# Cisco Meraki MR Cloud Managed Access Points

CISCO DESIGNED



## Enterprise-class Performance, Managed from the Cloud for Faster Deployment, Simplified Administration, and Richer Visibility

The **Cisco Meraki MR Cloud Managed Access Points** are built from the highest grade components and carefully optimized for a seamless user experience. The outcome: faster connections, greater user capacity, more coverage, and fewer support calls.

NEW

Cisco Meraki MR36

Wi Fi 6 CERTIFIED

## Highlights

The Cisco Meraki wireless solution includes a complete, robust feature set right out of the box. No additional purchase required.

### Centralized Management

Seamlessly manage campus-wide Wi-Fi deployments and distributed multi-site networks from a single pane-of-glass.

### Multigigabit Ethernet

Pass up to 5 Gbps of traffic over a single existing cable in order to take full advantage of high-speed Wi-Fi 6.

### Location Analytics

Reveal powerful metrics such as visitor capture rate, user visit time, and repeat visits by listening for wireless devices.

### Application Visibility & Control

Identify which applications are being used, and then prioritize critical apps while limiting recreational apps.

### High Capacity Wi-Fi 6

RF optimization with real-time spectrum analysis enables high-performance wireless in dense, demanding environments.

### Automatic RF Optimization

Automatically optimizes Wi-Fi by measuring channel utilization, signal strength, throughput, and interference.

### Dedicated Security Radio

Instantly detects interference, vulnerabilities, and attacks on all channels.

### Identity-based Firewall

Automatically assigns firewall and traffic shaping rules, VLAN tags, and bandwidth limits to enforce the right policies for each class of users.

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# Cisco Meraki MR Cloud Managed Access Points



## Cisco Meraki MR Cloud Managed Access Points Positioning Map

High ←

| | | |
|---|---|---|
| 4,804 Mbps (5 GHz) + 1,147 Mbps (2.4 GHz) | 8×8:8 DL/UL MU-MIMO + 4×4:4 DL/UL MU-MIMO | Wi-Fi 6 * MR55; Wi-Fi 6 NEW MR56 |
| 2,402 Mbps (5 GHz) + 1,147 Mbps (2.4 GHz) | 4×4:4 DL/UL MU-MIMO + 4×4:4 DL/UL MU-MIMO | Wi-Fi 6 * MR45; Wi-Fi 6 NEW MR46 |
| 1,733 Mbps (5 GHz) + 800 Mbps (2.4 GHz) | 4×4:4 DL MU-MIMO + 4×4:4 SU-MIMO | MR52; MR53; MR53E |
| 1,300 Mbps (5 GHz) + 600 Mbps (2.4 GHz) | 3×3:3 DL MU-MIMO + 3×3:3 SU-MIMO | MR42; MR42E |
| 1,201 Mbps (5 GHz) + 573 Mbps (2.4 GHz) | 2×2:2 DL/UL MU-MIMO + 2×2:2 DL/UL MU-MIMO | Wi-Fi 6 NEW MR36 |
| 867 Mbps (5 GHz) + 400 Mbps (2.4 GHz) | 2×2:2 DL MU-MIMO + 2×2:2 SU-MIMO | MR20; MR30H; MR33 |

Wireless Client Density → High

*1 Wi-Fi 6 compatible (UL MU-MIMO/OFDMA is not supported).

