CISCO Meraki

Cette documentation produit Cisco Meraki vous est fournie par :

bouchecousue
conseil en informatique

BoucheCousue est une société de conseil en informatique basée à Paris et **revendeur agréé Cisco Meraki** depuis 2011.

Si vous avez des questions, un projet réseau pouvant bénéficier de la solution & des produits Cisco Meraki, **n'hésitez pas à nous contacter :**
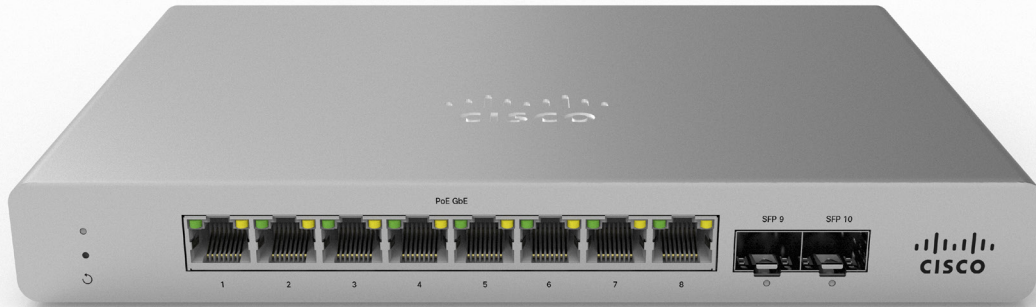
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Retrouvez aussi sur notre blog les dernières actualités Cisco Meraki ainsi que des astuces & informations utiles.

Notre site: https://bouchecousue.com

MS120-8 Compact Switch

1G access switch with 1G SFP uplinks, small form-factor, and optional PoE+

CLOUD-MANAGED COMPACT ACCESS SWITCHES

Cisco Meraki **MS120-8** compact switches provide Layer 2 access switching in a fanless, compact form factor. All models include 1GbE SFP ports for fiber uplink, integrated mounting brackets, and a Kensington security slot, making them ideal for rapid and secure deployment to branch location.

Cisco Meraki switches are built from the ground-up to be easily managed without compromising any of the power and flexibility traditionally found in enterprise-class switches.

Meraki switches are managed through an elegant, intuitive cloud interface, rather than through command line. To set up a Meraki switch, just plug it in; there's no need for complicated configuration files or even direct physical access to the switch.

Meraki's centralized management gives administrators deep visibility into the network and how it's used. For example, you can quickly see which switches are near capacity across hundreds of sites, or find all configuration changes made by a member of the team with instant search.

INDUSTRY-LEADING CLOUD MANAGEMENT

Cloud management has a number of benefits that make it easier to build networks large and small:

- True zero-touch device provisioning.

- Virtual Stacking: manage up to thousands of ports from a single pane of glass.

- Application-layer visibility with automatic operating system, client, and hostname fingerprinting.

- Powerful live tools such as packet capture and cable test to isolate and troubleshoot network issues.

- Alerts to indicate power loss, downtime, excessive Layer 1 issues, and configuration changes.

- Role-based administration and automatic, scheduled firmware upgrades over the web.

- Regular feature updates and enhancements delivered on demand from the Meraki cloud.

Product Highlights

- Gigabit access switching with 8 x 1GbE RJ45 ports and optional PoE/PoE+

- 2 x 1G SFP uplink interfaces on all models

- Fanless operation

- 20Gbps non-blocking compact switch

- 67/124 watt PoE budget with PoE+ support and dynamic power allocation for powering access points, phones, cameras, and other PoE-enabled devices

- 6 dedicated QoS queues for converged voice, video, and data applications

- Integrated mounting brackets for wall or desk mounting, with included Kensington security slot

- Lifetime hardware warranty and advanced replacement at no additional cost

Features

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

Branch & Campus Access

- 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
- Port security and MAC whitelisting
- 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, 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 lets administrators configure thousands of ports across a network in one dashboard action
- 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
- Staged, automatic, and scheduled firmware upgrades for the complete network

