MV Cloud Managed Security Cameras

OVERVIEW

Cisco Meraki's MV family of security cameras are exceptionally simple to deploy and configure. Their integration into the Meraki dashboard, ease of deployment, and use of cloud-augmented edge storage, eliminate the cost and complexity required by traditional security camera solutions.

Like all Meraki products, MV cameras provide zero-touch deployment. Using just serial numbers, an administrator can add devices to the Meraki dashboard and begin configuration before the hardware even arrives on site. Cameras can be up and running within minutes of connecting to the network. In the Meraki dashboard, users can easily stream video and create a live video wall for monitoring key areas across multiple locations.

INTRODUCING MV

With an unobtrusive industrial design suitable for any setting—and available in indoor (MV21) and outdoor (MV71) models—the MV family simplifies and streamlines the unnecessarily complex world of security cameras. By eliminating servers and video recorders, MV frees administrators to spend less time on deployment and maintenance, and more time on meeting business needs.

High-endurance solid state on-camera storage eliminates the concern of excessive upload bandwidth use and provides robust failover protection. As long as the camera has power it will continue to record, even without network connectivity. Historical video can be quickly searched and viewed using motion-based indexing, and advanced export tools allow evidence to be shared with security staff or law enforcement easily.

Because the cameras are connected to Meraki's cloud infrastructure, security updates and new software are pushed to customers automatically. This system provides administrators with the peace of mind that the infrastructure is not only secure, but that it will continue to meet future needs.

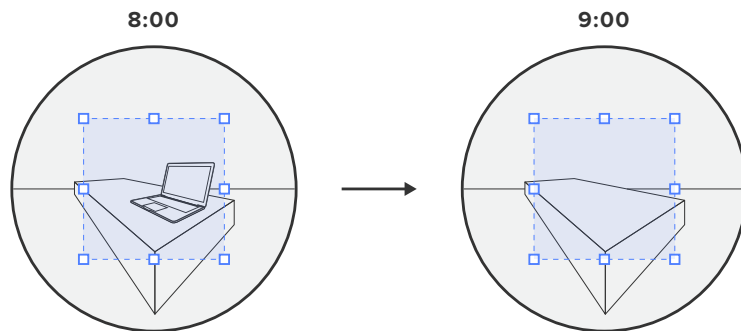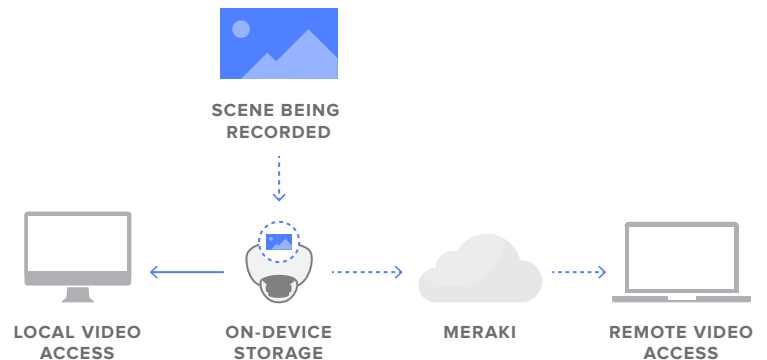Simply put, the MV brings Meraki magic to the security camera world.

Product Highlights

- Meraki dashboard simplifies operation

- Cloud-augmented edge storage eliminates infrastructure

- Suitable for deployments of all sizes: 1 camera or 1000+

- Intelligent motion indexing with search engine

- Easily export and share historical video

- Secure encrypted control architecture

- No special software or browser plugins required

- Granular user access controls

CUTTING EDGE ARCHITECTURE

Meraki's expertise in distributed computing has come to the security camera world. With cloud-augmented edge storage, MV cameras provide ground breaking ease of deployment, configuration, and operation. Completely eliminating the Network Video Recorder (NVR) not only reduces equipment CAPEX, but the simplified architecture also decreases OPEX costs.

Each MV camera has up to 20 days of integrated, state of the art, industrial-grade storage. This cutting edge technology allows the system to efficiently scale to any size because the storage expands with the addition of each camera. Administrators can rest easy knowing that even if the network connection cuts out, the cameras will continue to record footage.