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# Cisco Meraki MR Cloud Managed Access Points



## Cisco Meraki MR Cloud Managed Access Points (À la carte for SMB)

| Product SKU | Radio | | | | | Uplink | Downlinks | | PoE (PD)*2 | | Power Supply |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2.4 GHz | 5 GHz | WIDS/WIPS | BLE | Antenna | 1GE RJ45 | 1GE RJ45 | 1GE PoE RJ45 | 802.3af | 802.3at | |
| MR20-HW | 11n 2×2:2 | 11ac 2×2:2 | *1 | | | 1 | | | ✓ | ✓ | ✓*2 |
| MR30H-HW | 11n 2×2:2 | 11ac 2×2:2 | ✓ | ✓ | Internal | 1 | 3 | 1 | ✓*3 | ✓ | |
| MR33-HW | 11n 2×2:2 | 11ac 2×2:2 | ✓ | ✓ | Internal | 1 | | | ✓ | ✓ | ✓*2 |
| MR36-HW NEW | 11ax 2×2:2 | 11ax 2×2:2 | ✓ | ✓ | Internal | 1 | | | ✓ | ✓ | ✓*2 |
| MR42-HW | 11n 3×3:3 | 11ac 3×3:3 | ✓ | ✓ | Internal | 1 | | | ✓*3 | ✓ | ✓*2 |
| MR42E-HW | 11n 3×3:3 | 11ac 3×3:3 | ✓ | ✓ | External*2 | 1 | | | ✓*3 | ✓ | ✓*2 |

*1 MR20 performs scans only when no clients are connected. *2 Sold separately. *3 Some features are disabled when powered via 802.3af PoE.

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# Cisco Meraki MR Cloud Managed Access Points



## Cisco Meraki MR Enterprise Licenses

| Product SKU | Description | Compatible Model | | | | | |
|---|---|---|---|---|---|---|---|
| | | MR20 | MR30H | MR33 | MR36 | MR42 | MR42E |
| LIC-ENT-1YR | Meraki MR Enterprise License and Support, 1 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LIC-ENT-3YR | Meraki MR Enterprise License and Support, 3 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LIC-ENT-5YR | Meraki MR Enterprise License and Support, 5 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LIC-ENT-7YR | Meraki MR Enterprise License and Support, 7 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LIC-ENT-10YR | Meraki MR Enterprise License and Support, 10 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Cisco Meraki MR Advanced Licenses NEW

| Product SKU | Description | Compatible Model | | | | | |
|---|---|---|---|---|---|---|---|
| | | MR20 | MR30H | MR33 | MR36 | MR42 | MR42E |
| LIC-MR-ADV-1Y | Meraki MR Advanced License and Support, 1 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LIC-MR-ADV-3Y | Meraki MR Advanced License and Support, 3 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LIC-MR-ADV-5Y | Meraki MR Advanced License and Support, 5 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## Cisco Meraki MR Advanced License Upgrade NEW

| Product SKU | Description | Compatible Model | | | | | |
|---|---|---|---|---|---|---|---|
| | | MR20 | MR30H | MR33 | MR36 | MR42 | MR42E |
| LIC-MR-UPGR-1Y | Meraki MR Advanced License Upgrade and Support, 1 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LIC-MR-UPGR-3Y | Meraki MR Advanced License Upgrade and Support, 3 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| LIC-MR-UPGR-5Y | Meraki MR Advanced License Upgrade and Support, 5 Year | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

### Cisco Meraki and Umbrella Integration

The **Cisco Meraki MR Advanced + Upgrade Licenses** with Cisco Umbrella integration enables Meraki administrators to assign pre-defined Umbrella content filtering and security policies to an SSID or Group Policy directly from the dashboard and removes the need to integrate with an existing Umbrella dashboard or Umbrella account.

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# Cisco Meraki MR Cloud Managed Access Points



## Cisco Meraki MR Power Injectors & Power Supplies

| Product SKU | Description | Compatible Model | | | | | |
|---|---|---|---|---|---|---|---|
| | | MR20 | MR30H | MR33 | MR36 | MR42 | MR42E |
| MA-INJ-4-*xx* | PoE Injector (802.3at) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MA-PWR-30W-*xx* | Power Supply | ✓ | | ✓ | ✓ | ✓ | ✓ |

