



Mako 4000 Series

Extend your network securely.

At a Glance

WAP / Secure Edge Router / Secure Zone Router capabilities

PCI DSS Certified

Up to four wireless SSIDs

Fully cloud managed with zero-touch deployment

Wireless Access Point / Secure Edge Router / Secure Zone Router

The Mako 4000-series brings the security, functionality and cloud management of the Mako System into a streamlined, cost-effective, smaller footprint that allows for application as either a secure edge router, secure zone router, or secure wireless access point. The Mako 4000-series appliances are fully cloud-managed and allow customers the same flexible deployment model as with other Mako appliances. The 4000-series also uses the same centralized management and monitoring model, making remote management and support simple and straightforward. 4000-series appliances have no moving parts and the units are industrial-strength, designed to address the challenging requirements and environments of business users and distributed enterprises. The two models within the line, the 4500 and 4600, are similar but the 4600 adds 802.11ax Wi-Fi 6 capability, 4x4 MIMO (vs. 2x2 on the 4500), bluetooth support, and a faster processor with higher transfer speeds and more robust edge routing capabilities.

USER-DEFINED USE CASES

The Mako 4000-series can be configured as either a wireless access point (WAP) or as a secure edge router/zone router depending on your business needs. The appliance can be configured easily from the Central Management System, and changes made in the CMS take place in real-time, without a site visit or a need to locally re-flash the appliance.

PCI DSS CERTIFIED

The entire Mako System—including the 4000-series firmware, our wireless networking technology, the Central Management System and our onboard software—is PCI DSS certified from end-to-end, providing peace of mind and security for businesses that accept credit cards. Mako's PCI-certified wireless networking technology is a perfect fit for wireless and tablet-based POS systems. When using Mako's PCI-certified network configuration templates, Mako's PCI reach is unsurpassed.

EMBEDDED WIRELESS

The Mako 4000-series features dual-band wireless on 802.11b/g/n/ac (and ax on 4600 models) standards for customer hotspots or general business use and supports up to four wireless SSIDs per appliance.

CENTRALIZED LOGGING/REPORTING

Using a patented communications protocol, the Mako 4000-series securely connects to the Central Management System (CMS), providing data that is used to generate easy-to-understand graphical reports. Real-time information about the network, including cellular and broadband data use by site, user and timeframe, intrusion attempts, Internet traffic records, estate-wide network status and much more is available to authorized users 24x7.

MAKO VPN CLOUD MAKES CREATING VIRTUAL PRIVATE NETWORKS EASY

The 4000-series is ideal for connecting home workers, IoT applications or retail or remote locations to head offices, data centers or third-party application providers easily and securely. Mako 4000-series appliances can be used as part of a Mako VPN Cloud, which supports circuit, hardware and geographic redundancy, allowing your 4000-series appliance to connect to fast, reliable VPNs across broadband directly when configured as a router, or in conjunction with other Mako appliances when configured as a WAP. Using Mako's VPN Cloud technology, remote locations connected by Mako appliances can be linked in seconds by three easy mouse clicks in the CMS, all without requiring static IP addresses.

SIMPLE TROUBLESHOOTING

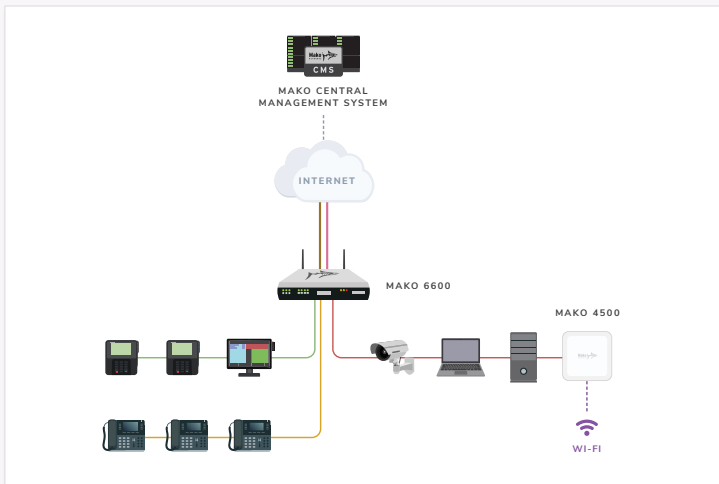
In addition to CMS troubleshooting diagnostic tools, the network LED on the Mako 4000-series provides Internet and network connection information at a glance. For non-technical users, this makes it easy to quickly diagnose network issues.

