# VORTEX

VORTEX Panoramic Cameras

By VIVOTEK

Overview

Users can now access efficient surveillance through the innovative panoramic camera, ensuring comprehensive protection without any blind spots. By powering advanced AI technology, this solution significantly enhances monitoring efficiency, simplifying the task of alert observation. The panoramic camera not only offers superior performance but also remarkably reduces the total cost of ownership, decreasing the problem of high maintenance expenses and complex setups.
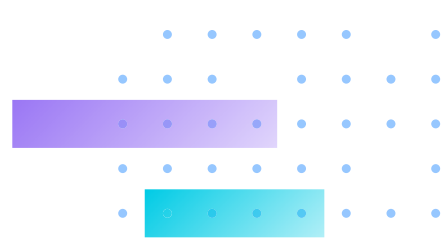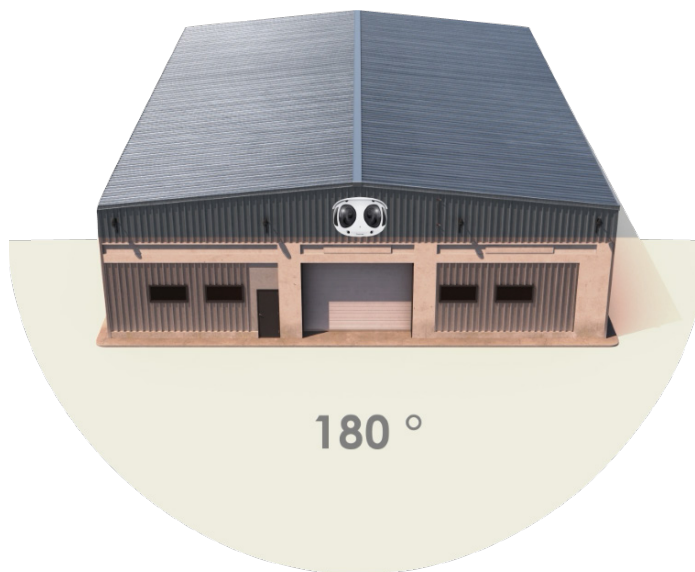
Benefits

## Protection with No Blind Spots

### Replace Three Cameras with One

Streamline surveillance with the panoramic camera – a single unit that effortlessly replaces the need for three separate cameras. Enjoy comprehensive coverage without the clutter, while saving valuable resources and minimizing installation hassles.

180 °

One view without interruption

With the panoramic camera, users can focus on one view instead of multiple views. This solution offers a simple, uninterrupted viewing environment, ensuring no crucial moment goes ignored.
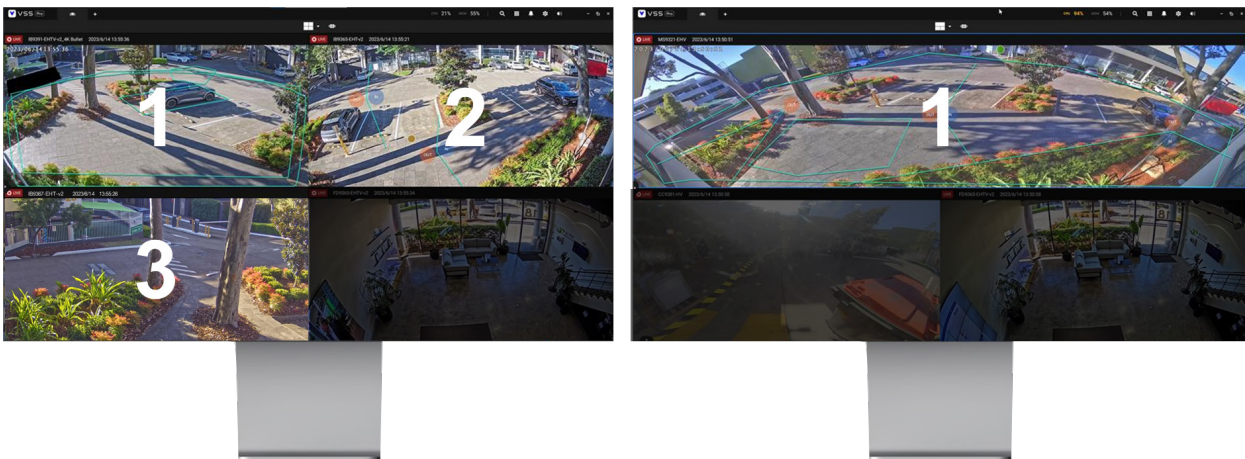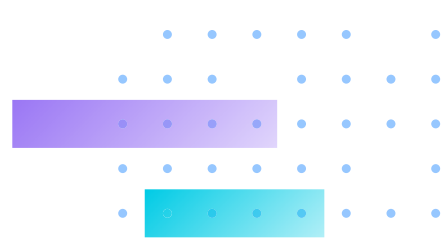
Benefits

