

MERAKI MS120 SERIES SWITCHES

Layer 2 Access Switches
1G SFP Uplinks
Designed for Small Branch
Deployments



Product Highlights

- 24 and 48 port models for Gigabit access switching (some models feature PoE+ support)
- Up to 740 watt PoE budget with PoE+ support and dynamic power allocation allowing users to power PoE-enabled devices such as APs, phones, cameras, and more
- All models feature 4 x 1G SFP uplink interfaces
- Non-blocking switch with up to 104 Gbps bandwidth support
- Sleek, fanless design on select models
- CablesAndKits Lifetime Advanced Replacement Warranty included at no additional cost
- Unify data, voice, & video with 6 configurable QoS queues
- Easy & flexible deployment in wiring closets, offices, and classrooms thanks to low power consumption, quiet acoustic design, and shallow rack depth options

CLOUD MANAGED ACCESS SWITCHES

Cisco Meraki MS120 switches are an excellent choice for branch and campus deployments seeking to achieve powerful and reliable Layer 2 access switching. Additionally, the MS120 series features a variety of power options which are designed to meet the diverse needs of large enterprise networks.

All Cisco Meraki switches are built from the ground up with a specific focus on cloud management. They strike the perfect balance of enabling cloud management without compromising any of the power or flexibility of traditional networking.

Cisco Meraki switches are managed through the user-friendly, intuitive cloud interface known as the Meraki Dashboard. No need for a cryptic command line.

These switches are simple to bring up as all users need to do is plug it in. There is no required CLI for switch configuration or port management.

The beauty of Meraki's centralized management platform is that it gives administrators granular visibility into their network. This helps users keep track of every configuration change in the network with detailed event and change logs.



INDUSTRY-LEADING CLOUD MANAGEMENT

The benefits of cloud management are far-reaching and make it easier to create both large and small networks. Benefits include:

- Automatic email alerts from power loss, downtime, excessive Layer 1 errors, or configuration changes
- Powerful remote diagnostic tools such as packet capture to help isolate and troubleshoot network issues
- Role-based administration

- Firmware upgrades and enhancements from the Meraki cloud
- Virtual Stacking enables switch port configuration changes on the dashboard interface without the need to physically stack switches
- Incredible network transparency with application, operating system, client, and hostname visibility
- Zero-touch provisioning for rapid deployment across sites

Features & Capabilities

Meraki switches include all of the traditional Ethernet features found in modern enterprise access switches, including:

Branch & Campus Access

- PoE and PoE+ models available for device level powering
- Quality-of-Service (QoS) to prioritize mission critical traffic such as voice and video
- Voice VLAN support for simplified VoIP deployments
- CDP/LLDP with detailed neighbor discovery and visibility
- Port Mirroring support for monitoring network traffic at line rate
- IGMP Snooping to optimize network performance for multicast applications
- Link Aggregation Control Protocol (LACP) for high-capacity trunking

Network Security

- IEEE 802.1X, MAB, and Hybrid authentication support for wired access control with RADIUS server monitoring
- ACL support (IPv4 & IPv6) and MAC whitelisting
- Single-Host/Multi-Domain/Multi-Host/Multi Authentication
- Change of Authorization (CoA) and RADIUS accounting support
- DHCP snooping to prevent users from adding unauthorized DHCP servers on the network
- Rapid spanning tree, BPDU guard, root guard, loop guard, UDLD and other safeguards to help prevent misconfigurations and reduce convergence time
- Per-port VLAN configuration
- Multiple administrative roles with sophisticated security policy management

Network Troubleshooting & Automation

- Virtual Stacking helps IT admins make configuration changes to hundreds of switch ports in seconds with our intuitive dashboard interface
- Configuration templates for rapid, zero-touch provisioning and auditing of all sites
- Network Topology for automatic and interactive network mapping
- Remote cable testing, packet capture and client discovery
- Automatic and scheduled firmware upgrades for the complete network



Features & Capabilities

Converged Voice, Data, & Video

The Meraki switch family is designed to unify data, voice, and video onto a single IP backbone. All Meraki switches support rich quality-of-service (QoS) functionality for prioritizing data, voice, and video traffic. The switches support eight class-of-service (CoS) queues on every port, enabling them to maintain end-to-end traffic prioritization.

