



Specifications Included

MV2 Cloud-Managed Smart Cameras
MT30 Cloud-Managed Smart Automation Button
Z-Series Teleworker Gateway

Igniting your Remote Workforce

A UL® Remote Worker Solution from CSS

In response to the changing nature of work and the need to remain UL compliant, Communication Service Solutions introduces a new end-to-end remote worker package. Explicitly developed for central monitoring stations, this series of products brings virtual infrastructure and security to almost any environment while adhering to the UL 827 guidelines. This solution thoroughly addresses the security of the remote operator, their workstations, connectivity, bandwidth, and verification and includes MV2 Cloud-Managed Smart Cameras, MT30 Cloud-Managed Smart Automation Buttons and the Z-Series Cloud-Managed Teleworker Gateway.



communicationsolutions

MV2

Cloud-Managed Smart Cameras

Overview

The Meraki MV2, part of the MV smart camera family, brings physical security and advanced analytics together in a flexible, compact form factor. Easy to install and simple to use, MV2 provides rich analytics and smart security for a variety of indoor applications.



MV2: Simple, Smart, and Secure

MV2 brings enterprise-grade physical security almost anywhere. A unique hinge, flexible mounting options, wireless capability, USB-C power, and a mobile on-boarding flow enable a seamless, DIY installation experience. Onboard processing power and cloud management, eliminate infrastructure and software requirements, and simplify configuration and viewing.

MV2 makes it easy to stay on top of what's going on. Securely view video locally or remotely, in-browser or on an app, from virtually any device. Intelligent alerts keep you up-to-date on activity even when no one is watching. Adding the optional Cloud Archive license for cloud video storage gives you access to historical video, so you can use smart search tools to quickly investigate events and export or share video clips.

MV2 uses machine-learning-based computer vision for real-time object detection, classification, and tracking of people with no heavy duty servers or hardware required. This data can increase safety and provide useful insights that lay the foundation for more effective and efficient processes like journey pathing and safer working practices. These smart cameras enable physical security and business intelligence, all in a refreshingly simple package.

MV2 Product Overview

- Easy install with flexible mounting options, adjustable hinge, and USB-C power
- Expansive coverage with a wide 103° horizontal field of view
- High-definition video with 4MP sensor and 1080P video resolution
- Simplify storage and access to historical data with Cloud Archive
- Gain insight with built-in motion analytics
- In-camera machine-learning capability for intelligent object detection
- Simple to use, no special software or browser plug-ins required
- All-in-the-box solution minimizes physical infrastructure
- Simplified management with Meraki cloud architecture
- Built-in, automatic security with secure boot and signed firmware backed by hardware security chip
- Secure video access and ensure privacy with role-based user accounts
- Flexible deployment options with integrated 802.11ac wireless
- Night vision with IRz illumination up to 8m (26ft)

MV2 Specifications

Camera

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

2.8mm focal length fixed lens

f/2.0 aperture

Field of view:

- Horizontal 103°

- Vertical 76°

- Diagonal 134°

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

Minimum illumination 0.18 Lux

Built-in IR illuminators, effective up to 8m (26ft)

Video

1080p HD video recording (1920x1080) with H.264 encoding, up to 15fps

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

Data and Network Security

Full disk encryption (AES 256-bit)

Automatically purchased and provisioned TLS certificates (publicly-signed)

Management encryption and two-factor authentication

WPA, WPA2-PSK, WPA2-Enterprise with 802.1X E AP-TTLS

TKIP and AES encryption

Networking and Wireless

Dual band WLAN with supporting 2.4GHz and 5GHz

DSCP traffic marking

2.4 GHz 802.11b/g/n radio

5 GHz 802.11a/n/ac radio

Supported frequency bands (country-specific restrictions apply):

- 2.412 - 2.484 GHz

- 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)

802.11ac and 802.11n capabilities

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

10 W via a USB-C power adapter (MA-PWR-USB-XX)

12.95W maximum via 802.3af PoE (MA-PWR-ETH)

Environment

Temperature: 0°C - 35°C (32°F - 95°F)