## Improve Monitoring Efficiency with AI

Consolidate Three Alarms into One

Simplify security systems with the panoramic camera's video analytics. Receive consolidated alerts that combine the insights of three separate cameras into one notification, allowing users to react promptly and effectively without being misled by repeated alerts.

Consolidate Three Search into One

Efficient footage search is now achievable with the panoramic camera. It offers the footage search capabilities of three cameras into a single, user-friendly interface, facilitating post-incident analysis without repeatedly checking images from different angles.
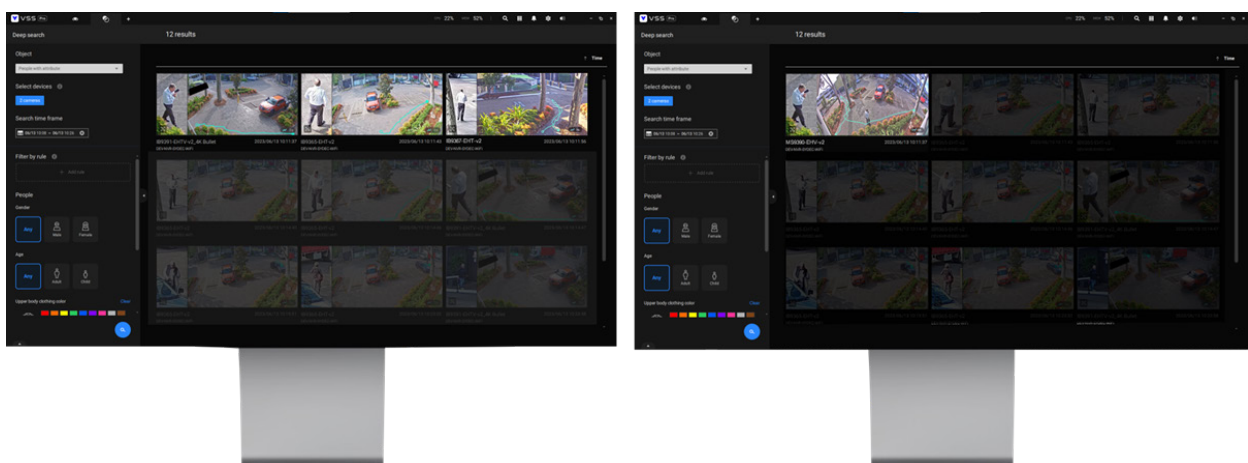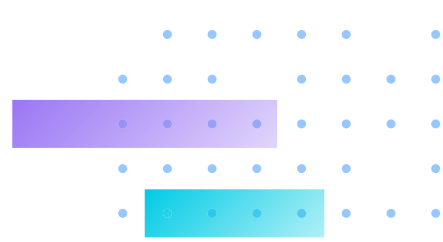
Benefits

Lower Total Cost of Ownership

One Camera, One Installation, One License

The panoramic camera transforms surveillance infrastructure. Through the installation process of a single camera, users gain complete coverage without the complexities of deploying multiple cameras. This approach saves time and resources without compromising security standards. Not only the above, users only need to purchase one license and a set of accessories, which greatly saves the cost of ownership.
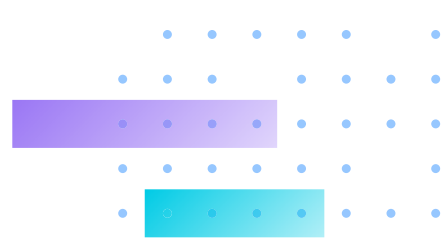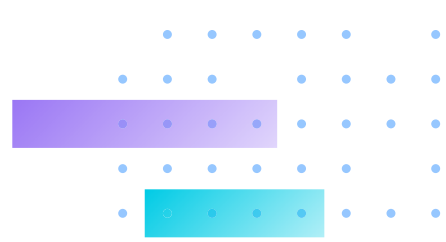
1 x Camera

