

Meraki MR58

Datasheet



Provide high speed wireless coverage to large areas quickly, easily, and cost effectively

The MR58 is a three-radio, 802.11n access point designed to provide high-speed wireless coverage over large indoor and outdoor areas. Example deployments include corporate and educational campuses, business districts, industrial areas, and public spaces.

One of the keys to the MR58's high performance is the use of three separate 802.11n radios, each operating concurrently on a separate frequency band. The MR58 also uses advanced radio techniques like MIMO, beam forming, multiple radio combining, and expanded channel widths to increase performance.

Since the MR58 is configured and controlled through the Meraki Cloud Controller, creating a secure and sophisticated network takes just minutes. Dashboard provides network wide frequency planning, automatic, over the air firmware upgrades, hosted branding, and simplified authentication. In addition, the MR58 features Meraki's award-winning mesh technology, which can further reduce installation time.

An MR58-based network costs a fraction of traditional network infrastructure. Elimination of separate controllers and software help minimize upfront expense, while simplified web-based management reduces ongoing costs. Drawing only 8 watts of power, the MR58 also helps decrease power consumption.

Recommended Use Cases

> High-Performance Networks

- Provide high-speed access to a large number of clients.
- The highest performance is achieved when each MR58 is connected to a wired backhaul.

> Point-to-Multi-Point Mesh

- Cover a large area with a limited number of backhaul connections.
- Multiple MR58s can form a high-speed mesh backbone network that provides service to other Meraki devices, such as the Meraki Indoor or Outdoor.

> Long Distance Point-to-Point

- Build a long-distance bridge between two networks.
- Two MR58s can establish up to a 20 km link using high-gain antennas.

Specifications

➤ Radios

- Three 802.11 a/b/g/n radios
 - Auto-selection of optimal 2.4 GHz or 5 GHz frequencies
 - Max radio rate 300 mbit/s per radio
 - Connect, transmit, and receive on all three radios
 - 2.4 GHz 22 dBm peak transmission power
 - 5 GHz 21 dBm peak transmission power
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➤ 802.11n Capabilities

- 2 x 2 multiple input, multiple output (MIMO) with two spatial streams
 - Maximal ratio combining (MRC)
 - Beamforming
 - 20 and 40 MHz channels
 - Packet aggregation
 - Cyclic shift diversity support
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➤ Typical Outdoor Range

- Refer to Meraki Range Calculator
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➤ Power

- Power over Ethernet: 802.3af compatible
 - Power consumption: 12.8 W max; 7.5 W typical
 - Power over Ethernet adapter available separately
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➤ Warranty

- 1 year hardware warranty included
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➤ Ordering Information

MR58-PRO	Meraki MR58 with Pro Edition Service
POE-INJ-3-US	Meraki Power Over Ethernet for Meraki MR58 (US Plug)
ANT-10	Meraki 5 - 7 dBi Omni Antenna, Dual Band, N-Type, Set of 2
ANT-11	Meraki 14 dBi Sector Antenna, 5 GHz MIMO, N-Type
ANT-13	Meraki 11 dBi Sector Antenna, 2.4 GHz MIMO, N-Type

➤ Mounting

- Mounts to walls and horizontal, vertical, and angled poles
 - Mounting hardware included
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➤ Environment

- Operating temperature: -4° F to 122° F (-20° C to 50° C)
 - IP-65 environmental rating (sealed against water and dust)
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➤ Physical Dimensions (without antennas)

- 9.8" x 10" x 3.1" (250mm x 260mm x 80mm) not including mount
 - Weight: 3.8 lb (1.7 kg)
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➤ Interfaces

- Two 10/100 Mbps auto-crossover Ethernet ports
 - Six external N-type connectors
 - Signal strength LEDs
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➤ Regulatory

- FCC (USA)
 - IC (Canada)
 - CE (Europe) with DFS
 - C-Tick (Australia)
 - Max transmission power is decreased for certain geographies to comply with regulatory requirements
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