Chip)
Flash	1GB
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	88.6° ~ 40.1° (Horizontal) 61.2° ~ 28.6° (Vertical) 115.5° ~ 49.5° (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	0.035 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 (1T capacity supported) and recording to network-attached storage (NAS)
Built-in Installation Aids	Remote Focus, Remote Zoom, pixel calculator

Video

Compression	H.265, H.264, MJPEG
Maximum Frame Rate	15 fps @ (2688x1920) x 4 30 fps @ (2560x1440) x 4
Maximum Streams	2 streams each channel (up to total 13 profiles)
S/N Ratio	60 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constrained bit rate control
Image Settings	General settings video title and time stamp overlay, video orientation (flip, mirror), day/night settings Illuminators illuminators, anti-overexposure Image settings white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, HLM Exposure BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control), AE speed adjustment, WDR Privacy mask pixel calculator 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 20 clients
Security	Access list, digest authentication, HTTPS, IEEE 802.1x, Password protection, 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.

Solution Integration

Video modtion detection	Motion Detection (Five-window video motion detection)

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 ouput (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 25W
Dimensions	ø 275 x 118 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) UKCA, ICES-003 issue 7 Safety UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471) Environment IK10 (IEC 62262), IP66 (IEC 60529), NEMA (NEMA 250 Type 4X)
Operating Temperature	Start Temperature: -30°C ~ 50°C (-22°F ~ 122°F) Working temperature: -40°C ~ 50°C (-40°F ~ 122°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

DORI (EN 62676-4 Standard)	
Detection (25PPM/ 8PPF)	Wide: 74.0 m (242.6 ft) Tele: 153.9 m (505.0 ft)
Observation (63PPM/ 19PPF)	Wide: 29.3 m (96.3 ft) Tele: 61.1m (200.4 ft)
Recognition (125PPM/ 38PPF)	Wide: 14.8 m (48.5 ft) Tele: 30.8m (101.0 ft)
Identification (250PPM/ 76PPF)	Wide: 7.4 m (24.2 ft) Tele: 15.4m (50.5 ft)

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