MV2 Specifications (Continued)

Physical Characteristics

Dimensions: 76mm x 68-129mm (diameter x height)

Weight 464g

Fixed lens

USB-C Jack

Multicolor, multifunction status LED

Reset button

Ordering Information

MV2-HW: Indoor Flex Camera

LIC-MV-XYR: Meraki MV Enterprise License (X = 1, 3, 5, 7)

MA-PWR-USB-XX*: Meraki AC Power adapter for MV and MT
(XX = U S, EU, UK, or AU)

MA-PWR-ETH*: Meraki Ethernet adapter for MV and MT

*Either MA-PWR-USB-XX or MA-PWR-ETH is required to power MV2-HW

In the Box

Quick start & installation guide

MV camera hardware

Magnetic base plate with 1/4" Screw

Wall mounting kit

MT30

Cloud-Managed Smart Automation Button



Overview

Organizations are turning toward digital technologies to streamline processes, create new customer experiences, and adapt to evolving business challenges.

The Cisco Meraki MT30, part of the Meraki MT sensor portfolio, is a smart automation button designed to automate common tasks or trigger specific actions at the press of a button. MT30 comes with an Automation Builder feature on the Meraki dashboard that makes it easy to build workflows custom to your business needs, including native integrations with other Meraki products.

With the click of a button, MT30 can alert staff members when a customer needs assistance, turn off Wi-Fi to help students focus in school, replenish material on a manufacturing line, or control office lighting to decrease energy consumption. With MT30 and the cloud-first Meraki platform, anything is possible.

Smart Sensors. Smarter Businesses.

Meraki MT accelerates deployment, simplifies management, and provides data driven business outcomes. Wire-free installation, flexible mounting options, and automatic pairing make it easy to provision thousands of sensors in a short amount of time. Centralized cloud management and open APIs enable MT sensors to be managed alongside other networked devices or integrated with any business system.

MT30 Product Overview

Empowering automations

- Gain value from existing infrastructure by remotely automating MV, MR, and MS features
- Automate from anywhere with events triggered directly from the Meraki mobile app
- Build applications custom for your business through the vast partner ecosystem

Custom alerts and analytics

- Never miss an event with real-time alerts via email, SMS, push notification, or webhook
- Analyze data your way with .csv, .xls, API, or MQTT export options

Cloud-first architecture

- Cloud-based management eliminates the need for on-premises servers
- Visibility alongside other Meraki products on the dashboard empowers lean teams

Simple and secure connectivity

- Streamline deployment with automatic wireless connectivity to MR/MV gateways
- Secure your business with authentication and encryption from the Cisco Trust Anchor module

MT30 Specifications

Sensors

Trigger events with customizable button presses on MT30

Dashboard Automation Builder Features

Capture a time-stamped MV snapshot

Enable/disable MR SSID

Toggle on/off MS switch port

Send push, SMS, email with custom messages

Generate webhook alert

Wireless Capabilities

Bluetooth® Low Energy snapshot	Compatible MV smart cameras and MR access points
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Operating frequency	2.400–2.4835 GHz
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IEEE standard	802.15.1 (Bluetooth Low Energy 4.2)
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Data logging

Data sampling	Button-press events reported immediately to the gateway
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Onboard data storage	Up to five (5) days of data storage
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Security	Bluetooth Low Energy messages encrypted and authenticated using Cisco Trust Anchor technology
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Power

One AA battery or USB-C power adapter

Battery life up to five years

Power ratings: 5V; 0.1A

Operating environment

Temperature: -18°C to +55°C (0°F to +131°F)

Relative humidity: 0 to 95% RH

Physical Characteristics

Dimensions: 88 mm (L) x 55 mm (W) x 26.7 mm (H)

Battery compartment

Multicolor, multifunction status LED

General purpose button

Reset button

USB-C port (receptacle connector)

Ratings

IP55 rated

Warranty

Three-year hardware warranty with advanced replacement

Ordering information

MT30-HW	Meraki smart automation button
LIC-MT-XY	Meraki MT Enterprise License (X = 1, 3, 5, 7 years)
MA-PWR-USB-XX	External power adapter
MA-PWR-ETH	USB-C to Ethernet adapter

Note: Each Meraki MT sensor requires a license to operate, however every dashboard organization comes standard with five free MT licenses to help get started.