## Cisco Meraki MR Antennas

| Product SKU | Description | Compatible Model | | | | | |
|---|---|---|---|---|---|---|---|
| | | MR20 | MR30H | MR33 | MR36 | MR42 | MR42E |
| MA-ANT-3-A5 | Dipole Antenna | | | | | | ✓ |
| MA-ANT-3-B5 | Dipole Antenna (Bendable) | | | | | | ✓ |
| MA-ANT-3-C5 | Panel Omni Antenna | | | | | | ✓ |
| MA-ANT-3-D5 | Downtilt Panel Omni Antenna | | | | | | ✓ |
| MA-ANT-3-E5 | Wide Patch Antenna | | | | | | ✓ |
| MA-ANT-3-F5 | Narrow Patch Antenna | | | | | | ✓ |

MA-ANT-3-A5

MA-ANT-3-B5

MA-ANT-3-C5

MA-ANT-3-D5

MA-ANT-3-E5

MA-ANT-3-F5

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# Cisco Meraki MR Cloud Managed Access Points



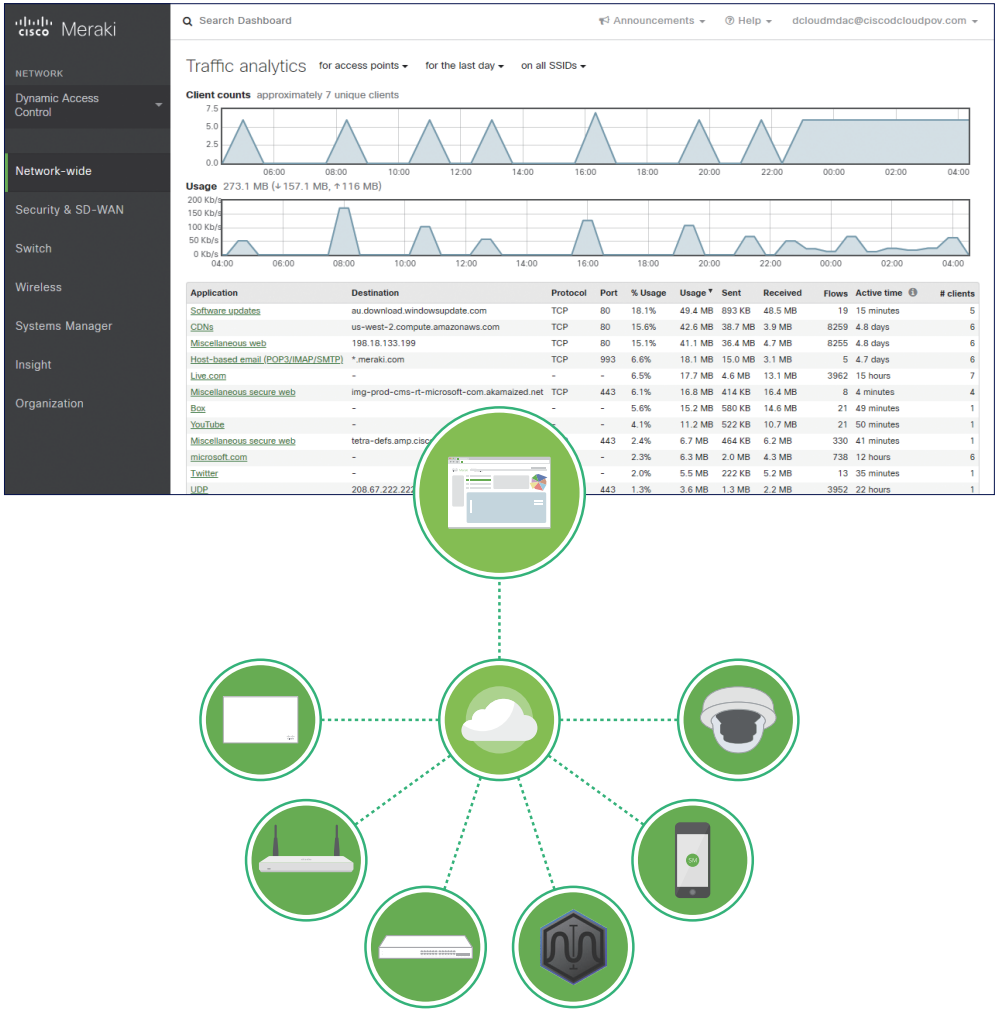
## Cloud Management Architecture

Cisco Meraki's architecture provides feature-rich network management without on-site management appliances or Wi-Fi controllers.

