

Cisco Meraki MX450-HW

Ultra High-Capacity Enterprise & Data Center SD-WAN Security Appliance

DATASHEET

Product Overview: The Cisco Meraki MX450-HW is the pinnacle cloud-managed security appliance designed specifically for massive enterprise campuses, headquarter environments, and data center VPN hubs. Engineered to support up to 10,000 users, the MX450 delivers up to 10 Gbps stateful firewall capacity, 10 GbE SFP+ uplinks and LAN interfaces, dual hot-swappable 250W power supplies, and AutoVPN mesh aggregation for massive topologies.

10 Gbps

MAX FIREWALL
THROUGHPUT

7 Gbps

ADVANCED SECURITY

4.5 Gbps

SITE-TO-SITE VPN

10,000

RECOMMENDED USERS

HARDWARE & INTERFACE SPECIFICATIONS

Interface Category	Specification Details
Dedicated WAN Ports	2× Dedicated 10 GbE SFP+ Fiber Uplinks
Dedicated LAN Interfaces	24 Ports Total: 8× 10 GbE SFP+ Fiber, 8× 1 GbE SFP Fiber, 8× 1 GbE RJ45
Cellular & Management Ports	1× USB 3.0 Port (Cellular modem backup), 1× Dedicated RJ45 Management Port
Power Redundancy	Dual Modular Hot-Swappable AC Power Supplies (2x MA-PWR-250WAC included)
Form Factor	1U Rack-Mountable (Includes heavy-duty 19" rack mounting kit)

PERFORMANCE & SCALE

Max Stateful Firewall Throughput	10,000 Mbps (10 Gbps)
Advanced Security (NGFW + IPS)	7,000 Mbps (7 Gbps with Snort IPS & AMP enabled)
Next-Gen Firewall (NGFW)	7,500 Mbps (7.5 Gbps)
Site-to-Site AutoVPN Throughput	4,500 Mbps (4.5 Gbps)
Max Concurrent VPN Tunnels	5,000 Concurrent Tunnels

PHYSICAL & POWER CHARACTERISTICS

Dimensions (W × D × H)	483 mm × 440 mm × 44 mm (19.0" × 17.3" × 1.75") — Standard 1U Rack
Weight	7.3 kg (16.0 lbs) with dual PSUs and fan units installed
Power Supply Rating	Modular 100-220V, 50/60Hz AC (2× 250WAC PSUs)

KEY SOFTWARE & ENTERPRISE CAPABILITIES

High-Density 10G SFP+ Backbone

Designed for multi-gigabit core aggregation with 10× 10 GbE SFP+ optical ports for high-capacity WAN links, server farms, and switch uplinks.

10G SFP+ Core

10,000 Users

Enterprise Data Center VPN Hub

Serves as an ultra-high performance VPN concentrator handling up to 5,000 AutoVPN spoke connections with seamless active-active failover.

5,000 Tunnels

Active-Active SD-WAN

Advanced Threat Protection

Cisco Snort-based Intrusion Prevention System (IPS), Cisco Advanced Malware Protection (AMP) with Threat Grid, and URL content filtering.

Snort IPS

Cisco AMP

Enterprise High Availability

Warm-spare High Availability (HA) failover with zero-drop heartbeat monitoring, dual modular redundant PSUs, and swappable fan trays.

Dual 250W PSU

Warm Spare HA

LICENSING TIERS COMPARISON

Feature / Capability	Enterprise	Advanced Security	SD-WAN Plus
Cloud Management & L3/L7 Stateful Firewall	✓	✓	✓
AutoVPN Hub & Multi-WAN Path Optimization	✓	✓	✓
Content Filtering & Cisco AMP Malware Defense	—	✓	✓
Snort IPS/IDS & Geo-IP Access Controls	—	✓	✓
Smart SaaS Pathing & Machine Learning Analytics	—	—	✓

ORDERING INFORMATION & ACCESSORIES

Part Number	Description
MX450-HW	Cisco Meraki MX450 Cloud-Managed Security Appliance
LIC-MX450-ENT-1Y	Cisco Meraki MX450 Enterprise License & Support (1 Year)
LIC-MX450-SEC-1Y	Cisco Meraki MX450 Advanced Security License & Support (1 Year)
MA-PWR-250WAC	Meraki 250W AC Modular Power Supply Unit (Replacement)
MA-FAN-18K	Meraki 18K RPM System Fan Tray for MX250 and MX450
MA-SFP-10GB-SR	Cisco Meraki 10GBASE-SR SFP+ Transceiver Module

Warranty & Enterprise Support: The MX450-HW includes Cisco Meraki's full lifetime hardware warranty featuring Advanced Next Business Day (NBD) replacement, supported by 24x7 enterprise technical phone support and continuous automated firmware updates included with an active license.