cisco Meraki

Z1 Installation Guide

This document describes how to install and set up the Z1 teleworker gateway. Additional reference documents are available online at: www.meraki.com/library/products.

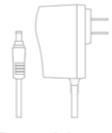
Z1 Overview

The Meraki Z1 is an enterprise teleworker gateway designed for telecommuting employees and IT staff. It is also a great all-in-one device to test the capabilities of Meraki's cloud-managed networking. This gateway provides the following features:

- · Support for four LAN connections
- · Dual-concurrent 802.11n radios for wireless connections
- · Wall screws and anchors for mounting drywall surface, either vertically or horizontally

Package contents

In addition to the Z1, the following are provided.



Power Adapter

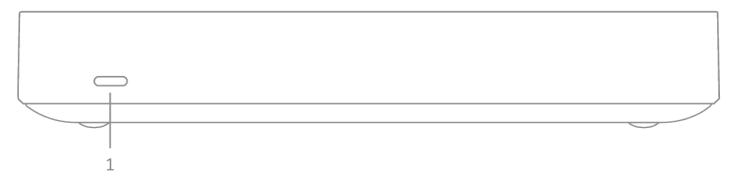


CAT5 Ethernet Cable



Wall Screws & Anchors

The Z1 front panel

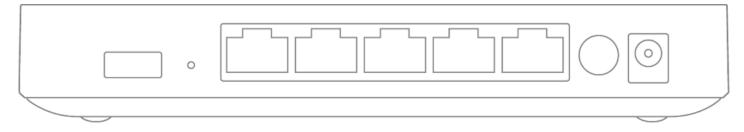


Ports and Status Indicators

The Z1 uses a single LED to inform the user of the device's status.

| LED Status | Meaning |
|----------------|-------------------------------------|
| Flashing white | Operation in progress |
| Solid white | Power is applied, Fully operational |

The Z1 back panel



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

| Reset button | Insert a paper clip if a reset is required. 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. |
|--------------|--|
|--------------|--|

| LAN ports | These 4 ports provide connectivity to computers, printers, access points, or Ethernet switches. A steady green LED indicates bidirectional connectivity, and flashing green indicates traffic. |
|---------------------|---|
| WAN / Internet port | Provides connectivity to the WAN. |
| USB port | USB 2.0 for 3G/4G wireless cards |
| Power input | Designed for use only with the unit's power supply. |

The Z1 bottom panel



Please note that the serial number is located on the product label at the bottom panel of Z1

Mounting hardware

The supplied wall screws and anchors allow you to mount the gateway on a drywall surface, either vertically or horizontally.

• For mounting on drywall, use a $\frac{1}{4}$ -in drill bit, then insert the plastic and screw assemblies.

- For mounting on wood or a similar surface, use only the screws.
- Allow the heads of the screws to stick out far enough to be inserted securely into the back of the gateway.

Connecting to WAN

All Meraki Z1 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 gateway, 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 one of the four **LAN** ports of the Z1.
- 2. Using a browser on the client machine, access the gateway'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 Z1 devices are configured to DHCP from upstream WAN / ISP servers. Simply plug the Z1'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, the device's front LED will be solid white.

Additional settings

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 PPPoE

PPPoE authentication may be required if you are connecting Z1 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 Z1 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 gateway, 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.

Power efficiency modes

The Meraki Z1 Teleworker Appliance has an off mode and a networked standby or efficient idle mode, both with power consumption less than 12W.

In off mode, the power consumption is a measured 0.3W. In the networked standby or efficient idle mode, the power consumption is under that of full operation mode, which is a measured 6.6W. This mode is initiated after treating the last payload packets.

To activate and/or deactivate wireless network ports, you may use the physical on/off switch or deactivate through the Meraki Dashboard.