QUICK AND EASY TO DEPLOY

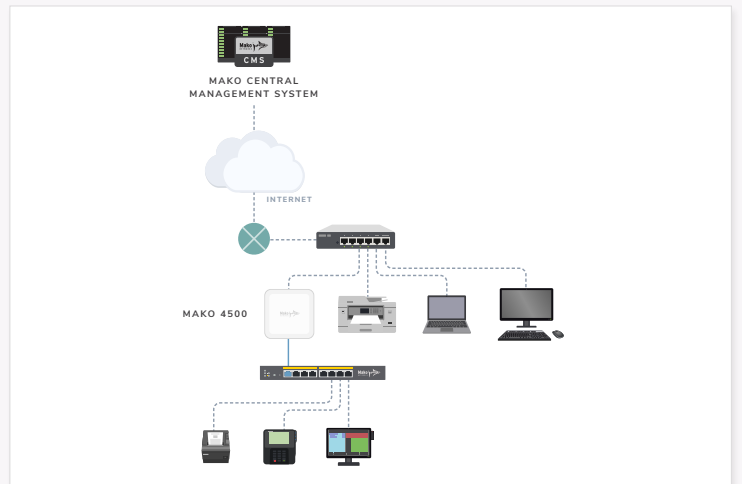
Like all Mako appliances, the 4000-series allows for zero touch deployment by automatically receiving device-specific configuration information from the Mako CMS via the cloud. Remote sites can get up and running quickly, easily and securely.

