

Cisco Meraki MR20-HW

Cisco Meraki MR20-HW Cloud Managed Access Point User Manual

Model: MR20-HW (Cisco MR20)

1. INTRODUCTION

The Cisco Meraki MR20 is a dual-radio, cloud-managed 2x2:2 802.11ac Wave 2 access point with MU-MIMO support. It is designed for basic to medium-density deployments, offering enterprise-grade security and simplified management through the Meraki cloud platform. This access point delivers a maximum 1.04 Gbps aggregate frame rate with concurrent 2.4 GHz and 5 GHz radios, providing reliable Wi-Fi for small business and home office networks requiring basic connectivity.



Figure 1: An image showing the top-down view of the white Cisco Meraki MR20 access point, featuring the Cisco Meraki logo on its surface.

2. KEY FEATURES

- **2x2 MU-MIMO 802.11ac Wave 2:** Enhances wireless performance and efficiency for multiple devices.
- **1.04 Gbps Aggregate Dual-Band Frame Rate:** Provides high-speed connectivity across both 2.4 GHz and 5 GHz bands.
- **Integrated Enterprise Security and Guest Access:** Ensures secure network access for both internal users and guests.
- **Built-in WIPS for Threat Detection and Remediation:** Wireless Intrusion Prevention System for enhanced security.
- **Application-aware Traffic Shaping:** Optimizes network performance by prioritizing critical applications.

- **Self-configuring, Plug-and-Play Deployment:** Simplifies installation and setup with automatic configuration.
- **Integrated Location Analytics and Heatmap:** Provides insights into network usage and coverage.

3. SETUP GUIDE

Follow these steps to set up your Cisco Meraki MR20 access point:

1. **Unpack the Device:** Carefully remove the MR20 access point and its accessories from the packaging.
2. **Mounting (Optional):** Determine the optimal location for your access point. The MR20 can be mounted on a wall or ceiling using the included mounting hardware. Ensure the location allows for good signal coverage and access to power and network cables.
3. **Connect to Power:** Connect the power adapter to the MR20 and plug it into a power outlet. Alternatively, if using Power over Ethernet (PoE), connect an Ethernet cable from a PoE-enabled switch or injector to the MR20's Ethernet port.
4. **Connect to Network:** Connect an Ethernet cable from your network switch or router to the MR20's Ethernet port.
5. **Cloud Registration:** The MR20 is a cloud-managed device. You will need to add it to your Meraki dashboard account. Log in to your Meraki dashboard (dashboard.meraki.com), navigate to 'Network-wide' > 'Add devices', and enter the serial number found on the device.
6. **Configuration:** Once registered, the MR20 will automatically download its configuration from the Meraki cloud. You can manage and configure your wireless networks (SSIDs), security settings, and other features directly from the Meraki dashboard.

4. OPERATION

The Cisco Meraki MR20 operates as a wireless access point, broadcasting Wi-Fi signals for client devices to connect to your network. Its operation is primarily managed through the Meraki cloud dashboard.

- **Network Connectivity:** Once powered on and connected to your network, the MR20 will broadcast the SSIDs configured in your Meraki dashboard. Client devices can then connect to these wireless networks.
- **Cloud Management:** All aspects of the MR20's operation, including firmware updates, network settings, user access, and monitoring, are controlled via the Meraki cloud dashboard. This allows for remote management and centralized control.
- **LED Indicator:** The MR20 features an LED indicator that provides status information. Refer to the Meraki documentation for specific LED patterns and their meanings (e.g., booting, connected, error).
- **Guest Access:** If configured, the MR20 can provide secure guest access, isolating guest traffic from your main network.

5. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your MR20 access point:

- **Firmware Updates:** Meraki devices automatically receive firmware updates from the cloud. Ensure your device is connected to the internet to receive these critical updates, which include security patches and new features.
- **Physical Cleaning:** Periodically clean the exterior of the access point with a soft, dry cloth. Do not use liquid cleaners or aerosols. Ensure ventilation openings are clear of dust and debris.
- **Environmental Conditions:** Ensure the MR20 is operating within its specified temperature and humidity ranges. Avoid placing it in direct sunlight or near heat sources.

- **Network Monitoring:** Regularly check the Meraki dashboard for device status, network health, and performance metrics. Address any alerts or warnings promptly.
- **Secure Placement:** Ensure the device is securely mounted and not easily accessible to unauthorized personnel, especially in public areas.

6. TROUBLESHOOTING

Here are some common issues and troubleshooting steps for the MR20 access point:

- **Device Not Powering On:**
 - Verify the power adapter is securely connected to both the MR20 and a working power outlet.
 - If using PoE, ensure the Ethernet cable is connected to a PoE-enabled port on your switch/injector and that the PoE source is active.
- **No Network Connectivity:**
 - Check the Ethernet cable connection between the MR20 and your network switch/router.
 - Ensure your network infrastructure (router, switch, internet connection) is functioning correctly.
 - Verify the MR20 is registered and online in the Meraki dashboard.
- **Slow Wi-Fi Speeds:**
 - Check for potential interference from other wireless devices or networks.
 - Ensure the MR20 is placed optimally for coverage, avoiding obstructions.
 - Review channel and power settings in the Meraki dashboard.
 - Check client device capabilities (e.g., 802.11ac support).
- **Device Not Appearing in Meraki Dashboard:**
 - Confirm the serial number was entered correctly during registration.
 - Ensure the device has an active internet connection to reach the Meraki cloud.
 - Allow a few minutes for the device to connect and appear after initial power-up.

For more detailed troubleshooting, refer to the official Cisco Meraki documentation or contact Meraki support.

7. TECHNICAL SPECIFICATIONS

Feature	Description
Model Number	MR20-HW
Wireless Standard	802.11ac Wave 2
Frequency Band Class	Dual-Band (2.4 GHz, 5 GHz)
Aggregate Frame Rate	1.04 Gbps
MIMO Configuration	2x2 MU-MIMO
Connectivity Technology	RJ45 (Ethernet)

Feature	Description
Control Method	Cloud-managed (Meraki Dashboard)
Recommended Uses	Security, Basic/Medium-Density Deployments
UPC	657768338762
Manufacturer	Cisco Meraki
First Available Date	March 7, 2023

8. WARRANTY AND SUPPORT

As this product is listed as "Amazon Renewed," its warranty and support terms may differ from new products. Please refer to the specific warranty information provided by Amazon Renewed or the seller (Network Hardware Depot) at the time of purchase.

For technical support related to the Cisco Meraki MR20's functionality and cloud management, you can typically access resources through the official Cisco Meraki documentation and support channels. Ensure your device is registered in your Meraki dashboard for access to cloud-based support features.

No official product videos were found for this specific model from the seller.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question