Every Meraki device —including access points, switches, security & SD-WAN appliances, and cameras— connects over the Internet to Meraki's datacenters, which run Meraki's cloud management platform.

These connections, secured via SSL, utilize a patented protocol that provides real-time visibility and control, yet uses minimal bandwidth overhead (typically 1 Kbps or less.)

In place of traditional command-line based network configuration, Meraki provides a rich web-based dashboard, providing visibility and control over up to tens of thousands of Meraki devices, anywhere in the world. Tools, designed to scale to large and distributed networks, make policy changes, firmware updates, deploying new branches, etc. simple and expedient, regardless of size or location. Meraki's real-time protocols combine the immediacy of on-premise management applications with the simplicity and centralized control of a cloud application.

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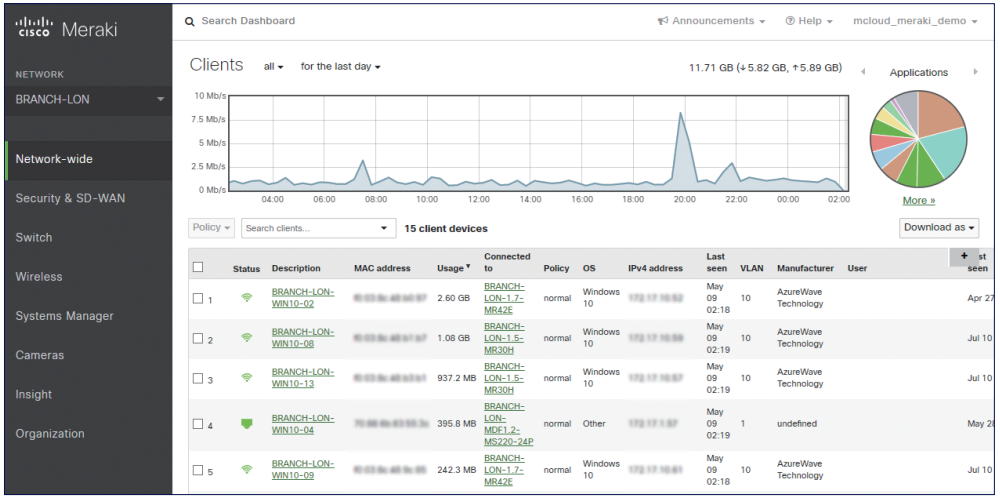
# Cisco Meraki MR Cloud Managed Access Points