PoE models provide power to VoIP telephones, IP security cameras, wireless access points (APs), and other IP devices. In addition, using CDP and LLDP, PoE power is intelligently budgeted to maximize the number of PoE clients supported.

Application Layer Visibility

Meraki switches include integrated Layer 7 fingerprinting without the need to purchase additional modules or services. Identify hundreds of applications from business apps to BitTorrent and YouTube.

User fingerprinting allows administrators to quickly identify individual users by device and tune network resources for optimum performance.

Unified Software Architecture

Meraki switches run the same operating system used by all of our products, which allows us to deliver a consistent user experience for network management.

When connected, new MS120 switches automatically reach out to the Meraki cloud and download the most current configuration. Future updates can be user-scheduled, ensuring the network is kept up-to-date with bug fixes, security updates, and new features.

Simplified Management & Operations

Meraki's cloud-managed architecture makes it simpler than ever to quickly provision and reconfigure switch ports with security, QoS, and other parameters. The Meraki dashboard provides unified policies, event logs, and monitoring, which make it easy to manage and grow scale network deployments.

By providing a complete, powerful set of management functions over the cloud, Meraki cloud-based management eliminates the need for proprietary command line configuration interfaces which require expensive and time-consuming certifications. Meraki MS switches can be fully deployed and provisioned in minutes, without requiring any local configuration or staging. Additional or replacement switches can be sent to remote offices and installed by non-technical staff, saving thousands of dollars in time and travel expenses.

The Meraki MS family also includes several remote diagnostic features, from network connectivity and cable integrity tests to latency measurement tools. For deep client troubleshooting, administrators can even perform per-port remote pcap packet captures without any additional probes or hardware on-site.



Dimensions & Interfaces

Model	Dimensions (HxWxD")	Weight	Interface	Switching Capacity
MS120-24-HW	1.73 x 17.32 x 9.84"	8.09 lbs	<ul style="list-style-type: none">• 24 x 10/100/1000BASE-T Ethernet RJ45 with auto negotiation and crossover detection (auto-MDIX crossover)• 4 x 1G SFP uplink• RJ45 Management port	56 Gbps
MS120-24P-HW	1.73 x 17.32 x 9.84"	9.26 lbs	<ul style="list-style-type: none">• 24 x 10/100/1000BASE-T Ethernet RJ45 with auto negotiation and crossover detection (auto-MDIX crossover)• 4 x 1G SFP uplink• RJ45 Management port	56 Gbps
MS120-48-HW	1.73 x 17.32 x 9.84"	8.97 lbs	<ul style="list-style-type: none">• 48 x 10/100/1000BASE-T Ethernet RJ45 with auto negotiation and crossover detection (auto-MDIX crossover)• 4 x 1G SFP uplink• RJ45 Management port	104 Gbps
MS120-48LP-HW	1.73 x 17.32 x 13.39"	12.70 lbs	<ul style="list-style-type: none">• 48 x 10/100/1000BASE-T Ethernet RJ45 with auto negotiation and crossover detection (auto-MDIX crossover)• 4 x 1G SFP uplink• RJ45 Management port	104 Gbps
MS120-48FP-HW	1.73 x 17.32 x 13.39"	12.70 lbs	<ul style="list-style-type: none">• 48 x 10/100/1000BASE-T Ethernet RJ45 with auto negotiation and crossover detection (auto-MDIX crossover)• 4 x 1G SFP uplink• RJ45 Management port	104 Gbps

Power Options & Specifications

Model	Idle/Full Power Load	Available PoE/PoE+ Power	Power Supply Configuration
MS120-24-HW	8 / 18 W	-	Fixed Internal
MS120-24P-HW	28 / 425 W	370 W	Fixed Internal
MS120-48-HW	17 / 36 W	-	Fixed Internal
MS120-48LP-HW	37 / 478 W	370 W	Fixed Internal
MS120-48FP-HW	37 / 908 W	740 W	Fixed Internal

MTBF Ratings (in hours)

Model	MTBF (at 25c)
MS120-24-HW	707,873
MS120-24P-HW	453,906
MS120-48-HW	692,887
MS120-48LP-HW	438,920
MS120-48FP-HW	660,538

