
MV93 Series Datasheet

This article covers the specifications, feature set, hardware, and capabilities of the MV93. MV93 offers advanced analytics and physical security with a 360° field of view. With up to 2880x2880 resolution, night vision, and compatibility with various mounting accessories, it provides comprehensive surveillance for outdoor applications, ensuring safety and security in diverse environments.

Overview

The Meraki MV93 is a third-generation MV smart camera that combines physical security and advanced analytics in a fisheye design. It is easy to install and offers a 360° field of view (FoV). The MV93 delivers full visibility and smart security for various outdoor applications.



Security That Tells a Complete Story

With video resolution up to 2880x2880 and 360-degree views, the MV93 captures the complete scene, providing both broad context and clear detail when needed. This panoramic overview enhances situational awareness, making surveillance more efficient.

Compatible with a variety of mounting accessories, the outdoor-rated MV93 series cameras can be installed in diverse deployment scenarios to provide comprehensive coverage. Their 360° field of view and IR illumination

make them ideal for enhancing safety and security in parking lots, warehouses, and other open spaces—even in low-light conditions.

Additionally, the MV93 series is engineered to withstand the rigors of transportation environments, ensuring reliable performance under shock and vibration conditions with EN 50155 Railway Compliance certification.

Product Highlights

- 360° fisheye lens camera
- Compact form factor with 180° horizontal and vertical FoV
- Large level of detail with up to 2880x2880 video resolution
- Guaranteed days of video with [Smart Retention](#)
- Night vision with IR illumination up to 20 m / 66 ft
- IK10+ and IP67 rated for deployment in more demanding environments
- Intelligent motion indexing with search engine
- Built-in analytics like Motion Search, Motion Recap, and Motion Heatmaps
- Digital Pan-Tilt-Zoom (DPTZ) mode for live & historical video
- Machine learning capability for intelligent object detection
- Role-based user accounts provide secure video access and ensure privacy
- Cloud-augmented edge storage for minimal physical infrastructure
- Built-in automatic security with secure boot and signed firmware, backed by a hardware security chip
- Suitable for deployments of all sizes, 1-10,000+ cameras
- NDAA Compliant
- EN 50155 Railway Compliance

MV93 Camera Specifications

Category	Specifications
Camera	<ul style="list-style-type: none">• 1/2.3" 12.4MP (4072x3046) progressive CMOS image sensor• High-performance fisheye lens• 256GB high-endurance solid-state storage (MV93)• 512GB high-endurance solid-state storage (MV93M)• 1TB high-endurance solid-state storage (MV93X)• 1.6 mm focal length• f/2.0 aperture• Field of view: horizontal 180°, vertical 180°• 1/30 second to 1/32,000 second shutter speed• Auto day/night mode switching capable• Built-in IR illuminators, effective up to 20 m (66 ft)• Heating elements
Video	<ul style="list-style-type: none">• 8MP video recording (2880x2880) with H.264 Smart Codec, up to 15fps• 4.2MP (2112x2112) 360° overview with H.264 Smart Codec, up to 24fps• 1MP (1080x1080) 360° overview with H.264 Smart Codec, up to 24fps• High dynamic range (HDR)• Cloud-augmented edge storage (locally stored video; metadata in the cloud)• Optimized retention settings (scheduling, motion-based) for variable retention• Direct live streaming with no client software (native browser playback)*• Stream video anywhere with automatic cloud proxy• Audio recording supported with three (3) built-in microphones

