
MS425 Overview and Specifications

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Overview

The Cisco Meraki 425 series extends cloud management across the aggregation layer for medium-size networks with our 10/40G fibre aggregation switches. As with our access layer switches, our aggregation switches are built from the ground up to be easy to manage without compromising any of the power and flexibility, traditionally found in enterprise-class switches.

Available in 2 different port densities, 16 or 32 x 10G SFP+, both of which include 2 x 40G QSFP+ uplink/stacking ports which are capable of providing up to 160Gbps stacking bandwidth to support campus environments.



Features

- Managed via the Cisco Meraki Dashboard
- Remote Packet Capture Tools via Meraki Dashboard
- Automatic Firmware upgrades
- SNMP/Syslog Integration
- IPv4/6 ACL support
- 802.1q VLAN tagging
- Broadcast Storm Control
- Dynamic ARP Inspection / DHCP Snooping
- 802.1X Authentication
- 16 or 32 x 10,000 Mbps SFP+
- 2x 40G QSFP+ uplink/stacking ports
- L3 Switching including OSPF
- Hot Swappable Power Supplies and Fans
- Warm Spare capable

Configuration

The basic initial configuration of the MS425 is just as simple as any other model of MS switch. The links below provide additional information and instructions relating to each step in getting the device setup and configured for the first time.

1. [Claim the device to an Organization on the Meraki Dashboard](#)
 - a. If a Dashboard Organization does not yet exist, [Create one](#)
2. [Add the device to a Dashboard Network](#)
 - a. If a Network does not yet exist, [Create one first](#)
3. Physically connect the device to the local network
 - a. Connect one of the RJ45 ports to existing infrastructure to provide a temporary uplink
 - b. Power on the device and let it check in to the Dashboard
 - c. If necessary, configure a Static IP through the [Local Status Page](#) to allow it to communicate with the Meraki Dashboard.
4. Allow the device to completely check-in and perform any initial firmware upgrades
5. Finish configuring the device from the Meraki Dashboard
 - a. [Create a Switch Stack](#)
 - b. [Manage local VLANs / Port configuration](#)
 - c. [Configure Layer 3 Routing](#)

Context and Comparisons

Description	MS410-32	MS425-32
1GbE SFP	32	-
10GbE SFP+	2	32
40GbE QSFP+	-	2
Dedicated Hardware Stack Port	2	-
Dedicated Management Interface	1	1
Hot Swap Power Supply	Yes, Dual	Yes, Dual
Hot Swap Fans	Yes, x2	Yes, x3
Layer 3 Routing	Yes	Yes
Max Switching Capacity	144 Gbps	800 Gbps
Max Stacking Bandwidth	160 Gbps	160 Gbps

Technical Breakdown



The maximum MTU on MS425 is 9416 bytes.

Hardware Breakdown

Description	MS425-16	MS425-32
10GbE SFP+	16	32
40GbE QSFP+	2	2
Dedicated Management Interface	1	1
Hot Swap Power Supply	Yes, Dual	Yes, Dual
Hot Swap Fans	Yes, x3	Yes, x3

Throughput and Capabilities

Description	MS425-16	MS425-32
Layer 3 Routing	Yes	Yes
Switching Capacity	480 Gbps	800 Gbps
Stacking Bandwidth	160 Gbps	160 Gbps

Physical

Description	MS425-16	MS425-32
Mount Type	1U Rack Mount	1U Rack Mount
Dimensions (h x w x d)	1.72 x 19 x 20.67in (4.42cm x 48.44cm x 48.69cm)	1.72 x 19 x 20.67in (4.42cm x 48.44cm x 48.69cm)
Weight	13.7 lbs (6.2 kg)	14.00 lbs (6.35 kg)
Power Supply	250W AC	250W AC
Power Load (idle/max)	98 / 136 W	98 / 136 W
Operating Temperature	32°F - 104 °F 0°C - 40 °C	32°F - 104 °F 0°C - 40 °C
Humidity	5% to 95%	5% to 95%

Troubleshooting

Common Troubleshooting

My device is connected to the network but not checking in to the Meraki cloud or shows a solid Orange LED.

Confirm that the device is powered on and has a valid IP address that is able to access the Internet. Use the Local Status Page to get more information about the connectivity status of the device such as if it can successfully reach the Local Gateway, Internet, and/or Meraki Cloud servers. If necessary, contact Meraki Support for additional assistance.

My Status LED is blinking WHITE

A blinking WHITE Status LED indicates that the device is in contact with the Dashboard Cloud servers and is performing a firmware update. This can sometimes take 20-45 minutes or more to complete depending on hardware and other factors.

My Status LED is blinking ORANGE

The device is not able to successfully communicate with the Dashboard Cloud servers or there may be a hardware issue with the device. Check the Local Status Page of the device to confirm the status and reach out to Meraki Support for further troubleshooting.

Event Log

The most common Event Log messages and their meaning are listed below.

Port STP change

Indicates the STP state of the port has changed, lists the relevant port number, previous, and new states. Typically accompanied by a 'Port status change' event.

Port status Change

Indicates the link state of the port has changed, lists the relevant port number, old, and new state. Always accompanied by a 'Port STP change' event.

SFP module inserted/removed

Indicates that an SFP module was either inserted or removed, includes SFP module information for inserted events and always lists the relevant port number.

Common Stacking Alerts

View our dedicated [Switch Stacking document](#) for more detailed information about configuring a Switch Stack and common issues.