SCENE BEING RECORDED

LOCAL VIDEO ACCESS   **ON-DEVICE STORAGE**   **MERAKI**   **REMOTE VIDEO ACCESS**

ISOLATE EVENTS, INTELLIGENTLY
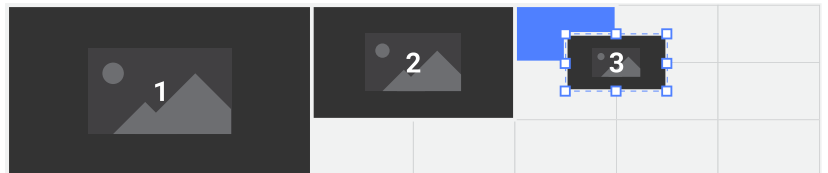
8:00   **9:00**

Meraki MV cameras use intelligent motion search to quickly find important segments of video among hours of recordings. Optimized to eliminate noise and false positives, this allows users to zero-in on relevant events with minimal effort.

The MV motion indexing offers an intuitive search interface. Select the elements of the scene that are of interest and dashboard will retrieve all of the activity that occurred in that area. Laptop went missing? Drag the mouse over where it was last seen and quickly find out when it happened and who was responsible.

VIEW THINGS YOUR WAY

Installing plugins, changing browser settings, and deploying custom software are now relics of the past. Meraki MV uses the latest web technology to provide a fluid video experience within the Meraki dashboard—all seamlessly integrated with the other products in Meraki's lineup.

Drag and drop camera feeds to create any number of video walls with up to 12 cameras per layout. When resizing the video tiles, the rest of the layout dynamically updates to accommodate the changes. Once the perfect layout has been created, layouts are shared accross all users, preventing the need to create them again and again.

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ADMIN

CONFIGURE

VIEW-ONLY

EASY TO ACCESS, EASY TO CONTROL

There is often a need to allow different users access but with tailored controls appropriate for their particular roles. For example, a receptionist needing to see who is at the front door does not need full camera configuration privileges.

The Meraki dashboard has a set of granular controls for defining what a user can or cannot do. Prevent security staff from changing network settings, limit views to only selected cameras, or restrict the export of video: you decide what is possible.
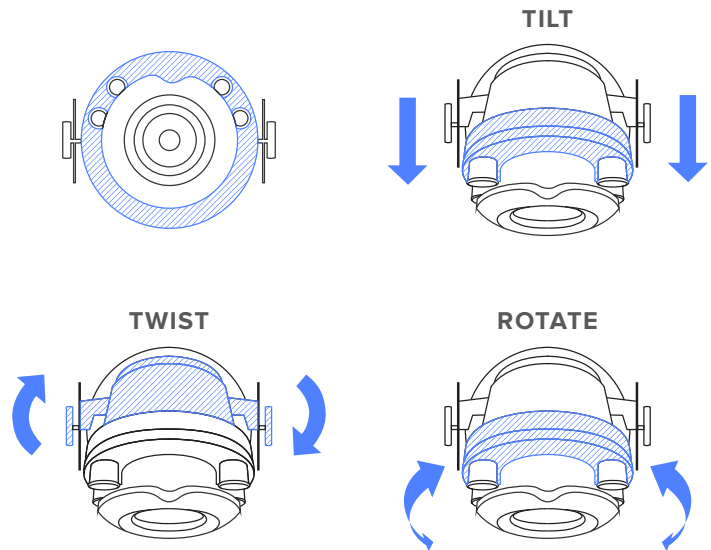
With the Meraki cloud authentication architecture, these controls scale for any organization and support Security Assertion Markup Language (SAML) integration.
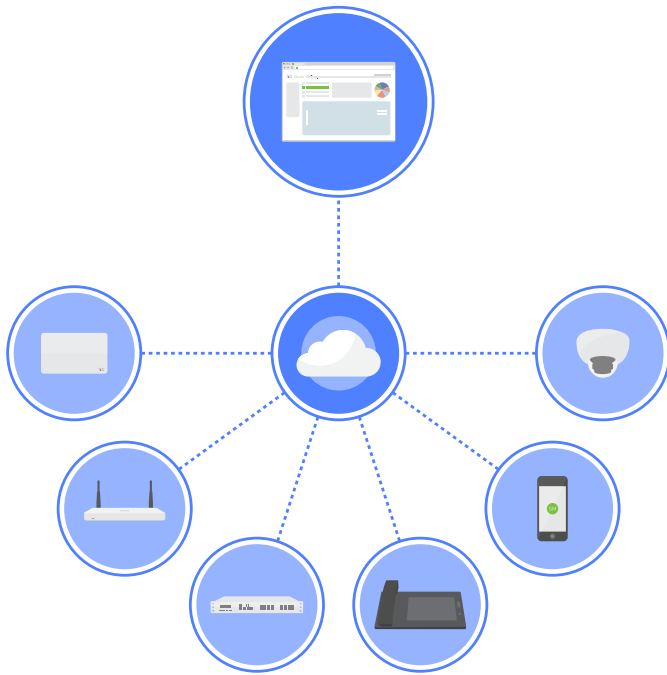
COMMON-SENSE INDUSTRIAL DESIGN

