



S series **MS9321-EHV**

Multi-Sensor Panoramic
Network Camera



20MP 30fps • 30M IR • WDR Pro • SNV • Smart Stream III •
IP66 • Panoramic View

VIVOTEK's newly designed MS9321-EHV multi-sensor panoramic network camera offers the highest resolution and maximum field of view, reducing the total number of cameras required and helping save on the installation costs.

Featuring 4 x 5MP CMOS Sensors, the multiple sensor network camera can monitor full 180° horizontal views and deliver the highest-quality comprehensive coverage, making it an ideal outdoor surveillance solution with excellent image details. Improving on the previous version, the MS9321-EHV now includes H.265 compression for reduced bandwidth and storage over H.264 compression. WDR Pro (120dB) has been added for improved image quality in high contrast environments. Smart IR II

is included for manual or auto IR adjustments based on different night viewing scenarios. And last but not least, the MS9321-EHV is capable of 30fps at all resolutions including the max 20MP.

Like its predecessor MS8391-EV, the MS9321-EHV has the Video Alignment feature that allows you to adjust the positioning and image quality of each sensor, enabling users to view a seamless picture, with no repetition. MS9321-EHV's new housing design is IP66 and IK10-rated to enable use in rain and dust as well as to protect against vandalism or tampering. The new housing design also allows for more tilt and pan during installation, allowing for more versatility.

Key Features

- H.265 Compression Technology
- 20MP Panoramic 180° View
- 30 fps @ 7680x2560 (WDR Pro on)
- Smart Stream III to Optimize Bandwidth Efficiency
- WDR Pro (120 dB) for Unparalleled Visibility in Extremely Bright and Dark Environments
- SNV (Supreme Night Visibility) for Low Light Conditions
- Built-in IR Illuminators with Smart IR II, Effective up to 30 Meters
- Trend Micro IoT Security
- Weather-proof IP66-rated and Vandal-proof IK10-rated Housing



Day Mode



Night Mode



IR Mode (Smart IR II)

Technical Specifications

Model	MS9321-EHV
System Information	
CPU	Multimedia SoC (System-on-Chip)
Flash	8GB
RAM	4GB
Camera Features	
Image Sensor	1/2.7" Progressive CMOS
Max. Resolution	7680x2560 (20MP)
Lens Type	Fixed-focal
Focal Length	f = 3.8 mm
Aperture	F1.8
Iris type	Fixed-iris
Field of View	180° (Horizontal) 65° (Vertical) 180° (Diagonal)
Shutter Time	1/5 sec. to 1/32,000 sec.
WDR Technology	WDR Pro
Day/Night	Yes
Removable IR-cut filter	Yes
IR Illuminators	Built-in IR illuminators, effective up to 30 meters with Smart IR II
Minimum Illumination	0.095 Lux @ F1.8 (Color) 0.005 Lux @ F1.8 (B/W) 0 Lux with IR Illuminators on
Pan Range	±90°
Tilt Range	90°
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)
On-board Storage	Slot type: MicroSD/SDHC/SDXC card slot (Max. SD card capacity: 256GB) Seamless Recording
Video	
Compression	H.265, H.264, MJPEG
Maximum Frame Rate	30 fps @ 7680x2560 (WDR Pro on)
Maximum Streams	4 simultaneous streams
S/N Ratio	61.5 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and bitrate, Smart Stream III

