

MX100 Installation Guide

This document describes how to install and set up the MX100 security appliance. Additional reference documents are available online at: www.meraki.com/library/products.

MX100 Overview

The Meraki MX100 is an enterprise security appliance designed for distributed deployments that require remote administration. It is ideal for network administrators who demand both ease of deployment and a state-of-the-art feature set. This security appliance provides the following new features:

- Two GbE SFP connections (requires optional Meraki SFP-1GB-SX transceiver).
 - USB port, to support approved 3G/4G cards for failover to cellular networks.
 - 1TByte cache storage for WAN acceleration.
 - LAN 2 port can be configured to be a LAN or WAN connection, allowing support up to 2 WAN connections.
 - Dedicated management port.
 - Front-panel rack mounts.
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Package contents

In addition to the MX100, the following are provided.



Power Cable

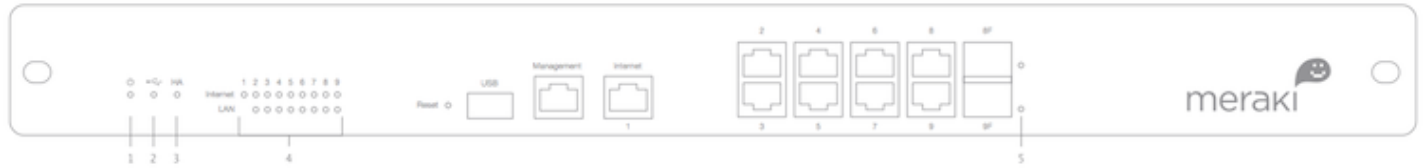


2 CAT6 Ethernet Cables



Rack Mounting Kit

The MX100 front panel



Ports and Status Indicators

The MX100 uses LEDs to inform the user of the device's status. When the device powers on, all the Internet LEDs flash twice. Additional functions are described below, from left to right.

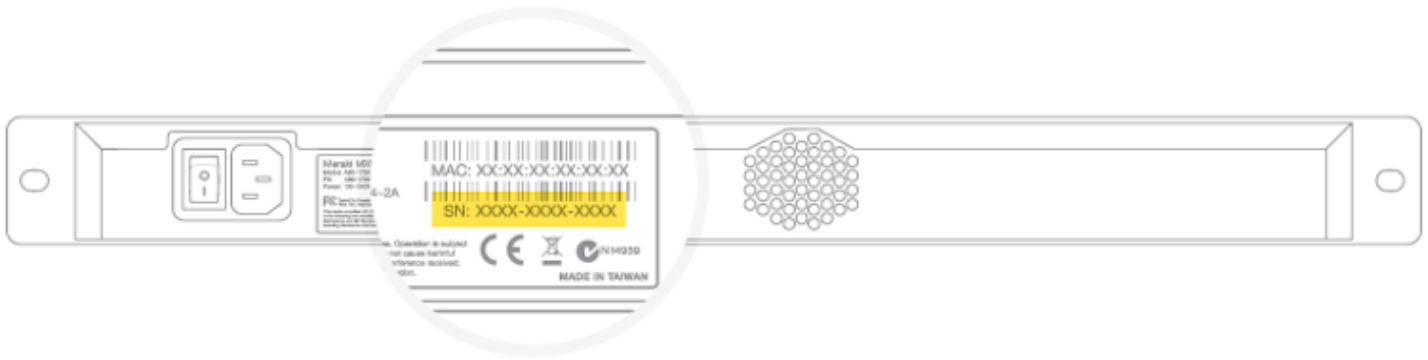
Item	Function	LED Status	Meaning
1	Power	Solid orange	Power is applied
		Shifting colors	Unit is attempting to contact the Cloud
		Flashing white	Operation in progress
		Solid white	Fully operational
2	USB connectivity	Off	During boot or no USB link
		Solid orange	Initial link
		Flashing orange	Internet connectivity not complete
		White	USB connection detected
		Off	No high availability available

3	HA status	Orange	Initial link
		Flashing orange	High availability not complete
		White	High availability available
4	Internet	Green	Port is configured as an Internet uplink port
	LAN	Green	Port is configured as a LAN port
5	SFP connectivity	Off	No SFP connection
		Green	SFP connection

Additional functions on the front panel are described below, from left to right.