Knowing camera installation is costly, time consuming, and critical to the success of the system, Meraki developed the MV family with special attention to the simplicity of physical installation. The MV21 typifies this by requiring no tools to adjust the lens or attach it to the mounting bracket.

Each camera ships with wall and ceiling mounts and the MV21 also includes adapters for rapid attachment to ceiling T-rails. For more demanding outdoor installations, additional mounting accessories are available to meet a variety of deployments. All MV models can be powered with a standard Ethernet cable and PoE, making cable installation as straightforward as possible.

Both the MV21 and MV71 offer high deployment flexibility with a vari-focal lens, integrated night vision, and infrared (IR) illumination. This allows cameras to be positioned in a variety of locations and situations while providing the best video security possible.

TILT

TWIST

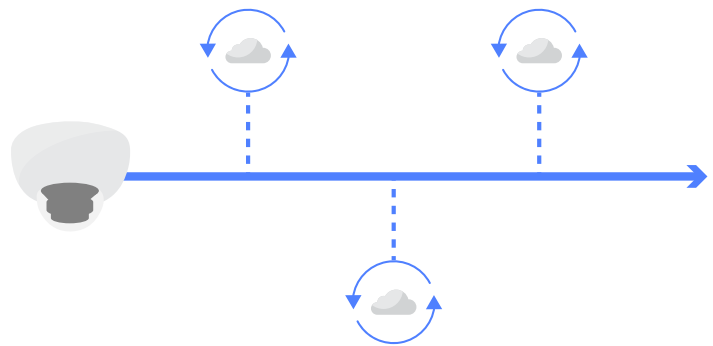**ROTATE**

SIMPLY CLOUD-MANAGED

Meraki's innovative GUI-based dashboard management tool has revolutionized networks around the world, and brings the same benefits to networked video surveillance. Zero-touch configuration, remote troubleshooting, and the ability to manage distributed sites through a single pane of glass eliminate many of the headaches security administrators have dealt with for decades. Best of all, dashboard functionality is built into every Meraki product, meaning additional video management software (VMS) is now a thing of the past.

Additionally, features like the powerful drag-and-drop video wall help to streamline remote device management and monitoring — whether cameras are deployed at one site, or across the globe.

SECURE AND ALWAYS UP-TO-DATE

Centralized cloud management offers one of the most secure platforms available for camera operation. All access to the camera is encrypted with a public key infrastructure (PKI) that includes individual camera certificates. Integrated two-factor authentication provides strong access controls.

All software updates are managed automatically for the delivery of new features and to enable rapid security updates. Scheduled maintenance windows ensure the MV family continues to address users' needs with the delivery of new features as part of the all-inclusive licensed service.

Camera Specifications

Camera

1/3.2" 5MP (2560x1920) progressive CMOS image sensor

128GB high endurance solid state storage

3 - 10mm vari-focal lens with variable aperture f/1.3 - f/2.5

Variable field of view:

28° - 82° (Horizontal)

21° - 61° (Vertical)

37° - 107° (Diagonal)

Automatic iris control with P-iris for optimal image quality

1/5 sec. to 1/32,000 sec. shutter speed

Minimum illumination 0.27 Lux @ F1.3 (color) 0.001 Lux @ F1.3 (B&W)

S/N Ratio exceeding 62dB - Dynamic Range 69dB

Hardware based light meter for smart scene detection

Built-in IR illuminators, effective up to 30 meters (98 feet)

Integrated heating elements for low temperature outdoor operation (MV71 only)

Video

720p HD video recording (1280x720) with H.264 encoding

Cloud augmented edge storage (video at the edge, metadata in the cloud)

Up to 20 days of video storage per camera*

Direct live streaming with no client software (native browser playback)**

Stream video anywhere with autotmatic cloud proxy

Networking

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

Compatible with Meraki wireless mesh backhaul (separate WLAN AP required)

