'disco' Meraki

MX85 Datasheet

By Amon Stinson, Don Vo and Simarbir Singh

The network performance benchmarks listed in the KB are target numbers based on initial testing and can change on further testing.

Overview

The Meraki **MX85** is an enterprise security appliance designed for distributed deployments that require remote administration across Medium branch environments. It is ideal for network administrators who demand both ease of deployment and a state-of-the-art feature set. The Meraki Dashboard allows for simple and easy deployment of the **MX85** with minimal pre-configuration in almost any location.

Providing 4 dedicated WAN uplinks, 2 x 1GbE SFP ports and 2 x RJ45 1GbE ports. The LAN ports include 8 x RJ45 1GbE ports, and 2 x SFP ports. The MX85 is ready for deployment in a variety of enterprise environments. The MX85 appliance provides the following features:



Features

- Managed via Cisco Meraki Dashboard
- Automatic Firmware upgrades

- Meraki AutoVPN and L2TP/IPSec VPN endpoint
- Active Directory integration

- WAN Link Balancing
- Automatic WAN Failover
- SD-WAN over Meraki AutoVPN
- L3/L7 Stateful Firewall
- · Geo based firewall rules
- 1:1 and 1:Many NAT
- Configurable VLANs / DHCP support
- Static Routing
- Client VPN endpoint

- Content Filtering
- Malware Protection (AMP) w/ optional Threat Grid integration
- IDS/IPS protection
- Custom Traffic Shaping
- Historical Client Usage statistics
- Netflow support
- Syslog integration
- Remote Packet Capture tools

Interfaces

- 2 x 1 Gigabit Ethernet SFP ports dedicated for the WAN uplinks
- 1 x RJ45 / 1 Gigabit Ethernet port dedicated for the WAN uplinks
- 1 x RJ45 / 1 Gigabit Ethernet port with PoE+ capabilities dedicated for the WAN uplinks (port 4 is PoE+ WAN port)
- 8 x RJ45 / 1 Gigabit Ethernet LAN ports
- 2 x SFP / 1 Gigabit Ethernet LAN ports
- 1 x RJ45 dedicated management port for local status page access
- 1 x USB 3.0 port

Context and Comparisons

	<u>MX75</u>	<u>MX85</u>
# of WAN Uplinks	3	4
Stateful Firewall Throughput	1 Gbps	1 Gbps

	<u>MX75</u>	<u>MX85</u>
Maximum site-to-site VPN Throughput	1 Gbps	1 Gbps
Advanced Security Throughput	1 Gbps	1 Gbps
PoE Capabilities	Yes, 2x RJ45 / 1 Gigabit Ethernet port (LAN)	Yes, 1x RJ45 / 1 Gigabit Ethernet port (WAN - port 4)

Note: MX85 supports PoE+ on GbE Port 4. For more information on the behavior of WAN ports, please see <u>WAN</u> behavior on MX75/85/95/105

Technical Breakdown

WAN Interface

<u>MX75</u>	<u>MX85</u>
1 x Dedicated 1 Gigabit Ethernet SFP	2x Dedicated 1 Gigabit Ethernet SFP
2 x Dedicated 1 Gigabit Ethernet RJ45	2x Dedicated 1 Gigabit Ethernet RJ45

Note: The MX firmware currently supports a maximum of two Active WAN Uplinks. For more information about the interface behaviors, please refer to our <u>WAN behavior on MX75/85/95/105</u> <u>documentation</u> and <u>MultiWAN Backup Uplink</u>.

LAN Interface

MX75	MX85
10 x Dedicated 1 Gigabit Ethernet RJ45	8 x Dedicated 1 Gigabit Ethernet RJ45 2 x Dedicated 1 Gigabit Ethernet SFP

Throughput and Capabilities

	MX75	MX85
Recommended Device Count	Small branch with up to 200 devices	Small to medium branch with up to 250 devices
Max VPN Throughput	1 Gbps	1 Gbps

Max Concurrent site-to-site VPN Tunnels	75	200
Max Stateful Firewall Throughput	1 Gbps	1 Gbps
Max Advanced Security Throughput	1 Gbps	1 Gbps

Physical

	<u>MX75</u>	<u>MX85</u>
Mount Type	Desktop	Rack Mount
Dimensions (h x d x w)	1.06" x 5.83" x 11.14" 27 x 148 x 283 mm	1.7" x 9.8" x 19" 43.8 x 250 x 484.6 mm
Weight	1.87lb (0.85kg)	8.2lb (3.7kg)
Input Operating Voltage	90-264VAC (47-63Hz)	Internal 100-127VAC, 200-240VAC (50/60Hz)
PSU Model Number	MA-PWR-100WAC	N/A
Power Load (idle/max)	12W / 96W	12W / 55W
Fan	Yes	No
Operating Temperature	32°F to 113°F (0°C to 45°C)	32°F to 104°F (0°C to 40°C)
Humidity	5% to 95%	5% to 95%

Accessories

Accessory

MA-PWR-CORD-US	1x AC Power Cable, US plug
MA-PWR-CORD-EU	1x AC Power Cable, EU plug
MA-PWR-CORD-UK	1x AC Power Cable, UK plug
MA-PWR-CORD-AU	1x AC Power Cable, AU plug
MA-RCKMNT-KIT-1	Optional: Rack mount screws kit. (Not included with MX85)

Compatible Fiber Transceiver Modules

The Cisco Meraki MX85 supports pluggable optics for high-speed backbone connections between wiring closets or to aggregation switches. Cisco Meraki offers several standards-based Gigabit pluggable modules. Each appliance has also been tested for compatibility with several third party modules.

Product ID	Fiber Type
MA-SFP-1GB-SX	Multi-Mode Fiber (MMF)
MA-SFP-1GB-LX10	Single-Mode Fiber (SMF)
MA-SFP-1GB-TX	N/A (RJ45 Copper SFP)

Note: Please refer to the Meraki SFP Datasheet for additional information about the fiber transceiver modules

Troubleshooting

Common Event Log Messages

Common event logs exist for wired events. As such, no specific MX85 event log entries are required at this time.

For more general information about navigating the Event Log and the types of Events that could be expected please check out our <u>Event Log documentation</u>.

Warranty

MX Warranty coverage periods are as follows:

Product Warranty Warranty Information

MX (e.g. MX85)	Lifetime	Full lifetime hardware warranty with next-day advanced replacement included.
МХ		The following are considered accessories:
Accessories	1 Year	SFP Modules, all mounting kits and stands, interface modules, additional power cords

Additional warranty information can be found on the <u>Return Policy and Requesting a RMA</u> page of the Cisco Meraki website.

If your Cisco Meraki device fails and the problem cannot be resolved by troubleshooting, contact support to address the issue. Once support determines that the device is in a failed state, they can process an RMA and send out a replacement device free of charge. In most circumstances, the RMA will include a pre-paid shipping label so the faulty equipment can be returned.

In order to initiate a hardware replacement for non-functioning hardware that is under warranty, you must have access to the original packaging the hardware was shipped in. The original hardware packaging includes device serial number and order information, and may be required for return shipping.

Meraki **MX85** devices have been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. A digital device that is marketed for use in a residential environment notwithstanding use in commercial, business and industrial environments.