Rapid Deployment & Configuration

With Meraki's secure cloud architecture, device provisioning and orchestration becomes completely streamlined. Zero-touch configuration coupled with configuration templates let administrators define a switch configuration once and then bind thousands of switches to a profile, reducing overhead and increasing network security.
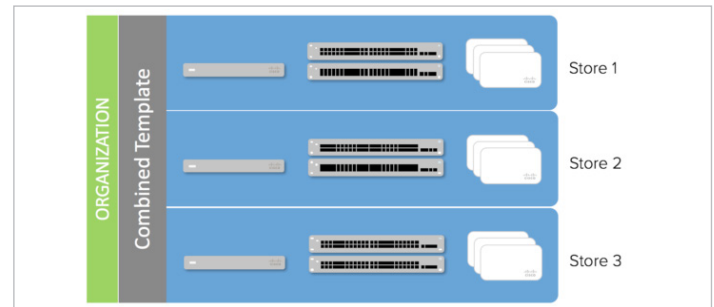
Template network configuration for distributed deployments

Application Layer Visibility

Meraki is the only switch to include integrated Layer 7 fingerprinting. Our powerful, built-in traffic classification features can identify hundreds of applications from business apps to BitTorrent and YouTube. User fingerprinting with Google-like search allows administrators to easily identify and control individual users, PCs, Macs, iPads, Android devices, and other device types. This unprecedented visibility allows optimizing of network resources and maintaining an optimal, secure network that always performs.

Unified Software Architecture

Meraki switches run the same operating system used by all of Meraki's products. The use of a common operating system allows Meraki to deliver a consistent experience across all product lines. When connected, MS120-8 switches automatically connect to the Meraki cloud, download configuration, and join the appropriate network. If new firmware is required, this is retrieved by the switch and updated automatically. This ensures the network is kept up-to-date with bug fixes, security updates, and new features.

Remote cable test in the Meraki dashboard

Simplified Management and 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 scale large network deployments.

By providing a complete, powerful set of management functions over the web, 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 packet captures without any additional probes or hardware on-site.

Scheduled & Automatic Firmware Updates

Automatic E-mail Alerts

Designed for Reliability & Environmental Efficiency

The Meraki switch family was designed for reliable operation in network closets, which are prone to high temperatures and limited ventilation. By minimizing total component count and only using proven switching silicon, Meraki is able to deliver highly reliable products with exceptional mean time between failure (MTBF) ratings.

Each Meraki switch also operates with a split-plane architecture, where silicon-based switching and data forwarding are separated from software-based control and management. By decoupling the underlying switching logic from control, each unit is able to deliver wire-speed switching even when advanced software features such as Layer 7 host and OS fingerprinting are enabled.

Finally, the highly integrated designs of Meraki switches result in power and cooling savings in large deployment environments of 30-60% when compared with similar managed Gigabit switches.

DISTRIBUTED BRANCHES & REMOTE SITES

Meraki's cloud-based system makes it easy to manage a single switch, or thousands of distributed switches, from a single interface.

- Troubleshoot problems remotely; e.g., find which port has a bad cable attached.

- Add or replace switches without having to send a technician on-site. Switches automatically download their current configuration as soon as they are connected to the network.

- Receive email alerts or SMS messages whenever there's a problem at a remote site.

CAMPUS EDGE

MS switches are ideal for small and large scale campus deployments, where reliability, scalability, and managability are top priorities.

- Virtual Stacking lets administators manage up to thousands of ports in a single interface without having to physically connect stack members.

- SFP uplinks with link aggregation provide high speed connectivity to the core of the network.

- Receive alerts if any switch loses connectivity, before users complain.

Dimensions & Interfaces

Model	Physical Dimensions (H x W x D)*	Weight	Interface	Switching Capacity
MS120-8-HW	1.1 x 8.74 x 5.91" (2.8 x 22.2 x 15cm)	2.36 lb (1.07 kg)	• 8 x 10/100/1000BASE-T Ethernet RJ45 with auto negotiation and crossover detection (auto-MDIX crossover) • 2 x 1GbE SFP uplink	20 Gbps
MS120-8LP-HW	1.1 x 8.74 x 5.91" (2.8 x 22.2 x 15cm)	2.76 lb (1.25 kg)	• 8 x 10/100/1000BASE-T Ethernet RJ45 with auto negotiation and crossover detection (auto-MDIX crossover) • 2 x 1GbE SFP uplink	20 Gbps
MS120-8FP-HW	1.75 x 8.97 x 8.58" (4.4 x 22.7 x 23cm)	3.42 lb (1.55 kg)	• 8 x 10/100/1000BASE-T Ethernet RJ45 with auto negotiation and crossover detection (auto-MDIX crossover) • 2 x 1GbE SFP uplink	20 Gbps