DSCP traffic marking

Features

Cloud managed with complete integration into the Meraki dashboard

Plug and play deployment with self-configuration

Remote adjustment of focus, zoom, and aperture

Dynamic day-to-night transition with IR illumination

Noise optimized motion indexing engine with historical search

Shared video wall with individual layouts supporting multiple cameras

Selective export capability with cloud proxy

Highly granular view, review, and export user permissions with SAML integration

Power

Power consumption (MV21) 10.94W maximum via 802.3af PoE

Power consumption (MV71) 21.95W maximum via 802.3at PoE+

Environment

Starting temperature (MV21): -10°C - 50°C (14°F - 122°F)

Starting temperature (MV71): -40°C - 50°C (-40°F - 122°F)

Working temperature (MV21): -20°C - 50°C (-4°F - 122°F)

Working temperature (MV71): -50°C - 50°C (-58°F - 122°F)

In the box

Quick start & installation guide

MV camera hardware

Wall mounting kit, drop ceiling T-rail mounting hardware

Physical characterisitcs

Dimensions (MV21) 166mm x 116.5mm (diameter x height)

Dimensions (MV71) 173.3mm x 115mm (diameter x height)

Weather-proof IP66-rated housing (MV71 only)

Vandal-proof IK10-rated housing (MV71 only)

Lens adjustment range:

65° Tilt

350° Rotation

350° Pan

Weight (MV21) 1.028kg (including mounting plate)

Weight (MV71) 1.482kg (including mounting plate)

Female RJ45 Ethernet connector

Supports Ethernet cable diameters between 5-8mm in diameter

Status LED

Reset button

Warranty

Warranty (MV21) 3 year hardware warranty with advanced replacement

Warranty (MV71) 3 year hardware warranty with advanced replacement

Ordering Information

MV21-HW: Meraki MV21 Cloud Managed Indoor Camera

MV71-HW: Meraki MV71 Cloud Managed Outdoor 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)

Note: Each Meraki camera requires a license to operate

* Storage duration dependent on encoding settings.

** Browser support for H.264 decoding required.

Mounting Accessories Specifications

Meraki Wall Mount Arm

Wall mount for attaching camera perpendicular to mounting surface
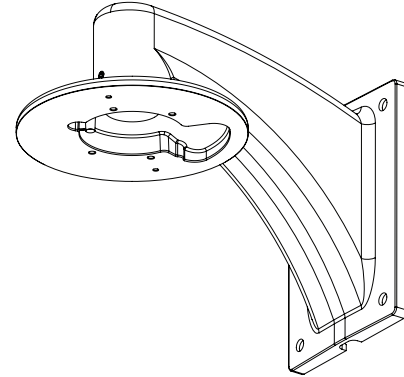
Includes pendant cap

Supported Models: MV21, MV71

Dimensions (Wall Arm) 140mm x 244mm x 225.4mm

Dimensions (Pendant Cap) 179.9mm x 49.9mm (Diameter x Height)

Combined Weight 1.64kg

Meraki Pole Mount

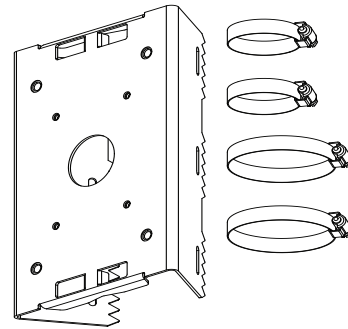Pole mount for poles with diameter between 40mm - 145mm (1.57in - 5.71in)

Can be combined with MA-MNT-MV-1: Meraki Wall Mount Arm

Supported Models: MV71

Dimensions 156.7mm x 240mm x 68.9mm

Weight 1.106kg

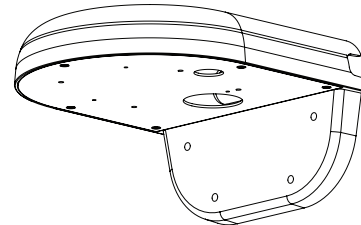**Meraki L-Shape Wall Mount Bracket**

Compact wall mount for attaching camera perpendicular to mounting surface

Supported Models: MV21, MV71

Dimensions 206mm x 182mm x 110mm

Weight 0.917kg

Ordering Information

MA-MNT-MV-1: Meraki Wall Mount Arm for MV21 and MV71

MA-MNT-MV-2: Meraki Pole Mount for MV71

MA-MNT-MV-3: Meraki L-Shape Wall Mount Bracket for MV21 and MV71