

# MV32 Cloud Managed Smart Cameras



## OVERVIEW

MV32, a member of the second generation MV smart camera family, combines powerful, advanced analytics with 360° viewing in a compact form factor. With powerful hardware and the

architectural simplicity of the MV family, MV32 continues the shift from cameras for physical safety and security, to providing business intelligence as well.

## MV32: SEE THE COMPLETE PICTURE WITH 360° VISIBILITY

The MV32 fisheye camera provides 360° viewing of a space. The camera records everything, and the dashboard's intuitive player allows an immersive dewarped video view, with pan, tilt, and zoom available on live and historical footage. On mobile devices, video playback takes advantage of the accelerometer to provide an interactive viewing experience, and enable VR. Because the MV32 stores and processes the fully warped image, no video or information is lost.

The MV32 has an 8.4MP sensor, records in up to 2058 x 2058 resolution, and is equipped with an industry-leading processor, powering advanced analytics capabilities that previously required specialized software and heavy-duty hardware. Harnessing the power of machine learning for computer vision, the MV32, along with the rest of the second generation family, can do real time

object detection, classification, and tracking of people. This simple-seeming insight lays the foundation for more effective and efficient processes, like people counting, journey pathing, and automatic safe working practices in manufacturing. These analytics, combined with the wide overall viewing angle, provide valuable, big picture insights into what is happening in an organization.

As with the rest of the MV lineup, the MV32 features an innovative architecture that places high-endurance storage locally on the camera, removing the Network Video Recorder (NVR) and Video Management System (VMS) from the equation. Not only does this drastically simplify both installation and scaling, it also eliminates a major network security vulnerability in IT infrastructure.

## Product Highlights

- Meraki dashboard simplifies operation
- Machine learning capability for intelligent object detection
- Cloud-augmented edge storage minimizes physical infrastructure
- Suitable for deployments of all sizes, 1-10,000+ cameras
- Intelligent motion indexing with search engine
- Built-in motion analytics like motion search, recap, and motion heatmaps
- Secure, encrypted control architecture
- No special software or browser plugins required
- Granular user access controls
- Wireless capable for easy upgrades from analog
- Client-side dewarp and immersive video playback
- Pan, tilt, and zoom for live and historical playback

# MV32 Camera Specifications

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| <b>Camera</b>                                                                                                                                                                                                                                                                                                                             |
| 1/2.5" 8.4MP (4.2MP effective) progressive CMOS image sensor                                                                                                                                                                                                                                                                              |
| 256GB high endurance solid state storage                                                                                                                                                                                                                                                                                                  |
| 1.19mm focal length fixed lens                                                                                                                                                                                                                                                                                                            |
| f/2.0 aperture                                                                                                                                                                                                                                                                                                                            |
| Field of view: Horizontal 180°, Vertical 180°                                                                                                                                                                                                                                                                                             |
| 1/30s to 1/32,000s shutter speed                                                                                                                                                                                                                                                                                                          |
| Minimum illumination 0.18 Lux                                                                                                                                                                                                                                                                                                             |
| <b>Video</b>                                                                                                                                                                                                                                                                                                                              |
| 4.2MP (2058x2058) 360° overview with H.264 encoding, up to 15fps                                                                                                                                                                                                                                                                          |
| 1MP (1080x1080) 360° overview with H.264 encoding, up to 8fps                                                                                                                                                                                                                                                                             |
| Cloud augmented edge storage (locally stored video with metadata in the cloud)                                                                                                                                                                                                                                                            |
| Optimized retention settings (scheduling and motion-based) for variable retention                                                                                                                                                                                                                                                         |
| Up to 20 days of 24/7 continuous video storage per camera*                                                                                                                                                                                                                                                                                |
| Direct live streaming with no client software (native browser playback)**                                                                                                                                                                                                                                                                 |
| Stream video anywhere with automatic cloud proxy                                                                                                                                                                                                                                                                                          |
| High dynamic range (HDR)                                                                                                                                                                                                                                                                                                                  |
| Audio recording supported with built-in microphone                                                                                                                                                                                                                                                                                        |
| <b>Data and Network Security</b>                                                                                                                                                                                                                                                                                                          |
| Full disk encryption (AES 256-bit)                                                                                                                                                                                                                                                                                                        |
| Automatically purchased and provisioned TLS certificates (publicly-signed)                                                                                                                                                                                                                                                                |
| Management encryption and two-factor authentication                                                                                                                                                                                                                                                                                       |
| Wireless security: <div>WPA, WPA2-PSK, WPA2-Enterprise with 802.1X EAP-TTLS</div> <div>TKIP and AES encryption</div>                                                                                                                                                                                                                      |
| <b>Networking and Wireless</b>                                                                                                                                                                                                                                                                                                            |
| 1x 10/100/1000 Base-T Ethernet (RJ45)                                                                                                                                                                                                                                                                                                     |
| DSCP traffic marking                                                                                                                                                                                                                                                                                                                      |
| Supported frequency bands (country-specific restrictions apply): <div>2.4 GHz 802.11b/g/n radio<div>2.412 - 2.484 GHz</div></div> <div>5 GHz 802.11a/n/ac radio<div>5.150 - 5.250 GHz (UNII-1)</div><div>5.250 - 5.350 GHz (UNII-2)</div><div>5.470 - 5.600, 5.660 - 5.725 GHz (UNII-2e)</div><div>5.725 - 5.825 GHz (UNII-3)</div></div> |
| 1x1 with one spatial stream                                                                                                                                                                                                                                                                                                               |
| MU-MIMO support <div>20 and 40 MHz channels (802.11n)</div> <div>20, 40, and 80 MHz channels (802.11ac)</div>                                                                                                                                                                                                                             |
| Up to 256 QAM on both 2.4 GHz and 5 GHz bands                                                                                                                                                                                                                                                                                             |
| Integrated omni-directional antennas (4.4 dBi gain at 2.4 GHz, 6.3 dBi gain at 5 GHz)                                                                                                                                                                                                                                                     |

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|-----------------------------------------------------------------------------------|
| <b>Power</b>                                                                      |
| Power consumption 12.95W maximum via 802.3af PoE                                  |
| <b>Environment</b>                                                                |
| Temperature: 0°C - 40°C (32°F - 104°F)                                            |
| <b>Physical Characteristics</b>                                                   |
| Dimensions 106mm x 45.86mm (diameter x height)                                    |
| Weight 215g                                                                       |
| Female RJ45 Ethernet connector                                                    |
| Multicolor, multifunction status LED                                              |
| Reset button                                                                      |
| <b>Warranty</b>                                                                   |
| Warranty 5 year hardware warranty with advanced replacement                       |
| <b>Ordering Information</b>                                                       |
| MV32-HW: 256GB Indoor Fisheye Camera                                              |
| LIC-MV-XYR: Meraki MV Enterprise License (X = 1, 3, 5, 7, 10 years)               |
| MA-INJ-4-XX: Meraki 802.3at Power over Ethernet injector (XX = US, EU, UK, or AU) |
| MA-PWR-MV-LV: Low voltage 12VDC/24VAC input PoE injector for MV cameras           |
| <b>In The Box</b>                                                                 |
| Quick start & installation guide                                                  |
| MV camera hardware                                                                |
| Wall mounting kit                                                                 |

Note: Each Meraki camera requires a license to operate

\* Storage duration dependent on encoding settings and camera storage model.

\*\* Browser support for H.264 decoding required.