Reset button	<p>Insert a paper clip if a reset is required.</p> <ul style="list-style-type: none"> • A brief, momentary press: To delete a downloaded configuration and reboot. • Press and hold for more than 10 sec: To force the unit into a full factory reset.
USB port	USB 2.0 for 3G/4G wireless cards. Traffic status is indicated by the USB LED.
SFP ports	Ports 10 and 11 are designed for SFP-SX (fiber) or SFP-TX (RJ45 copper) GbE connectivity.

The MX100 back panel



Please note that the serial number is located on the product label at the back panel of MX100

Mounting hardware

The mounting hardware includes four sets of standard slot-head rack screws and nuts. The additional screws and nuts are for use with optional rear brackets if rear support is required. When installing the appliance, make sure that there is sufficient space between the rear of the rack and other obstacles to ensure adequate airflow.

Safety guidelines

Regardless if you are using a wall power outlet (MAINS) or any other type of power connection (e.g., a UPC device), always ensure that the power cord can be readily disconnected from the hardware unit.



MX100 comes with a built-in battery for system date and time. You should never attempt to replace the battery yourself. Return the MX100 to Cisco Meraki for battery replacement. Opening the unit to replace the battery will void the warrant.

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO BATTERY INSTRUCTION.

Connecting to WAN

All Meraki MX devices must have an IP address. This section describes how to configure your local area network before you deploy it. A local management web service, running on the appliance, is accessed through a browser running on a client PC. This web service is used for configuring and monitoring basic ISP/WAN connectivity.

Setting up a static IP address



To ensure that the client PC is redirected to the local web service in the following step, you must disable all other network services (ex: wi-fi) on your client machine.

Do the following to configure basic connectivity and other networking parameters:

1. Using a client machine such as a laptop, connect to the **management** port of the MX.
2. Using a browser on the client machine, access the appliance's built-in web service by browsing to <http://setup.meraki.com>. (You do not have to be connected to the Internet to reach this address)
3. Click **Uplink configuration** under the **Local status** tab. The default credentials use the device serial number as the username, with a blank password field.
4. Choose **Static** for the **IP Assignment option**.
5. Enter the IP address, subnet mask, default gateway IP and DNS server information.

Setting up a DHCP IP address

By default all MX devices are configured to DHCP from upstream WAN / ISP servers. Simply plug the MX's WAN / Internet port to your upstream circuit and wait a few minutes for the unit to negotiate a DHCP address.



When the WAN connection is fully enabled, Internet LED will turn green.

Additional settings



Please note that all these settings below are accessible only via the local management console.

Setting VLANs

If your WAN uplink is on a trunk port, choose **VLAN tagging > Use VLAN tagging** and enter the appropriate value for **VLAN ID** for your network.

Setting up secondary WAN interface (dual WAN)

You can toggle the LAN2 port between **LAN** and **Internet**, through **Uplink configuration** under the **Local status** tab.

Setting PPPoE

PPPoE authentication may be required if you are connecting MX device to a DSL circuit. You need to know your authentication option and credentials (supplied by your ISP) in order to complete these steps.

- Choose **Connection Type > PPPoE**.
- Select your **Authentication** option.
- If you select **Use authentication**, enter appropriate values for **Username** and **Password**.

Web proxy settings

These settings take effect if the MX device has to fall back to using HTTP to contact the Cloud Controller. By default, web proxy is disabled. To enable web proxy, do the following:

- Choose **Web proxy > Yes**.
- Enter values as appropriate for **Hostname or IP** and **Port**.
- If you require authentication, choose **Authentication > Use authentication**, and enter appropriate values for **Username** and **Password**.



To apply all configuration settings to the appliance, be sure to click **Save Settings** at the bottom of the page.

Configuring physical link settings

To configure physical link settings on the Ethernet ports, click **Local status > Ethernet configuration**. You can enable half duplex, full duplex, and autonegotiation, as well as set 10- or 100-Mbps data rates.