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## 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.

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### 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:



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### 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

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## 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

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## Context and Comparisons

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

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|                                            | <b><u>MX75</u></b>                           | <b><u>MX85</u></b>                                    |
|--------------------------------------------|----------------------------------------------|-------------------------------------------------------|
| <b>Maximum site-to-site VPN Throughput</b> | 1 Gbps                                       | 1 Gbps                                                |
| <b>Advanced Security Throughput</b>        | 1 Gbps                                       | 1 Gbps                                                |
| <b>PoE Capabilities</b>                    | 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 [WAN behavior on MX75/85/95/105](#)

## Technical Breakdown

### WAN Interface

| <b><u>MX75</u></b>                                                            | <b><u>MX85</u></b>                                                          |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1 x Dedicated 1 Gigabit Ethernet SFP<br>2 x Dedicated 1 Gigabit Ethernet RJ45 | 2x Dedicated 1 Gigabit Ethernet SFP<br>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 [WAN behavior on MX75/85/95/105 documentation](#) and [MultiWAN Backup Uplink](#).

### LAN Interface

| <b>MX75</b>                            | <b>MX85</b>                                                                   |
|----------------------------------------|-------------------------------------------------------------------------------|
| 10 x Dedicated 1 Gigabit Ethernet RJ45 | 8 x Dedicated 1 Gigabit Ethernet RJ45<br>2 x Dedicated 1 Gigabit Ethernet SFP |

### Throughput and Capabilities

|                                 | <b>MX75</b>                         | <b>MX85</b>                                   |
|---------------------------------|-------------------------------------|-----------------------------------------------|
| <b>Recommended Device Count</b> | Small branch with up to 200 devices | Small to medium branch with up to 250 devices |
| <b>Max VPN Throughput</b>       | 1 Gbps                              | 1 Gbps                                        |

|                                                |        |        |
|------------------------------------------------|--------|--------|
| <b>Max Concurrent site-to-site VPN Tunnels</b> | 75     | 200    |
| <b>Max Stateful Firewall Throughput</b>        | 1 Gbps | 1 Gbps |
| <b>Max Advanced Security Throughput</b>        | 1 Gbps | 1 Gbps |

## Physical

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

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## Accessories

| <b>Accessory</b> | <b>Description</b> |
|------------------|--------------------|
|------------------|--------------------|

|                        |                                                           |
|------------------------|-----------------------------------------------------------|
| <b>MA-PWR-CORD-US</b>  | 1x AC Power Cable, US plug                                |
| <b>MA-PWR-CORD-EU</b>  | 1x AC Power Cable, EU plug                                |
| <b>MA-PWR-CORD-UK</b>  | 1x AC Power Cable, UK plug                                |
| <b>MA-PWR-CORD-AU</b>  | 1x AC Power Cable, AU plug                                |
| <b>MA-RCKMNT-KIT-1</b> | 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              |
|------------------------|-------------------------|
| <b>MA-SFP-1GB-SX</b>   | Multi-Mode Fiber (MMF)  |
| <b>MA-SFP-1GB-LX10</b> | Single-Mode Fiber (SMF) |
| <b>MA-SFP-1GB-TX</b>   | 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 [Event Log documentation](#).

## Warranty

MX Warranty coverage periods are as follows:

| Product | Warranty Period | Warranty Information |
|---------|-----------------|----------------------|
|---------|-----------------|----------------------|

|                |          |                                                                              |
|----------------|----------|------------------------------------------------------------------------------|
| MX (e.g. MX85) | Lifetime | Full lifetime hardware warranty with next-day advanced replacement included. |
|----------------|----------|------------------------------------------------------------------------------|

|                |        |                                                                                                                                   |
|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------|
| MX Accessories | 1 Year | The following are considered accessories:<br>SFP Modules, all mounting kits and stands, interface modules, additional power cords |
|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------|

**Additional warranty information can be found on the [Return Policy and Requesting a RMA](#) 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.