DATASHEET

Meraki MR62

Single-Radio Outdoor 802.11n Access Point

Ruggedized, outdoor cloud-managed wireless LAN

The Meraki MR62 is an enterprise class, single-radio 802.11n cloud managed access point designed for deployments in harsh outdoor locations and industrial indoor environments. The MR62 uses advanced 802.11n technologies including MIMO and beamforming to deliver the throughput and reliable coverage required by the most demanding business applications, even in harsh environments.

MR62 and the Meraki Cloud Controller: A Powerful Combination

The MR62 is managed through the Meraki Enterprise Cloud Controller, with an intuitive browser-based interface that lets you get up and running quickly without training or certifications. Since the MR62 is self-configuring and managed over the web, it can even be deployed at a remote location without on-site IT staff.

The MR62 is monitored 24x7 from the Meraki Enterprise Cloud Controller which delivers real-time alerts if your network encounters problems. Remote diagnostics tools also enable real-time troubleshooting over the web.

The MR62's firmware is always kept up to date from the cloud. New features, bug fixes, and enhancements are delivered seamlessly over the web, so you never have to manually download software updates or worry about missing security patches.

Recommended Use Cases

Outdoor coverage for corporate campuses, educational institutions, and parks

- Provide high-speed access to a large number of clients
- Mesh networking

Indoor coverage for industrial areas (e.g., warehouses, manufacturing facilities)

- Reliable coverage for scanner guns, security cameras, and POS devices
- High speed-access for portable tablets and laptops

Long distance point-to-point

- Build a long-distance bridge between two networks
- Two MR62s can establish up to a 20 km link using high-gain antennas

Features

Enterprise class 802.11n, up to 300 Mbit/sec

The MR62 features two powerful radios and advanced RF design for enhanced receive sensitivity. Combined with 802.11n technologies including MIMO and beamforming, the MR62 delivers up to 300 Mbit/sec throughput and up to 50% increased capacity compared to typical rugged enterprise-class 802.11g access points, meaning fewer access points are required for a given deployment.

Rugged industrial design

The MR62 is designed and tested for salt spray, vibration, extreme thermal conditions, shock and dust and is IP67-rated, making it ideal for extreme environments. Despite its rugged design, MR62 has a low profile and is easy to deploy.

Application-aware traffic shaping

The MR62 includes an integrated layer 7 packet inspection, classification, and control engine, enabling you to set QoS policies based on traffic type. Prioritize your mission critical applications, while setting limits on recreational traffic, e.g. peer-to-peer and video streaming.

Automatic cloud-based RF optimization with spectrum analysis

The MR62's sophisticated, automated RF optimization means that there is no need for the dedicated hardware or RF expertise typically required to tune a wireless network. An integrated spectrum analyzer monitors the airspace for neighboring WiFi devices as well as non-802.11 interference – microwave ovens, Bluetooth headsets, etc. The Meraki Cloud Controller then automatically optimizes the MR62's channel selection, transmit power, and client connection settings, providing optimal performance even under challenging RF conditions.

Integrated enterprise security and guest access

The MR62 features integrated, easy-to-configure security technologies to provide secure connectivity for employees and guests alike. Advanced security features such as AES hardware-based encryption and WPA2-Enterprise authentication with 802.1X and Active Directory integration provide wire-like security with the convenience of wireless mobility. One-click guest isolation provides secure, Internet-only access for visitors. The Meraki policy firewall (Identity Policy Manager) enables group-based, granular access policy control.

High performance mesh

The MR62's advanced mesh technologies like multi-channel routing protocols and multiple gateway support enable scalable, high throughput coverage of hard-to-wire areas with zero configuration. Mesh also improves network reliability - in the event of a switch or cable failure, the MR62 will automatically revert to mesh mode, providing continued gateway connectivity to clients.

Self-configuring, self-optimizing, self-healing

When plugged in, the MR62 automatically connects to the Meraki Enterprise Cloud Controller, downloads its configuration, and joins your network. It self optimizes, determining the ideal channel, transmit power, and client connection parameters. It also self heals, responding automatically to switch failures and other errors.

Low profile, environmentally friendly design

In addition to eliminating excess packaging and documentation, 90% of the access point materials are recyclable. A maximum power draw of only 6.5 watts and a cloud-hosted, multi-tenant controller mean that pollution, material utilization and your electric bill are kept to a minimum.