What's in the Box

MT30-HW

Quick-start and installation guide

One AA battery

Mounting equipment	Wall-mount backplate Magnet VHB tape Two mounting screws Two drywall anchors
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Z-Series

Cloud-Managed Teleworker Gateway



Overview

The Cisco Meraki Z-Series teleworker gateway is an enterprise class firewall, VPN gateway and router. Each model offers five gigabit Ethernet ports and wireless for connectivity. Each model is designed to securely extend the power of Meraki cloud managed networking to employees, IT staff, and executives working from home.

Using Meraki's proven and highly scalable Auto VPN technology, administrators can deploy network services including VoIP and remote endpoints with automatic, zero-touch provisioning. Additionally the Z-series provides secure wired and wireless access, and increases end-user productivity through Layer 7 traffic shaping.

All models feature a high-performance stateful firewall, support for VLANs, inter-VLAN routing, and isolation to segregate corporate data from recreational traffic. The Z-series offers the latest in wireless performance with 802.11ac Wave 2 technology with MU-MIMO support to provide reliable and high speed network access for most demanding business applications and latest devices.

Z-Series and Meraki Cloud Management: A Powerful Combo

All Meraki devices are managed via the Meraki cloud, with an intuitive browser-based interface. Since the Z-series is self-configuring and managed over the web, you can rapidly deploy at remote locations without any assistance from end-users.

Meraki Cloud services monitor all devices 24x7 and deliver real-time alerts if any device encounters a problem. Remote diagnostics tools enable real-time troubleshooting through any web browser. New features and enhancements are delivered seamlessly over the web, so you never have to manually download software updates or worry about missing security patches.

MV2 Product Overview

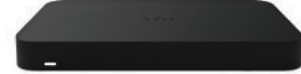
- 4 GbE ports for printers, phones and other wired devices
- 1 PoE-enabled port for VoIP phones and other powered devices
- Dual-concurrent 802.11ac Wave 2 radios with up to 1.3 Gbps data rate
- Auto VPN for intelligent site-to-site VPN connectivity
- 802.1x port authentication for wired devices
- Layer 7 application traffic shaping and prioritization
- Layer 3 firewall to separate corporate data from personal traffic
- Up to 4 SSIDs with integrated enterprise security and personal / guest access
- Optional desk stand
- Self-configuring, plug-and-play deployment
- Ideal for telecommuters using VoIP and remote applications
- Sleek, low profile design
- Built-in 100 Mbps CAT 3 LTE connectivity (Z3C)

Models

Z3



Z3C



Recommended use cases	Teleworker with VoIP or PoE, IoT, and M2M	Teleworker with VoIP or PoE, IoT, and M2M
Recommended clients	Up to 5 devices	Up to 5 devices
Stateful Firewall Throughput	100 Mbps	100 Mbps
Maximum VPN Throughput	50 Mbps	50 Mbps
WAN Interfaces	1 x GbE RJ45 1 x USB (cellular failover ¹)	1 x GbE RJ45 1 x Integrated CAT 3 LTE Cellular Modem (cellular failover) 1 x USB (cellular failover ¹)
LAN Interfaces	4 x GbE	4 x GbE
PoE	1 x PoE enabled port (802.3af, 15.5W)	1 x PoE enabled port (802.3af, 15.5W)
Dimensions (w x d x h)	6.83" x 4.41" x 1.04" (173.4mm x 112mm x 26.3mm)	7.9" x 4.41" x 1.04" (200mm x 112mm x 26 mm)
Weight	0.85 lbs (0.386 kg)	1.1 lbs (0.487 kg)
Power Supply	50W (54 V / 0.92 A) Power supply included	50W (54 V / 0.92 A) Power supply included
Operating Temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Humidity	5% to 95% non-condensing	5% to 95% non-condensing

