MX95/105 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 **MX95/105** 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 MX95/105 with minimal preconfiguration in almost any location.

Includes 4x dedicated WAN uplinks, 2x 10G SFP+ ports, and 2x RJ45 2.5G mGig ports. The LAN ports include 4x RJ45 1 GbE ports and 2x SFP+ 10G ports. The MX95/105 is ready for deployment in a variety of enterprise environments. MX95/105 appliances provide the following features:

Features

- Managed via Cisco Meraki dashboard
- Automatic firmware upgrades
- Meraki Auto VPN and L2TP/IPSec VPN endpoint
- Active Directory integration

- WAN link balancing
- Automatic WAN failover
- SD-WAN over Meraki Auto VPN
- 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

- 2x SFP+ / 10 Gigabit Ethernet ports dedicated for the WAN uplink
- 1x RJ45 / 2.5 Gigabit Ethernet port dedicated for the WAN uplink
- 1x RJ45 / 2.5 Gigabit Ethernet port with PoE+ capabilities dedicated for the WAN uplink
- 4x RJ45 / 1 Gigabit Ethernet LAN ports
- 2x SFP+ / 10 Gigabit Ethernet LAN ports
- 1x RJ45 management port for local status page access
- 1x USB 3.0 port

Context and Comparisons

	MX85	**MX95**	**MX105**
# of WAN uplinks	4	4	4
Stateful firewall throughput	1 Gbps	2.5 Gbps	5 Gbps

	MX85	MX95	MX105
Maximum VPN throughput	1 Gbps	2.5 Gbps	3 Gbps
Advanced security throughput	1 Gbps	2 Gbps	2.5 Gbps
PoE Capabilities	Yes, 1x RJ45 / 1 Gigabit Ethernet port (WAN)	Yes, 1x RJ45 / 2.5 Gigabit Ethernet port (WAN)	Yes, 1x RJ45 / 2.5 Gigabit Ethernet port (WAN)

Note: MX85/95/105 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

MX85	MX95/105
2x dedicated 1 Gigabit Ethernet SFP 2x dedicated 1 Gigabit Ethernet RJ45	2x dedicated 10 Gigabit Ethernet SFP+ 2x dedicated 2.5 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

MX85	MX95/105
8x dedicated 1 Gigabit Ethernet RJ45 2x dedicated 1 Gigabit Ethernet SFP	4x dedicated 1 Gigabit Ethernet RJ45 2x dedicated 10 Gigabit Ethernet SFP+

Throughput and Capabilities

	MX85	MX95	MX105

Recommended Device Count	Small to medium branch with up to 250 devices	Mid to large enterprise locations with 500 devices	Mid to large enterprise locations with 750 devices
Max site-to-site VPN throughput	500 Mbps	800 Mbps	1 Gbps
Max concurrent site-to-site VPN tunnels	200	500	1000
Max stateful firewall throughput	1 Gbps	2.5 Gbps	3 Gbps
Max throughput with all advanced security features	1 Gbps	2 Gbps	2.5 Gbps

Physical

	MX85	**MX-95**	**MX105**
Mount Type	Rack mount	Rack mount	Rack mount
Dimensions **(h x d x w)**	1.7 x 9.8 x 19 (in) 43.8 x 250 x 484.6 (mm)	1.73 x 11.23 x 19 (in) 44 x 285.2 x 484.6 (mm)	1.73 x 12.4 x 19 (in) 44 x 315 x 484.6 (mm)
Weight	8.2 lb (3.7 kg)	6.99 lbs (3.17 kg)	10.74 lbs (4.87 kg) 2 fans and 2 PSUs inserted
Input operating voltage	90-264 VAC (47-63 Hz)	100-127 VAC, 200-240 VAC (50/60 Hz)	100-127 VAC, 200-240 VAC (50/60 Hz)
PSU model number	N/A	N/A	Removable

			MA-PWR-150 W AC
Power load (idle/max)	12 W / 55 W	42 W/ 109 W	53 W/ 123 W
Operating temperature	32 °F to 104 °F (0 °C to 40 °C)	32 °F to 104 °F (0 °C to 40 °C)	32 °F to 104 °F (0 °C to 40 °C)
Humidity	5% to 95%	5% to 95%	5% to 95%

Accessories

Accessory	Description
MA-PWR-150WAC	1x Meraki MX105 power supply unit (PSU)
MA-PWR-CORD-US	1x AC power cable, U.S. 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-PWR-CORD-BR	1X AC power cable, BR plug
MA-RCKMNT-KIT-1	Optional: Rack mount screws kit. (Not included with MX95 and MX105)

Compatible Fiber Transceiver Modules

The Cisco Meraki MX95 and MX105 supports pluggable optics for high-speed backbone connections between wiring closets or to aggregation switches. Meraki offers several standards-based Gigabit and 10 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)

MA-SFP-10GB-SR	Multi-mode fiber (MMF)
MA-SFP-10GB-LR	Single-mode fiber (SMF)
MA-SFP-10GB-LRM	Single-mode fiber (SMF)
MA-SFP-10GB-LRM	Multi-mode fiber (MMF)
MA-SFP-10GB-ER	Single-moder fiber (SMF)
MA-SFP-10GB-ZR	Single-mode fiber (SMF)

Direct Attach

Product ID	Description
MA-CBL-TA-1M	10 GSFP+Cu, 1 m passive twinax
MA-CBL-TA-3M	10 GSFP+Cu, 3 m passive twinax

Note: Please refer to the Meraki SFP datasheet for additional information about the SFP accessories

Warranty

MX Warranty coverage periods are as follows:

Product	Warranty Period	Warranty Information
MX95/105	Lifetime	Full lifetime hardware warranty with next-day advanced replacement included.
MX95/105 Accessories	1 Year	The following are considered accessories: 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 MX95/105 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.

Troubleshooting

Common Event Log Messages

Common event logs exist for security appliance events. As such, no specific MX95/105 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.