



## High-density wireless deployments made easy with the Cisco Meraki MR84

### We love crowds

Providing wireless connectivity to large numbers mobile devices in venues like stadiums, city streets, or parks can be tough. There can be noticeably slow throughput that frustrates users and harms brands; “dead zones” from being unable to run network cabling to remote locations where WiFi is needed; outdoor interference from the elements; and the hassle of trying to manage and secure tens, hundreds, or thousands of access points (APs) across multiple locations with a lean IT staff — to name a few challenges.

At the same time, network providers want more information about their users to better tailor and deliver branded experiences and quality of service, while maintaining high levels of security throughout the wireless infrastructure.

### Enter the Cisco Meraki MR84

Sporting the market’s most advanced 802.11ac Wave 2 chipset, the MR84 provides the highest client density support, a blazingly fast multigigabit uplink for heavy data loads, self-healing mesh, dynamic tuning to automatically optimize RF in congested environments, built-in security, a slew of features to help you selectively tune your RF environments, and integrated location-based analytics to help you understand the foot traffic and behavior of connected clients across your sites. In a nutshell: the MR84 loves a crowd.



Get started with a risk-free trial at  
[meraki.cisco.com/eval](https://meraki.cisco.com/eval)

“The connectivity allows us to welcome our customers and be with them during events as they roam throughout the venue, making sure their experience is positive — and ultimately helping our business to be more profitable.”

– Manuel Saucedo, CEO - Impulsa at Barclaycard Centre

# Best-in-class, high-density wireless made easy

## Crowd-friendly Wi-Fi that deploys in minutes

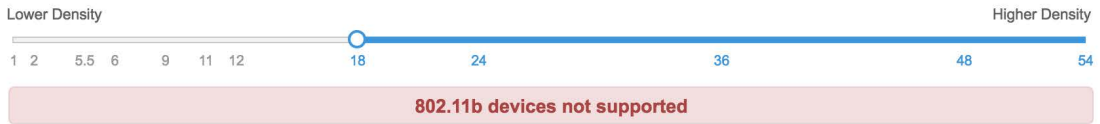
- Serve more concurrent clients with an advanced 802.11ac Wave 2 chipset, 4x4:4-stream MU-MIMO 160MHz architecture, and multigigabit uplink
- Steer clients to faster, less congested 5GHz channels and improve roaming performance by setting minimum bitrates
- Enjoy a seamless wireless experience — even with 10,000+ devices — across entire venue with Layer 3 roaming
- Quickly deploy baseline configuration and security across tens, hundreds, or thousands of APs with network templates
- Rapidly expand wireless connectivity to remote “dead zone” areas with zero-touch, automatic AP meshing
- Reduce RF interference in congested areas with a dedicated scanning radio that proactively tunes to optimize performance
- Improve performance with selective SSID and band enablement

### Wireless options

#### Band selection

- Dual band operation (2.4 GHz and 5 GHz)
- 5 GHz band only  
5 GHz has more capacity and less interference than 2.4 GHz, but legacy clients are not capable of using it.
- Dual band operation with Band Steering  
Band Steering detects clients capable of 5 GHz operation and steers them to that frequency, while leaving 2.4 GHz available for legacy clients.

#### Minimum bitrate (Mbps)



## Integrated analytics for better service & branding

- Leverage out-of-the-box analytics to understand client behavior and foot traffic across sites and venues
- Use location data to make informed decisions about staffing, event or storefront displays, advertising — even AP placement
- Deploy targeted advertising via built-in splash page hosting, integrated billing for pay-per-use WiFi, or BLE beaconing with retailing apps.
- Integrate raw, real-time data with business intelligence systems and perform deeper analysis using built-in API



Location analytics displays customizable charts on foot traffic, like dwell time and repeat visits — and is included at no additional charge.