¹ Requires separate cellular modem

Accessories



Desk Stand (sold separately)

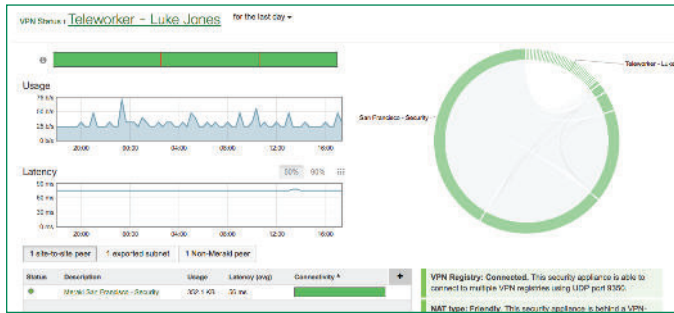


50W Power Adapter Spare



Power Cord (sold separately)

Features



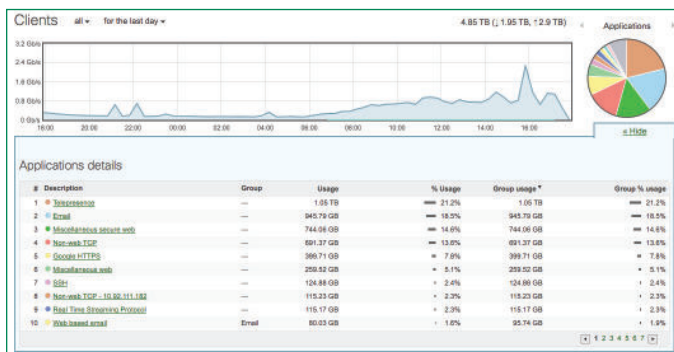
AUTO CONFIGURING SITE-TO-SITE VPN

Auto VPN

Leveraging Meraki's cloud architecture, VPN tunnels to HQ or the data center can be enabled via a single click without any commandline configurations or multi-step key permission setups. Meraki's patent-pending Auto VPN technology automatically tunnels, holepunches, sets up route tables, and establishes the IPsec connections, completely eliminating the complexity seen in traditional site-to-site VPN solutions.

Application-aware traffic shaping

The Z-Series includes an integrated layer 7 packet inspection classification, and control engine, enabling you to set QoS policies based on traffic type. Prioritize your mission critical applications like VoIP or remote desktop, while setting limits on recreational traffic, e.g., peer-to-peer and video streaming.



APPLICATION VISIBILITY AND CONTROL

Simple, powerful security from end to end

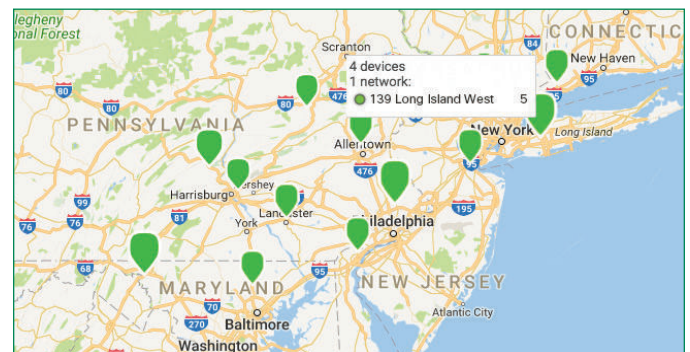
With end-to-end VPN encryption, corporate data is always protected. Additionally the Meraki Z-series supports 802.1x wired port authentication, offering network and endpoint security no matter where the gateway may be deployed.

Self-configuring, self-optimizing, self-healing

When plugged in, the Z-Series automatically connects to the Meraki cloud, downloads its configuration, and joins your network. In case of WAN IP address changes, the Z-Series self heals by re-establishing the site-to-site VPN tunnels using the new IP address. Also, if a supported SIM card is installed or a 3G/4G modem is connected and primary WAN uplink connectivity fails, the Z-Series will automatically failover to cellular.