Image Settings	Adjustable image size, quality and bit rate, time stamp, text overlay, flip and mirror, configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks, scheduled profile settings, HLC, defog, 3DNR, DIS
Audio	
Audio Capability	Two-way Audio (full duplex)
Compression	G.726, G.711
Interface	External microphone input External line output
Network	
Users	Live viewing for up to 10 clients
Protocols	802.1X, ARP, CIFS/SMB, CoS, DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, NTP, PPPoE, QoS, 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	Supported, specification available at www.onvif.org
Intelligent Video	
Video Motion Detection	Five-window video motion detection
VADP Package	Genetec Package, Trend Micro IoT Security
Alarm and Event	
Alarm Triggers	Motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, camera tampering detection, audio detection, SD card life expectancy, cybersecurity event (block brute force attack, block cyber attack, quarantine event)
Alarm Events	Event notification via digital output, email, HTTP, FTP, NAS server, SD card File upload via email, HTTP, FTP, NAS server, SD card
General	
Connectors	RJ-45 cable connector for 10/100/1000Mbps Network/PoE connection Audio input Audio output AC 24V power input Digital input*1 Digital output*1
LED Indicator	System power and status indicator
Power Input	AC 24V IEEE 802.3at PoE Class 4
Power Consumption	AC 24V: Max. 24 W PoE: Max. 24.65 W
Dimensions	308 x 167 x 130 mm (w/o junction box) 369 x 167 x 132 mm (w/ junction box)

Technical Specifications

Weight	2,400 g
Casing	IP66, IK10
Safety Certifications	CE, FCC Class A, UL, LVD, VCCI, C-Tick
Operating Temperature	Start Temperature: -30°C ~ 60°C (-22°F ~ 140°F) Working temperature: -40°C ~ 60°C (-40°F ~ 140°F)
Humidity	90%
Warranty	36 months

System Requirements

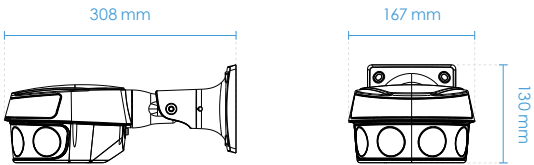
Operating System	Microsoft Windows 8/7 Mac 10.12 (Chrome only)
Web Browser	Chrome 58.0 or above Internet Explorer 10/11
Other Players	VLC: 1.1.11 or above QuickTime: 7 or above

Included Accessories

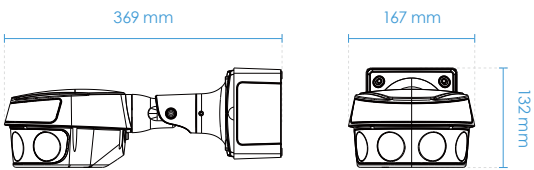
Others Quick installation guide, alignment sticker, screw pack, warranty card, junction box

Dimensions

w/o junction box



w/ junction box



Compatible Accessories

Mounting Kits



AM-312
Pole Mount Adapter



AM-412
Corner Mount Adapter

Cabinet



AT-CAB-001
Cabinet, IP66, IK10

+



AT-CAB-002
Side-mount Bracket
for HLG Series Power
Supply

+



AT-SUN-002
Sunshield for AT-CAX +
AT-CAB-002 Cabinet

+



AT-SWH-000
Power Safety Kit

➔



HLG-80H-54
90~305VAC in,
54VDC/80W out, IP67,
-40°C ~ 70°C

+



AW-IHT-0200
Industrial 1xGE 30W
PoE + 1xGE SFP Switch

+

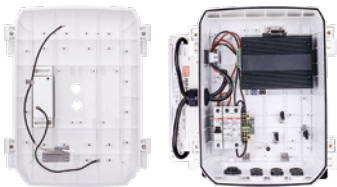


AT-PSP-001
PoE Surge Protector

+



AT-WPC-001
M16 Cable Gland for
4~7mm AWG





Compatible Accessories

PoE Kits - 30W				
Outdoor				
				
AW-GET-083A-120 Outdoor 4xGE PoE + 2xGE UTP + 2xGE SFP Unmanaged PoE Switch				
Indoor				
				
AP-GIC-010A-030 30W PoE Injector	AW-FET-060C-065 Unmanaged 4xFE PoE + 2xFE UTP Switch	AW-FGT-100C-120 Unmanaged 8xFE PoE + 1xGE UTP + 1xGE SFP Switch	AW-GEV-184B-250 Web Smart Managed 16xGE PoE + 2xGE SFP Switch	AW-GEV-267A-370 VivoCam L2 Managed 24xGE PoE + 2xGE Combo Switch