What's Included

All Models	1 x Mounting screw kit and anchor
MS120-8-HW and MS120-8LP-HW	1 x External Power Supply

Power Adapter   Wall Screws & Anchors

Power Options & Specifications

Model	Idle / Full Load Power	Available PoE/PoE+ Power	Power Supply Configuration	Power Supply/Model Number
MS120-8-HW	5 / 9 W	–	External Power Supply	DC 12V/2.5A, 30W, MA-PWR-30WAC
MS120-8LP-HW	7 / 88 W	67 W	External Power Supply	DC 54V/1.67A, 90W, MA-PWR-90WAC
MS120-8FP-HW	9 / 161 W	124 W	Fixed internal	DC 56V/2.7A, 150W

Meraki offers a variety of high-speed SFP pluggable optics for use with the MS120-8 Compact switches. Full specifications and compatibility information is available in the Meraki Accessories datasheet: https:// meraki.cisco.com/lib/pdf/meraki_datasheet_sfp.pdf

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

DHCP, client, and hostname fingerprinting

SNMP and Syslog support for integration with other network management solutions

Automatic firmware upgrades with scheduling control

Remote Diagnostics

Email, SMS and mobile push notification alerts [1]

Cable testing and link failure detection with alerting

Live remote packet capture

Dynamic and interactive network discovery and topology

Combined event and configuration change logs with instant search

Stacking

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

Ethernet Switching Capabilities

802.1p Quality of Service, 8 queues (w/ 6 configurable for DSCP-to-CoS mapping)

802.1Q VLAN and trunking support for up to 4,094 VLANs

802.1w, 802.1D Rapid Spanning Tree Protocol (RSTP, STP)

Broadcast storm control

IGMP Snooping

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

MAC forwarding entries: 16K for all models

Security

Integrated two-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

Multi-Domain/Multi-Host/Multi Authentication

Port security: Sticky MAC, MAC whitelisting

DHCP snooping, detection and blocking, Dynamic ARP Inspection

STP Enhancements: BPDU guard, Root guard, Loop guard

IPv4 and IPv6 ACLs

Layer 3

DHCP Relay

Performance

Switching capacity: 20Gbps

Forwarding rate: 14.88mpps with standard packet size

Jumbo frame support (9578 byte ethernet frame)

Flow control support

Power

Power input: 100 - 240 VAC, 47-63 Hz

Power consumption: 5 - 161W

External power supply for MS120-8, MS120-8 LP

Mounting

Wall or utility board mountable with included mount hardware

Desktop-mountable with included feet

Kensington lock slot included

Environment

Operating temperature: 0 °C to 45 °C

Humidity: 5 to 95% non-condensing

Fanless operation

Regulatory[2]

CSA-US (US, Canada)

FCC (USA)

IC (Canada)

CE (Europe)

RCM (Australia/New Zealand)

RoHS

Warranty

Full lifetime hardware warranty with next-day advanced replacement included

MTBF Ratings

Model	MTBF (at 25c)
MS120-8-HW	784,221
MS120-8-LP-HW	502,221
MS120-8-FP-HW	347,479

[1] Requires carrier-supported email to SMS gateway and/or Meraki Mobile app
[2] *For international availability, please contact sales@meraki.com*

Vous souhaitez en savoir plus sur Cisco Meraki et essayer la solution gratuitement? Plusieurs options s'offrent à vous.

En autonomie:

- **Webinar :** Participez à un webinar Cisco Meraki en cliquant ici et recevez ultérieurement un équipement gratuit[1] (comme une borne WiFi, un switch)

- **Try & Buy :** Essayez le matériel Cisco Meraki gratuitement en cliquant ici. A la fin de votre essai vous pouvez décider de garder & acheter le matériel ou le renvoyer.

Avec notre accompagnement:

Contactez-nous par téléphone (+33 1 83 62 52 34) ou par email à hello@bouchecousue.com en nous précisant votre projet. Nous pourrons choisir ensemble le matériel adapté à votre besoin et vous le faire essayer.

Retrouvez aussi nos coordonnées postales sur cette page : https://bouchecousue.com/contact/ si vous souhaitez convenir d'un rendez-vous.

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[1] Nécessite l'éligibilité à des critères définis par Cisco Meraki, vérifiez que vous êtes éligible sur le site de Cisco Meraki