Category	Specifications
DORI Specifications (Maximum Resolution)	<ul style="list-style-type: none"> • Detect (25 ppm/ 8 ppf) <ul style="list-style-type: none"> ◦ 36.7 m / 120.4 ft • Observe (63 ppm/ 19 ppf) <ul style="list-style-type: none"> ◦ 14.6 m / 47.9 ft • Recognize (125 ppm/ 38 ppf) <ul style="list-style-type: none"> ◦ 7.3 m / 23.9 ft • Identify (250 ppm/ 76 ppf) <ul style="list-style-type: none"> ◦ 3.7 m / 12.1 ft
Networking and wireless	<ul style="list-style-type: none"> • 1x 10/100/1000BASE-T Ethernet (RJ45) • DSCP traffic marking • Supported frequency bands (country-specific restrictions apply): • 2.4 GHz 802.11b/g/n radio <ul style="list-style-type: none"> ◦ 2.412 - 2.484 GHz • 5 GHz 802.11a/n/ac radio <ul style="list-style-type: none"> ◦ 5.150 - 5.250 GHz (UNII-1) ◦ 5.250 - 5.350 GHz (UNII-2) ◦ 5.470 - 5.600, 5.660 - 5.725 GHz (UNII-2e) ◦ 5.725 - 5.825 GHz (UNII-3) • 1x1 with one spatial stream • 20, 40, and 80 MHz channels (802.11ac) • Up to 256 QAM on 5 GHz band • Integrated omnidirectional antennas (6.3 dBi gain at 5 GHz) • MT Gateway Support for all MT sensors
Power	Power consumption 25.5W maximum via 802.3at PoE
Environment	Temperature: -40°C to 50°C (-40°F to 122°F)**
Data and network security	<ul style="list-style-type: none"> • Full disk encryption (AES-256) • Automatically purchased and provisioned TLS certificates (publicly signed) • Management encryption and two-factor authentication • Wireless security: <ul style="list-style-type: none"> ◦ WPA3-Personal (PSK / SAE) ◦ WPA, WPA2-PSK, WPA2-Enterprise with 802.1X EAP-TTLS TKIP and AES encryption
Physical characteristics	<ul style="list-style-type: none"> • Dimension: 137.68mm x 67.9mm (diameter x height) • Weight: 1050 grams • Fisheye lens • Female RJ45 Ethernet connector • Multicolor, multifunction status LED • External microphone switch • Reset button

Category	Specifications
Warranty	Five-year hardware warranty with advanced replacement
Hardware	<ul style="list-style-type: none"> • MV93-HW: 360° fisheye lens outdoor camera with 256 GB storage • MV93M-HW: 360° fisheye lens outdoor camera with 512 GB storage • MV93X-HW: 360° fisheye lens outdoor camera with 1 TB storage
Licensing	<p>LIC-MV-XYR: Meraki MV Enterprise license (X = 1, 3, 5, 7, 10 years)</p> <p>[Optional] LIC-MV-SEN-XYR: Meraki MV Sense license (X = 1, 3, 5, 7, 10 years)</p> <p>[Optional] LIC-MV-CA30-XY: MV Cloud Archive license (X = 1, 3, 5 years)</p> <p>[Optional] LIC-MV-CA90-XY: MV Cloud Archive license (X = 1, 3, 5 years)</p> <p>[Optional] LIC-MV-CA180-XY: MV Cloud Archive license (X = 1, 3, 5 years)</p> <p>[Optional] LIC-MV-CA365-XY: MV Cloud Archive license (X = 1, 3, 5 years)</p>
Accessories	<ul style="list-style-type: none"> • MA-MNT-MV-18: Mounting plate replacement kit • MA-MNT-MV-28: Pole mount • MA-MNT-MV-38: Wall-mount L-bracket • MA-MNT-MV-48: Wall-mount arm bracket • MA-MNT-MV-58: Conduit back box • MA-MNT-MV-68: T-rail adapter • MA-MNT-MV-88: Corner mount • MA-MNT-MV-78: Telescopic mount • MA-INJ-4: 802.3at power over Ethernet injector • MA-PWR-MV-LV: Low voltage 12V DC/24V AC input PoE injector
In the box	<ul style="list-style-type: none"> • Quick-start and installation guide • MV camera hardware • Ceiling/Wall mounting kit



Each Meraki camera requires a license to operate.