Industry-leading cloud management

Meraki's award-winning cloud management architecture unifies WAN, LAN, and wireless management under a web based dashboard, and scales easily from small deployments to large, multi-site deployments with tens of thousands of devices. The Meraki dashboard provides intuitive yet powerful role-based administration, firmware updates, configuration changes, email alerts, and easy to audit change logs.



MULTI-SITE MANAGEMENT VIA THE MERAKI CLOUD

Z Series Specifications

Performance

Firewall Throughput - 100 Mbps

VPN Throughput - 50 Mbps

Recommended for 5 clients or fewer

Interfaces

WAN interface: 1x GbE

LAN interfaces: 4x GbE

PoE: 1 x 802.3af enabled port

1x USB 2.0 port for 3G / 4G connectivity

1 x CAT 3 LTE modem for cellular connectivity (Z3C only)

Network and Security Services

Stateful firewall, 1:1 NAT, DMZ

Auto (site-to-site IPsec) VPN

Client VPN (IPsec L2TP), limit 2 authorized users (with Meraki-hosted authentication only)

Automatic Layer 3 failover (including VPN connections)

Application level (Layer 7) traffic analysis and shaping

Multiple WAN IP, PPPoE, NAT

VLAN support and DHCP services

802.1x wired port authentication

Static routing

User and device quarantine

Integrated Wireless

4 SSIDs

2x 802.11a/b/g/n/ac (2.4GHz or 5 GHz), 2x2 MU-MIMO with 2 spatial streams

Max data rate - 1.3 Gbps

4x internal dipole antennas (gain: 3 dBi @ 2.4 GHz, 4 dBi @ 5 GHz)

WPA2-PSK authentication

Regulatory: FCC (US), IC (Canada), CE (Europe), C-Tick (Australia/New Zealand), RoHS

Monitoring and Reporting

Throughput, connectivity monitoring and email alerts

Detailed historical per-port and per-client usage statistics

Application usage statistics

Org-level change logs for compliance and change management

VPN tunnel and latency monitoring

Network asset discovery and user identification

Periodic emails with key utilization metrics

Syslog integration

LTE traffic and performance (Z3C only)

Remote Diagnostics

Live remote packet capture

Real-time diagnostic and troubleshooting tools

Aggregated event logs with instant search

Management

Managed via the web using the Meraki Cloud Controller

Single pane of glass management of wired and wireless networks

Zero-touch remote deployment (no staging needed)

Automatic firmware upgrades and security patches

Centralized policy management

Org-level two-factor authentication and single sign-on

Role based administration with change logging and alerts

Integrated Cellular (Z3C only)

LTE bands: 2, 4, 5, 13, and 17 (North America). 1, 3, 7, 8, and 20 (Worldwide*)

100 Mbps CAT 3 LTE

Additional regulatory information: PTCRB (US), RCM (ANZ, APAC), GCF (EU)

Z Series Specifications (Continued)

Z3 & Z3C Environmental Specifications

Power: 50W (54 V / 0.92 A), external power supply included

Operating temperature: 32°F to 104°F (0°C to 40°C)

Humidity: 5 to 95% non-condensing

Desktop or wall mount (all standard mounting hardware included)

Kensington lock hard point

Regulatory

FCC (US)

CB (IEC)

CISPR (Australia/New Zealand)

PTCRB (US)

RCM (Australia/New Zealand, Asia Pacific)

GCF (EU)

Warranty

Full lifetime hardware warranty with next-day advanced replacement included.

* Z3C not available in Japan

What's in the Box

Z3	1 x Z3-HW 1 x Power Adapter (power cord sold separately) 1 x Cat5 Ethernet cable 1 x Mounting Kit
Z3C (North America)	1 x Z3C-HW-NA 1 x Power Adapter (power cord sold separately) 1 x Cat5 Ethernet cable 1 x Mounting Kit 1 x SIM card ejector tool
Z3C (Worldwide1)	1 x Z3C-HW-WW 1 x Power Adapter (power cord sold separately) 1 x Cat5 Ethernet cable 1 x Mounting Kit 1 x SIM card ejector tool