Specifications

› Radio
- 2.4 GHz 802.11b/g/n radio
- Max data rate: 300 Mbit/s
- 2.4 GHz 26 dBm peak transmission power
- Max transmission power is decreased for certain geographies to comply with local regulatory requirements
- Operating bands:

FCC (US)	*EU (Europe)*
2.412-2.484 GHz	2.412-2.484 GHz

› 802.11n Capabilities
- 2 x 2 multiple input, multiple output (MIMO) with two spatial streams
- Maximal ratio combining (MRC)
- Beamforming
- Packet aggregation
- Cyclic shift diversity (CSD) support

› Power
- Power over Ethernet: 24 - 57 V (802.3af compatible)
- Power consumption: 6.5 W max
- Power over Ethernet injector sold separately

› Mounting
- Mounts to walls and horizontal and vertical poles
- Mounting hardware included

› Physical Security
- Security screw included

› Environment
- Operating temperature: -4 °F to 122 °F (-20 °C to 50 °C)
- IP67 environmental rating

› Physical Dimensions
- 10.5" x 7.6" x 2.2" (267 mm x 192 mm x 57 mm)
- Weight: 1.5 lb (680 g)

› Interfaces
- 1x 100/1000Base-T Ethernet (RJ45) with 48V DC 802.3af PoE
- Two external N-type antenna connectors

› Security
- Integrated policy firewall (Identity Policy Manager)
- 24x7 wireless intrusion detection
- Guest isolation
- WEP, WPA
- WPA2-PSK
- WPA2-Enterprise with 802.1X
- TKIP and AES encryption
- VLAN tagging (802.1q)

› Quality of Service
- Wireless Quality of Service (WMM/802.11e)
- Advanced Power Save (U-APSD)
- DSCP (802.1p)

› LED Indicators
- 4 signal strength
- 1 Ethernet connectivity
- 1 power/booting/firmware upgrade status

› Regulatory
- FCC (US)
- IC (Canada)
- CE (Europe)
- C-Tick (Australia/New Zealand)
- RoHS

› Warranty
- 1 year hardware warranty with advanced replacement included

› Ordering Information

MR62-HW	Meraki MR62 Cloud-Managed 802.11n Ruggedized Access Point
POE-INJ-3-XX	Meraki 802.3af Power over Ethernet Injector (XX = US, EU, UK or AU)
ANT-10	Meraki 5/7 dBi Omni Antenna, Dual-band, N-type, Set of 2
ANT-13	Meraki 11 dBi Sector Antenna, 2.4 GHz MIMO, N-type

Note: Meraki Enterprise Cloud Controller license required.

› RF Performance Table

Operating Band	Operating Mode	Data Rate	TX Power (dBm)	RX Sensitivity
2.4 GHz	802.11b	1 Mb/s	22	-96
		2 Mb/s	22	-94
		5.5 Mb/s	21	-95
		11 Mb/s	21	-92
2.4 GHz	802.11g	6 Mb/s	26	-95
		9 Mb/s	26	-94
		12 Mb/s	26	-93
		18 Mb/s	26	-93
		24 Mb/s	25	-91
		36 Mb/s	25	-87
		48 Mb/s	24	-83
		54 Mb/s	23	-81
2.4 GHz	802.11n (HT20)	MCS0/8 HT20	21	-96
		MCS1/9 HT20	21	-94
		MCS2/10 HT20	21	-92
		MCS3/11 HT20	21	-89
		MCS4/12 HT20	21	-85
		MCS5/13 HT20	21	-82
		MCS6/14 HT20	19	-81
		MCS7/15 HT20	18	-79
2.4 GHz	802.11n (HT40)	MCS0/8 HT40	21	-93
		MCS1/9 HT40	22	-91
		MCS2/10 HT40	21	-89
		MCS3/11 HT40	22	-86
		MCS4/12 HT40	21	-82
		MCS5/13 HT40	21	-79
		MCS6/14 HT40	19	-78
		MCS7/15 HT40	18	-76

*Maximum hardware capability shown above. Transmit power is configurable in increments of 1 dB and is automatically limited by the Meraki Cloud Controller to comply with local regulatory settings.