MV22 Cloud-Managed Smart Cameras



OVERVIEW

The Meraki MV22 series, part of the MV smart camera family, brings physical security and advanced analytics together in a dome form factor suitable for a variety of deployments. The built-in powerful processor and innovative edge architecture minimize physical infrastructure and software requirements. MV22 smart cameras ensure physical safety and security while providing business intelligence, all in a refreshingly simple package.

MV22: SECURITY AND ANALYTICS

As with the rest of the MV lineup, the MV22 series 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, but it also eliminates a major network security vulnerability in IT infrastructure.

MV22 series cameras are equipped with an industry-leading processor, and have a 4MP sensor for recording in up to 1080P. The processor powers advanced analytics capabilities that previously required specialized software and heavy-duty hardware. Harnessing the power of machine learning for computer vision, MV22 can do real-time object detection, classification, and tracking. This compelling insight lays the foundation for more effective and efficient processes, like journey pathing, and safe working practices.

MV22 cameras are varifocal dome cameras, capable of up to 3x optical zoom. The adjustable field of view provides flexibility to cover wide areas for context, or focus up close to get details of smaller scenes. This, combined with an attractive industrial design and easy installation makes it a natural fit for a variety of indoor applications.

Product Highlights

- Varifocal lens, dome camera with 36-112° horizontal FoV
- Intelligent motion indexing with search engine
- Built-in motion analytics like Motion Search, Motion Recap, and Motion Heatmaps
- In-camera machine learning capability for intelligent object detection
- No special software or browser plugins required
- Cloud-augmented edge storage minimizes physical infrastructure
- Meraki dashboard simplifies operation
- Secure, encrypted control architecture and storage
- Secure boot and signed firmware backed by hardware security chip
- Granular user access controls
- Integrated 802.11ac wireless for easy upgrades from analog
- IR illumination up to 30m or 98ft
- Suitable for deployments of all sizes, 1-10,000+ cameras

MV22 Camera Specifications

Camera

1/3” 4MP (2688x1520) progressive CMOS image sensor

256GB high endurance solid state storage (MV22)

512GB high endurance solid state storage (MV22X)

3-9mm focal length

f/1.2-2.3 aperture

Field of view: Horizontal 36-112°, Vertical 20-57°, Diagonal 42° - 138°

Lens adjustment range: Tilt: 65°, Rotation: +/- 90°, Pan: 354°

1/30s to 1/32,000s shutter speed

Minimum illumination 0.18 Lux (standard recording) and 0.01 Lux (night mode)

Built-in IR illuminators, effective up to 30m (98ft)

Video

1080p HD video recording (1920x1080) with H.264 encoding up to 20fps (MV22)

4MP recording with H.264 encoding up to 15fps (MV22X)

Cloud augmented edge storage (locally stored video with metadata in the cloud)

Optimized retention settings (scheduling and motion-based) for variable retention

Up to 90 days (MV22X) 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

Networking and Wireless

1x 10/100/1000 Base-T Ethernet (RJ45)

DSCP traffic marking

Supported frequence bands (country-specific restrictions apply):

2.4 GHz 802.11b/g/n radio

- 2.412 - 2.484 GHz

5 GHz 802.11a/n/ac radio

- 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

MU-MIMO support

- 20 and 40 MHz channels (802.11n)
- 20, 40, and 80 MHz channels (802.11ac)

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)

2.4 GHz Bluetooth Low Energy (BLE) radio

Power

Power consumption 12.95W maximum via 802.3af PoE

Environment

Temperature: 0°C - 40°C (32°F - 104°F)

Data and Network Security

Full disk encryption (AES 256-bit)

Automatically purchased and provisioned TLS certificates (publicly-signed)

Management encryption and two-factor authentication

Wireless security:

- WPA, WPA2-PSK, WPA2-Enterprise with 802.1X EAP-TTLS
- TKIP and AES encryption

Physical Characteristics

Dimensions 149mm x 97mm (diameter x height)

Weight 706g

Female RJ45 Ethernet connector

Multicolor, multifunction status LED

Reset button

Warranty

Warranty 5 year hardware warranty with advanced replacement

Ordering Information

MV22-HW: Varifocal Indoor Dome Camera with 256GB Storage

MV22X-HW: Varifocal Indoor Dome Camera with 512GB Storage

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

In The Box

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.