Typical Network Configurations

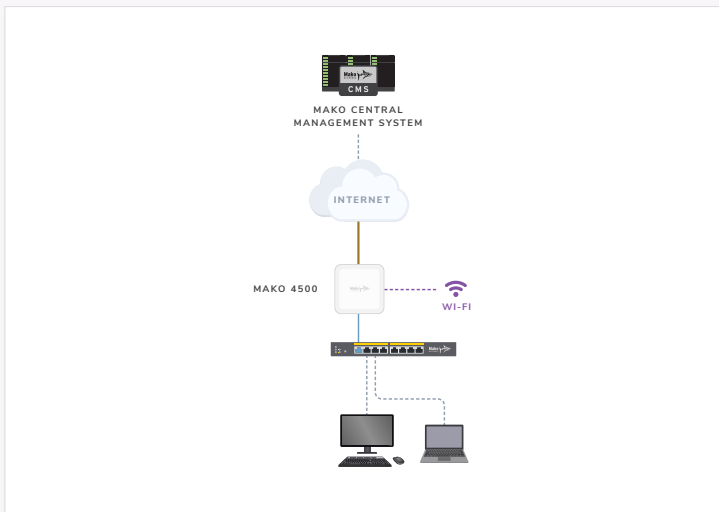
ACCESS POINT



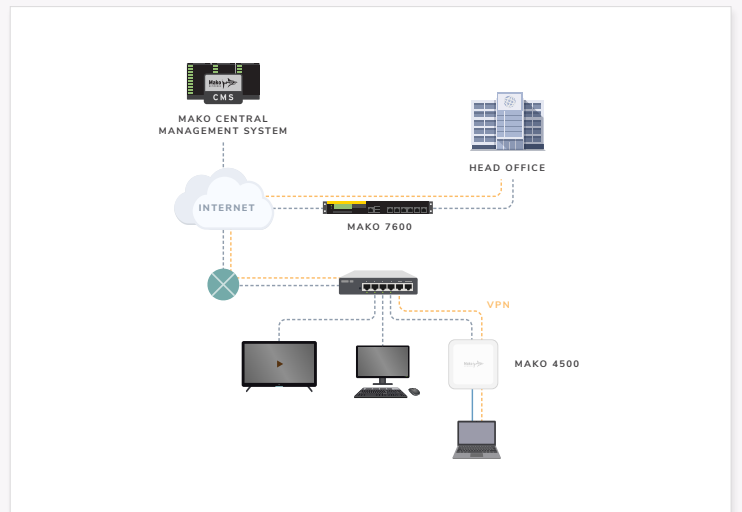
ZONE ROUTER



EDGE DEVICE



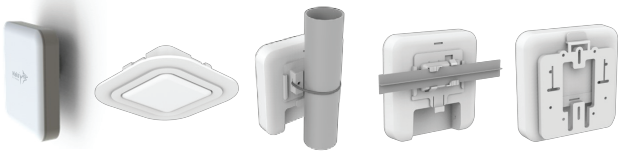
HOME WORKER



Mako 4500 Specifications

Hardware

Processors	OCA IPQ4018 + OCA8072
System Memory	Flash 32MB / RAM 256 MB
Interface	1 x 10/100/1000Mbps Ethernet Port with 802.3af/at PoE 1 x DC power connector 1 x reset button
Interface Options	1 x 10/100/1000Mbps Ethernet Port 1 x USB 2.0 Port **USB require DC12V/1.25A or 802.3at PoE Power
Mounting	Ceiling, T-Rail and Wall mount Optional pole mount, in-ceiling bracket and junction box plate



Mounting Options: wall/ceiling, in ceiling, pole, T-rail clips, junction plate

Radio

Dual Concurrent Radio	2.4GHz: 802.11b/g/n with max data rate up to 400Mbps 5GHz: 802.11a/n/ac with max data rate up to 867Mbps
Transmit Power (combined)	2.4GHz: 25dBm (max) 5GHz: 24dBm (max) Max transmit power is limited by regulatory power
Radio Chains / Spatial Streams	2 x 2 / 2

Wireless

Operating Mode	AP, WDS, client bridge
SSIDs	Supports up to 8 SSIDs per frequency band
Guest Network	Allocates a separate network segment for guest access within the same WLAN
Mobility	PMKSA support for fast roaming
Security	WPA/WPA2 PSK Hidden SSID MAC address filtering (up to 50 MAC) Client isolation
Other	Wireless Client List Background Scanning Auto Transmit Power Band Steering

Physical and Environmental

Chassis Dimensions	142 x 142 x 34 mm (L x W x H) (5.59 x 5.59 x 1.34 in)
Power Supply	Input DC 12 VDC/1A PoE: Compatible with 802.3af/at
Operating Temperature	32° F to 104° F 0° C to 40° C
Humidity	0% - 90% typical

Contact Mako Networks

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Mako 4600 Specifications

Hardware

Processors	OCA IPQ4018 + OCA8072
System Memory	Flash 32MB / RAM 256 MB (upgradeable to 2GB max)
Interface	1 x 10/100/2500Mbps Ethernet Port with 802.3at PoE 1 x 10/100/1000Mbps Ethernet Port 1 x DC power connector 1 x reset button 1 x USB 2.0 Port **USB require DC12V/1.25A or 802.3at PoE Power
Mounting	Ceiling, T-Rail and Wall mount Optional pole mount, in-ceiling bracket and junction box plate



Mounting Options: wall/ceiling, in ceiling, pole, T-rail clips, junction plate

Radio

Indoor Dual Concurrent Radio	2.4GHz: 802.11ax with max data rate up to 1148Mbps 5GHz: 802.11ax with max data rate up to 2400Mbps 4x4 MU-MIMO is backwards compatible with 802.11 ac/ a/n mode BT/BLE5.0 radio available. 5GHz/2.4GHz 802.11a/b/g/n/ac 1x1 selectable scanning radio available.
Transmit Power (combined)	2.4GHz: 23dBm (max) 5GHz: 23dBm (max) Max transmit power is limited by regulatory power
Radio Chains / Spatial Streams	4 x 4 / 4

Wireless

Operating Mode	AP, WDS, client bridge
SSIDs	Supports up to 8 SSIDs per frequency band
Guest Network	Allocates a separate network segment for guest access within the same WLAN
Mobility	PMKSA support for fast roaming
Security	WPA/WPA2 PSK Hidden SSID MAC address filtering (up to 50 MAC) Client isolation
Other	Wireless Client List Background Scanning Auto Transmit Power Band Steering

Physical and Environmental

Chassis Dimensions	205mm x 205mm x 34mm (L x W x H) (8.07 x 8.07 x 1.34 in)
Power Supply	Input DC 12 VDC/1A IEEE802.3at or Passive 48-54v PoE Input (2.5GbE port)
Operating Temperature	32° F to 104° F 0° C to 40° C
Humidity	0% - 90% typical

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