MR84

Dual-band 802.11ac Wave 2 access point with separate radios dedicated to security, RF management, and Bluetooth

High performance 802.11ac Wave 2 wireless
The Cisco Meraki MR84 is a four-radio, cloud-managed 4x4 MU-MIMO 802.11ac Wave 2 access point. Designed for high-performance next-generation deployments — in high-density environments with tough RF — the MR84 offers performance, enterprise-grade security, and simple cloud-based management. A unique industrial design enables flexible installation in harsh outdoor conditions or indoor spaces.

The MR84 provides a maximum 2.5 Gbps* aggregate frame rate with concurrent 2.4 GHz and 5 GHz radios. A dedicated third radio provides real-time WIDS/WIPS with automated RF optimization, and a fourth integrated radio delivers Bluetooth Low Energy (BLE) scanning and Beaconing.

The combination of cloud management, powerful hardware, multiple radios, and advanced software features make the MR84 an outstanding platform for the toughest use cases — including high-density deployments and support for latency-sensitive applications like voice and high-definition video.

MR84 and Meraki cloud management: A powerful combo
Management of the MR84 is handled through the Meraki dashboard, an intuitive browser-based interface that enables rapid deployment across multiple sites without the need for time-consuming training or costly certifications. Since the MR84 is self-configuring and managed over the web, it can be deployed at a remote location in a matter of minutes, even without on-site IT staff.

24x7 monitoring via the Meraki cloud delivers real-time alerts if the network encounters problems. Remote diagnostic tools enable immediate troubleshooting so that distributed networks can be managed with a minimum of hassle.

The MR84’s firmware is automatically kept up to date via the cloud. New features, bug fixes, and enhancements are delivered seamlessly over the web. This means no manual software updates to download or missing security patches to worry about.

Product Highlights

- 4x4:4 160 MHz MU-MIMO 802.11ac Wave 2
- 2.5 Gbps* dual-radio aggregate frame rate
- 24x7 real-time WIDS/WIPS and spectrum analytics via dedicated 3rd radio
- Integrated BLE Beacon and scanning radio
- Full-time WiFi location tracking via dedicated 3rd radio
- Integrated enterprise security and guest access
- Application-aware traffic shaping
- Optimized for voice and video
- Self-configuring, plug-and-play deployment
- Flexible omni- and directional antenna options
- Sleek, low-profile design blends into indoor and outdoor environments

* Refers to maximum over-the-air data frame rate capability of the radio chipset, and may exceed data rates allowed by IEEE 802.11ac-compliant operation.
Advanced analytics
Drill down into the details of your network usage with highly granular traffic analytics. Extend your visibility into the physical world: View visitor numbers, dwell times, repeat visit rates, and compare trends. Fully customize your analysis with simple APIs.
Specifications

Radios
2.4 GHz 802.11b/g/n/ac client access radio
5 GHz 802.11a/n/ac client access radio
2.4 GHz & 5 GHz dual-band WIDS/WIPS, spectrum analysis, & location analytics radio
2.4 GHz Bluetooth Low Energy (BLE) radio with Beacon and scanning support
Concurrent operations of all four radios

Supported frequency bands (country-specific restrictions apply):
2.412-2.484 GHz
5.150-5.250 GHz (UNII-1)
5.250-5.350 GHz (UNII-2)
5.470-5.600, 5.660-5.725 GHz (UNII-2e)
5.725 -5.825 GHz (UNII-3)

802.11ac Wave 2 and 802.11n Capabilities
4 x 4 multiple input, multiple output (MIMO) with four spatial streams
SU-MIMO and MU-MIMO support
Maximal ratio combining (MRC) & beamforming
20 and 40 MHz channels (802.11n), 20, 40, 80, 160, 80 + 80 MHz channels (802.11ac)
Up to 256-QAM on both 2.4 GHz & 5 GHz bands
Packet aggregation

Power
Power over Ethernet: 37 - 57 V (802.3at required with functionality-restricted 802.3af mode supported)
Power consumption: 21W max (802.3at)
Power over Ethernet injector sold separately

Mounting
Mounts to walls and vertical poles.
Mounting hardware included

Physical Security
Security screw included
Concealed mount plate

Environment
Operating temperature: -40 °F to 131 °F (-40 °C to 55 °C)
Humidity: 5 to 95% non-condensing
IP67 environmental rating

Physical Dimensions
28.6 cm x 17.6 cm x 18.5 cm including mounting bracket
Weight: 3.8 lbs. (1.7 kg)

Interfaces
1x 100/1000/2.5G BASE-T Ethernet & 1x 10/100/1000 BASE-T Ethernet (RJ45)
Four external N-type female antenna connectors

Security
Integrated Layer 7 firewall with mobile device policy management
Real-time WIDS/WIPS with alerting and automatic rogue AP containment with Air Marshal
Flexible guest access with device isolation
VLAN tagging (802.1q) and tunneling with IPsec VPN
PCI compliance reporting
WEP, WPA, WPA2-PSK, WPA2-Enterprise with 802.1X
EAP-TLS, EAP-TTLS, EAP-MSCHAPv2, EAP-SIM
TKIP and AES encryption
Enterprise Mobility Management (EMM) & Mobile Device Management (MDM) integration
Cisco ISE integration for Guest access and BYOD Posturing

Quality of Service
Advanced Power Save (U-APSD)
WMM Access Categories with DSCP and 802.1p support
Layer 7 application traffic identification and shaping

Mobility
PMK, OKC, & 802.11r for fast Layer 2 roaming
Distributed or centralized layer 3 roaming

Analytics
Embedded location analytics reporting and device tracking
Global L7 traffic analytics reporting per network, per device, & per application

Warranty
1 year hardware warranty with advanced replacement included

Ordering Information
MR84-HW   Meraki MR84 Cloud Managed 802.11ac AP
MA-INJ-5-XX  Meraki Multigigabit 802.3at PoE Injector (XX = US/EU/UK/AU)
MA-ANT-20   Meraki Dual-Band Omni Antennas
MA-ANT-25   Meraki Dual-Band Patch Antenna
MA-ANT-27   Meraki Dual-Band Sector Antenna
AIR-ANT2513P4M-N= Dual-band, 4-port, 30° beam
Note: Meraki Enterprise license required. For AIR-ANT2513P4M-N= antenna, contact Cisco directly.