1 x Installation

1 x license

Technical Specifications

Model	**MS930-EHV**
Camera Features	
Image sensor	1/2.7" Progressive CMOS
Resolution	HD 4864 x 1632 (8MP) SD 2432x 816
Lens Types	Fixed-focal
Focal Length	f = 2.8 mm
Aperture	F1.2
Iris	Fixed iris
Field of View	180° (Horizontal) 50° (Vertical) 180° (Diagonal)
Camera Movement	Tilt: 20°
Shutter Speed	1/30 sec. to 1/32,000 sec.
Day/Night	Yes
IR Cut Filter	Yes
IR Range	20 meters
Minimum Illumination	0.018 lux @ F1.2 (Color), 30IRE <0.01 lux @ F1.2 (B/W) 0 lux with IR illumination on
Onboard Storage	MicroSD/SDHC/SDXC card slot (Bulit-in 512GB industrial SDCard)
Standard video settings	
Frame Rate	15FPS
Video Streaming Settings	HD 4864 x 1632 (8MP)@15fps 3Mbps upload SD 2432x 816@15fps 400Kbps upload
Standard audio settings	
Audio	One-way Audio
Interface	Built-in microphone
Effective Range	5 meters
Power and network	
Power input	IEEE 802.3at PoE Class 4
Power Consumption	Max: 20 W / 13.5W (IR on/ IR off)
Connectivity	RJ-45 cable connector for 10/100 Mbps PoE network connection
RTSP	WebRTC, ARP, DHCP, DNS, HTTP, HTTPS, ICMP, IPv4, IPv6, NTP, QoS (CoS/DSCP), RTSP/RTP/RTCP, SSL, TCP/IP, TLS 1.2, UDP
Users	Up to 6 clients *Live viewing for 6 clients *live viewing up to 4 clients and playback 2 clients)
Security	Secure boot Signed firmware HTTPS/TLS encryption Video encryption
Interface	10 Base-T/100 Base-TX Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.
General	
Operating Temperature	Starting Temperature: -30°C ~ 55°C (-22°F ~ 131°F) Working Temperature: -40°C ~ 50°C (-40°F ~ 122°F) (IR on)
Humidity	90% RH (non-condensing)
Certifications	EMC: CE (EN 55032/EN 55035 Class A), UKCA (BS EN 55032/BS EN 55035 Class A), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A), IC (ICES-003 Issue 7, Class A); Safety: UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471), LVD (IEC/EN 62368-1), UKCA (BS EN 62368-1); Environment: IK10 (IEC 62262), IP66(IEC 60529)
Warranty	10 years
Included Accessories	Quick installation guide, alignment sticker, desiccant bag, screw driver, screws pack, sunshield
Mechanical	
Weight	1.2 kg
Dimensions	165 x 112 x 97 mm (w/o sunshield) 165 x 100 x 119 mm (w/ sunshield)
Body	Metal
AI Analytics	
Audio detection	Yes
Tampering detection	Yes
People Analytics	Intrusion detection, Line crossing detection, Loitering detection, Appearance Search, Scene Search, Re-Search, Profile Search
Vehicle Analytics	Intrusion detection, Line crossing detection, Loitering detection, Appearance Search, Scene Search, Re-Search, LPR Search
Object Analytics	Unattended object detection, Missing object detection

Ordering Information

Camera

Model	Resolution	Indoor/ Outdoor	Lens	Type	SD Card Storage	Max. SD Card Recording	AI Features
MS930-EHV	8MP	Outdoor	Fixed	Panoramic	512GB	30 days	Premium

Accessories

Model	Description
AM-21N	Wall Mount Bracket
AM-312	Pole Mount Adapter
AM-412	Corner Mount Adapter

Licenses

License	Description
Standard License	1-year
Standard License	3-year
Standard License	5-year
Professional License	1-year (with 30-day Cloud Backup)
Professional License	3-year (with 30-day Cloud Backup)
Professional License	5-year (with 30-day Cloud Backup)
Additional Cloud Backup	60-day Storage (one-unit license, for 30-day license period)
Additional Cloud Backup	90-day Storage (one-unit license, for 30-day license period)
Additional Cloud Backup	120-day Storage (one-unit license, for 30-day license period)
Additional Cloud Backup	180-day Storage (one-unit license, for 30-day license period)
Additional Cloud Backup	365-day Storage (one-unit license, for 30-day license period)
Network Horn Speaker License	1-year

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