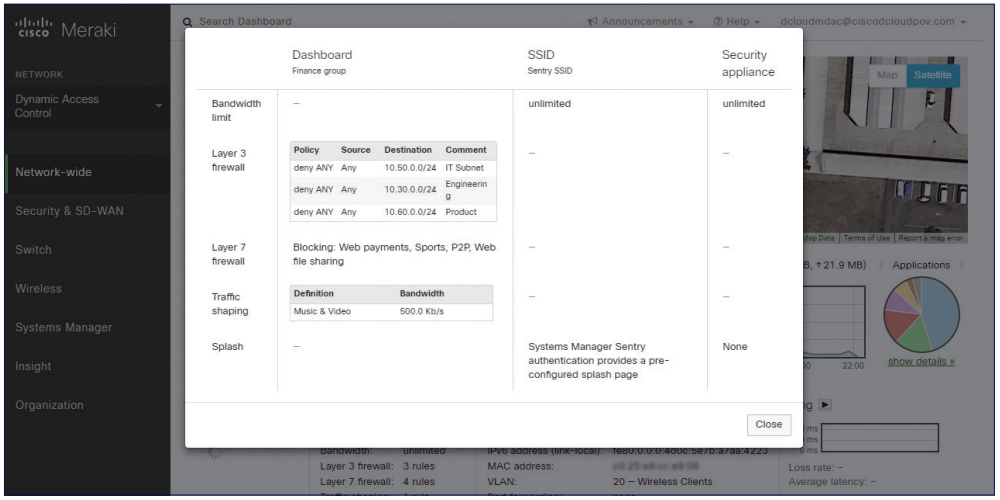
## Unmatched Visibility

The Cisco Meraki MR provides deep network insight enabling smarter network management via the Cisco Meraki dashboard. It gives visibility into the network users, their devices, and their applications. Armed with rich analytics, administrators can quickly create access control and application usage policies, optimizing both the end-user experience and network security.




## Application-aware Traffic Shaping

Cisco Meraki MR includes an integrated Layer 7 packet inspection, classification, and control engine, enabling the configuration of QoS policies based on traffic type, helping to prioritize mission-critical applications while setting limits on recreational traffic like peer-to peer and video streaming. Policies can be implemented per network, per SSID, per user group, or per individual user for maximum flexibility and control.

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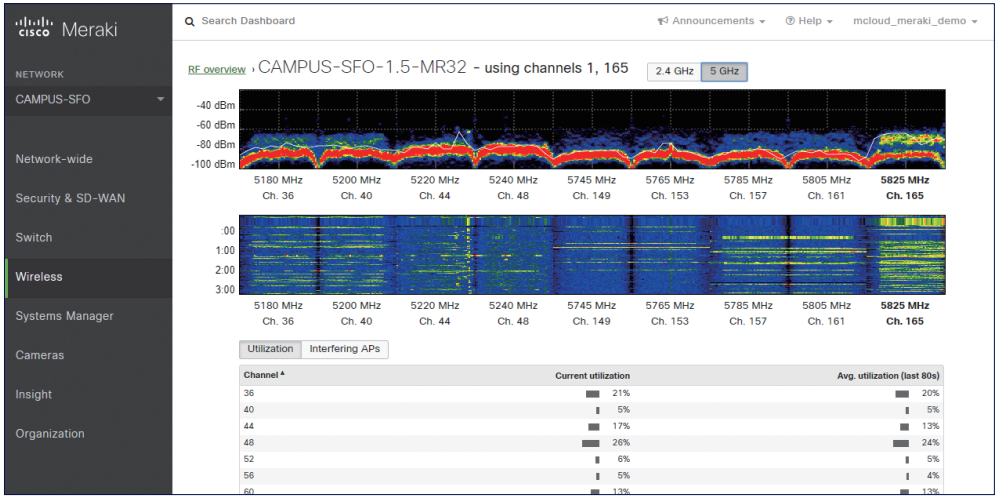
## Dedicated Security Radio

In addition to the high-power 2.4 GHz and 5 GHz client-service radios, most of the Cisco Meraki MR also includes a dedicated security radio that:

- Continuously scans and protects against security threats
- Senses the RF environment and adapts to interference
- Automatically configures RF settings to maximize performance

The RF data collected by the dedicated third radio is continuously fed back to the Meraki cloud. This data is then used to automatically tune the channel selection, transmit power, and client connection settings for optimal performance under even the most challenging RF conditions. There is no need for the dedicated hardware and RF expertise typically required to tune a wireless network.




## Bluetooth Low Energy Beacon and Scanning Radio

An integrated fourth Bluetooth radio provides seamless deployment of BLE Beacon functionality and effortless visibility of Bluetooth devices. Cisco Meraki MR enables the next generation of location-aware applications while future-proofing deployments, ensuring it's ready for any new customer engagement strategies.

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