



# Mako 6600-M

Fast and flexible, scalable and secure.

The 6600-M continues Mako's legacy of design innovation, building on the highly secure 6500 platform and incorporating new features that deliver faster, more flexible business networking and next-gen firewalling. With a sealed, tamper-proof case, no moving parts and high heat tolerance, the 6600-M stands up to tough network environments like petroleum, QSRs and retail. The 6600 series adds a dual-SIM LTE module, IDS/IPS, higher transfer speeds, more efficient VPN performance and an SFP port, allowing for multi-WAN configurations (SD-WAN) while retaining four physically-segmented LAN ports.

## PCI DSS CERTIFIED

The entire Mako System—including the 6600-M appliance, 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.

## CENTRALIZED LOGGING/REPORTING

Using a patented communications protocol, the Mako 6600-M 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.

## USER-DEFINED WAN FAILOVER

The Mako 6600-M's WAN interfaces can be configured to fail over from one another in the event of failure through to seamless connectivity that won't even drop a live voice call should a network connection drop. These fast, flexible failover options offer businesses continuity in the case of unexpected interruptions while also providing high availability at a business-friendly cost. Combine fixed-line connections with single or dual SIM LTE in any connection order or failover pattern your business needs.

## EMBEDDED WIRELESS

The Mako 6600-M features single or dual-band wireless on b/g/n and ac standards for customer hotspots or general business use, supporting up to eight wireless SSIDs per appliance.

## NEXT-GEN SECURITY

The Mako 6600-M features Intrusion Detection and Prevention Next Generation Firewall technology; all traffic entering and leaving a network is scrutinized to ensure network connections are authorized and intrusion attempts identified and blocked. Port scanning protection detects and repels intruders attempting to discover network vulnerabilities by blocking IP addresses searching for open ports.

Mako 6600 appliances also protect against internal threats by using worm detection to identify and nullify threats from infected host computers on internal networks. As all Mako Appliances are managed through the cloud using the CMS, software is automatically patched and updated on every Mako appliance connected to the Internet anywhere in the world.

Complex firewall rules can be templated and deployed to thousands of Mako Appliances via the CMS, massively reducing the time to implement changes and ensuring an organization's security posture is up to date.

## MAKO VPN CLOUD MAKES CREATING VIRTUAL PRIVATE NETWORKS EASY

Connect retail or remote locations to head offices, data centers or third-party vendors easily. Choose the amount of resiliency and redundancy your business needs. Mako VPN Cloud supports circuit, hardware and geographic redundancy, allowing your Mako 6600-M appliance to deliver fast, reliable VPN connectivity across any combination of broadband circuit types. 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. Each Mako 6600-M can simultaneously link up to 50 external VPNs.



## SIMPLE TROUBLESHOOTING

In addition to CMS troubleshooting diagnostic tools, a color-coded LED panel on the Mako 6600-M provides Internet and network connection information at a glance. For non-technical users, this makes it easy to quickly diagnose network issues.

## FLEXIBLE CONNECTION OPTIONS

Mako 6600-M appliances provide WAN connectivity via LTE, Ethernet, fiber or xDSL at up to 1 Gbit transfer speeds. No matter what technology your business uses to connect to the Internet, Mako can support and protect it.

## QUICK AND EASY TO DEPLOY

Like all Mako appliances, the 6600-M allows for zero touch deployment by automatically receiving site-specific configuration information from the Mako CMS via the cloud. Remote sites can get up and running quickly and easily, even when running on LTE-only broadband.

# Technical Specifications

## Hardware

WAN Interface, Ethernet	1 x Ethernet RJ45 10/100/1000 Mbps port. Auto crossover.
WAN Interface, SFP	1x SFP (usable as LAN or WAN).
WAN Interface, Cellular	LTE/3G Cellular Interface, Dual SIM, Single Radio LTE (Active/Standby)
WAN Interfaces xDSL (optional)	1 x RJ11 ITU G.992 port.
LAN Interfaces	4 x Ethernet RJ45 10/100/1000 Mbps ports. Auto crossover.
Power Supply	External 100 or 240 V AC Input (50 or 60Hz) 12 V DC output
USB Port	For support functions (i.e. manual configuration).
Chassis Dimensions	8.58 x 8.58 x 1.57 in   218 x 218 x 40 mm (L x W x H)
Operating Temperature	41 °F to 104 °F 5 °C to 40 °C
Humidity	10 % to 90 % relative, non-condensing
Hardware VPN Encryption	Supported
Power Consumption	48 W - Maximum

## Wi-Fi

Channels	2.4, 5 GHz, four SSIDs supported per radio (model-dependent)
Supported Standards	802.11 b/g/n/ac
Bandwidth	Up to 867 Mbps
Security	WPA2 Personal   WPA2 Enterprise
Frequencies	<b>W1 variant:</b> 2.4 GHz: 2.412 ~ 2.484 GHz   5.4 GHz: 5.180 ~ 5.825 GHz (region-dependent) <b>W2 variant:</b> (adds additional 2.4 GHz range) 2.4 GHz: 2.412 ~ 2.472 GHz plus 2.4 GHz: 2.412 ~ 2.484 GHz   5 GHz: 5.180 ~ 5.825 GHz (all ranges are region-dependent)
Other	Integrated access point scanning Wireless Multimedia (WMM) QoS
Output Power	2.4 GHz (max 21 dBm) 5 GHz (max 20 dBm) per chain

## Cellular Protocols

FEATURE	US/EU	AUS/NZ/UK
LTE	Bands (1,2,3,4,5,7,8,12,13,20,25,26,29,30,41)	Bands (1,3,5,7,8,18,19,21,28,38,39,40,41)
UMTS/HSPA(+)	Bands (1,2,3,4,5,8)	Bands (1,5,6,8,19)
Modem	MC7455 (USA/EU)	MC7430 (APAC)



## VPN Throughput

VPN Cloud	Up to 150 Mbps
IPsec	Up to 150 Mbps
Concurrent VPNs	20

## Compliance

Environmental	Lead-free and RoHS compliant
Firewall	PCI DSS, Verifone (MNSP Program), GDPR

## xDSL Standards (6600-MV-W1-LTE Only)

ADSL	G.992.1 ADSL (DMT) Annex A G.992.3 ADSL2 Annex A G.992.5 ADSL2+ Annex A G.992.5 ADSL2+ Annex M
VDSL	G.993.2 VDSL2 G.993.5 Vectoring G.993.2 Annex Q Profiles 8,12,17a, 35b

## Model Variations

6600-M-LTE	No Wi-Fi
6600-M-W1-LTE	Single-band wireless (802.11 b/g/n/ac)
6600-MV-W1-LTE	Single-band wireless (802.11 b/g/n/ac) xDSL WAN
6600-M-W2-LTE	Dual-band wireless (802.11 b/g/n/ac)

### Contact Mako Networks

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