MS120 Specifications

Management

- Managed via the Web with the Meraki cloud management platform
 - Integrated with Meraki Wireless and complete portfolio of IT products and solutions
 - Zero-touch remote provisioning (no staging needed)
 - Detailed historical per-port and per-client usage statistics
 - Operating System, device, and hostname fingerprinting SNMP and SYSLOG support for integration with other network management solutions
 - Automatic firmware upgrades with scheduling control
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Remote Diagnostics

- Email, SMS and mobile push notification alerts
 - Ping, traceroute, cable testing, and link failure detection with alerting
 - Remote packet capture
 - Dynamic and interactive network discovery and topology
 - Combined event and configuration change logs with instant search
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Stacking

- Virtual Stacking supports thousands of switch ports in a single logical stack for unified management, monitoring, and configuration
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Performance

- Switching capacity: 56Gbps on 24-port models, 104Gbps on 48-port models
- Forwarding rate: 41.67mpps on 24-port models, 77.38 mpps on 48-port models
- Jumbo frame (9578 byte Ethernet frame)
- Flow control

Ethernet Switching Capabilities

- 802.1p Quality of Service, 8 queues (w/ 6 configurable for DSCP-toCoS mapping)
 - 802.1Q VLAN and trunking support for up to 4,094 VLANs
 - 802.1w, 802.1D Rapid Spanning Tree Protocol (RSTP, STP)
 - 802.1ab Link Layer Discovery Protocol (LLDP) and Cisco Discovery Protocol (CDP)
 - 802.3ad Link aggregation with up to 8 ports per aggregate
 - Port mirroring
 - IGMP snooping for multicast filtering
 - MAC forwarding entries: 16K on 24-port models, 32K on 48-port models
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Power

- Power input: 100 - 240 VAC, 47-63 Hz
 - Power consumption: 8 - 908W
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Mounting

- 1U Rack-mountable with included rack mount hardware
 - 2-post front mounting options available
 - Desktop-mountable with included feet
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Environment

- Operating temperature: 0 °C to 45 °C
- Humidity: 5 to 95% non-condensing
- MS120-24, MS120-48 feature fanless operation

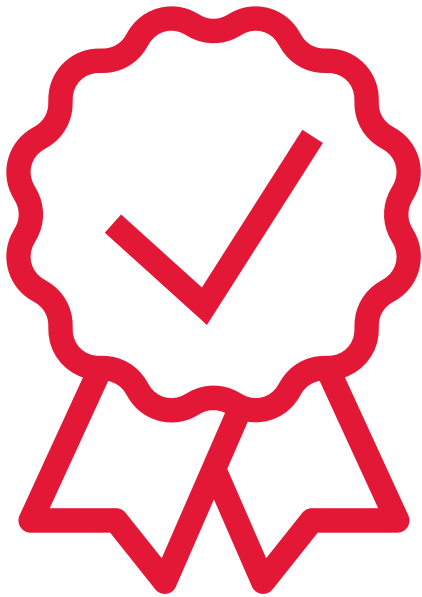
Security

- Integrated multi-factor authentication for Dashboard management
- Role-based access control (RBAC) with granular device and configuration control
- Corporate wide password policy enforcement
- IEEE 802.1X RADIUS and MAB, hybrid authentication and RADIUS server testing
- Single-Host/Multi-Domain/Multi-Host/Multi Authentication
- Port security: Sticky MAC, MAC whitelisting
- DHCP snooping, detection and blocking
- IPv4 and IPv6 ACLs

Regulatory

- CSA-US (US, Canada)
- FCC (USA)
- IC (Canada)
- CE (Europe)
- RCM (Australia/New Zealand)
- RoHS

CablesAndKits Advanced Replacement Lifetime Warranty



Purchase with confidence knowing that your Meraki device comes with a Lifetime Advance Replacement Warranty at no additional cost. We understand that in the event of a product malfunction or failure long downtimes are not an option. If you experience a malfunction or failure with a product at any point during your ownership we'll ship a replacement the same day you report the issue. We'll even expedite the shipment if requested, with an effort to provide a delivery date and time that meets your needs. That's Awesome.