## Enterprise security without the hassle

- Enable groups like ticketing, refreshments, or emergency response to receive different security postures and network access across one SSID, reducing RF overhead
- Employ Cisco ISE integration (with CoA) to securely manage authorized users, onboard guests with rich splash pages, and assess the security of BYOD devices
- Integrated, stateful Layer 3 and 7 firewalling, enterprise grade encryption and authentication, and VLAN tagging support

- Secure guest WiFi with device isolation that takes seconds to deploy via the Meraki dashboard
- Run the latest, most feature-rich and secure software with automatic firmware and security updates
- Protect your network with a dedicated, dual-band security radio that continuously scans for and contains rogue APs and malicious packets — all without hampering client access to WiFi

Containment	SSID	Last seen	First seen	# APs	Rogue because *	Manufacturer
uncontained	xfinitywifi-test-hao	Aug 18 17:16	Jul 29 00:23	1	Seen on LAN	Meraki
uncontained	MR42 OUI 0	Aug 18 17:16	Jul 13 15:55	2	Seen on LAN	Meraki
uncontained	OSU-OSEN	Aug 18 17:16	Aug 5 15:59	2	Seen on LAN	Meraki
uncontained	W072	Aug 18 17:16	May 20 11:29	1	Seen on LAN	Meraki
uncontained	Tunnel Test	Aug 18 17:16	Jul 13 13:58	1	Seen on LAN	Meraki
uncontained	Sentry WiFi Security	Aug 18 17:16	Oct 12 16:54	1	Seen on LAN	Meraki
uncontained	Sentry Policies	Aug 18 17:16	Nov 16 18:35	1	Seen on LAN	Meraki
uncontained	Sentry Enrollment	Aug 18 17:16	Oct 12 16:54	1	Seen on LAN	Meraki

Air Marshal automatically protects wireless networks in real time.

Containment	SSID	Last seen	First seen	# APs	Rogue because *	Manufacturer	Channel	Broadcast MACs
uncontained	xfinitywifi-test-hao	Aug 18 17:16	Jul 29 00:23	1	Seen on LAN	Meraki	1	88:15:44:00:84:16
uncontained	MR42 OUI 0	Aug 18 17:16	Jul 13 15:55	2	Seen on LAN	Meraki	11, 140	88:15:44:00:84:08 1:10000:1
uncontained	OSU-OSEN	Aug 18 17:16	Aug 5 15:59	2	Seen on LAN	Meraki	40	0a:1a:7b:0f:69 1:10000:1
uncontained	W072	Aug 18 17:16	May 20 11:29	1	Seen on LAN	Meraki	161	8e:15:54:50:0a:42
uncontained	Tunnel Test	Aug 18 17:16	Jul 13 13:58	1	Seen on LAN	Meraki	161	02:18:5a:20:0b:c3
uncontained	Sentry WiFi Security	Aug 18 17:16	Oct 12 16:54	1	Seen on LAN	Meraki	161	02:18:5a:20:0b:c1
uncontained	Sentry Policies	Aug 18 17:16	Nov 16 18:35	1	Seen on LAN	Meraki	161	02:18:5a:20:0b:c2
uncontained	Sentry Enrollment	Aug 18 17:16	Oct 12 16:54	1	Seen on LAN	Meraki	161	02:18:5a:20:0b:c0
uncontained	WHYPHY42 green	Aug 18 17:17	Jun 14 17:55	2	Seen on LAN	Meraki	6, 149	82:15:44:00:84:67 1:10000:1
uncontained	WHYPHY42	Aug 18 17:17	Jun 29 16:50	2	Seen on LAN	Meraki	6, 149	86:15:44:00:84:67 1:10000:1

Block or shape traffic by application, hostname, port range, or IP.

### Certified Antennas

AIR-ANT2513P4M-N=	Dual-band, 4-port, 30° beam
MA-ANT-27*	Dual-band sector
MA-ANT-25	Dual-band patch
MA-ANT-20	Dual-band omni



## Learn More

Cisco Meraki offers cloud-managed enterprise networking products with a refreshingly simple approach. We recognize there are many factors to consider when updating a network, and we therefore strive to make every step along the way easy. Let us know how we can help!

**Risk-free evaluation**  
[meraki.cisco.com/eval](https://meraki.cisco.com/eval)

**Check out our website & blog**  
[meraki.cisco.com/blog](https://meraki.cisco.com/blog)

**Contact Sales**  
[meraki.cisco.com/contact](https://meraki.cisco.com/contact)

# 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.