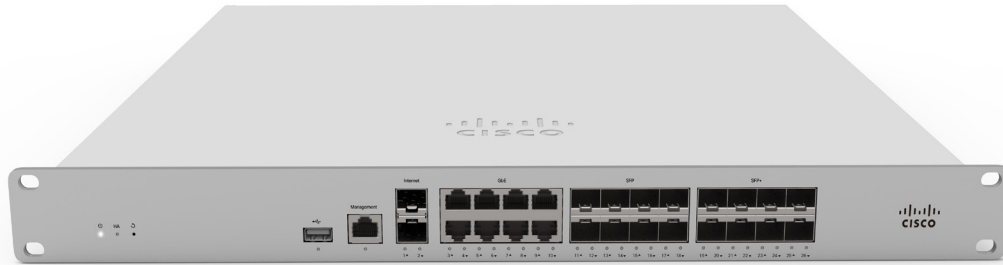


Meraki MX

CLOUD MANAGED SECURITY & SD-WAN



Overview

Cisco Meraki MX Security & SD-WAN Appliances are ideal for organizations considering a Unified Threat Management (UTM) solution for distributed sites, campuses or datacenter VPN concentration. Since the MX is 100% cloud managed, installation and remote management are simple. The MX has a comprehensive suite of network services, eliminating the need for multiple appliances. These services include SD-WAN capabilities, application-based firewalling, content filtering, web search filtering, SNORT® based intrusion detection and prevention, Cisco Advanced Malware Protection (AMP), web caching, 4G cellular failover and more. Auto VPN and SD-WAN features are available on our hardware and virtual appliances, configurable in Amazon Web Services or Microsoft Azure.

FEATURE-RICH UNIFIED THREAT MANAGEMENT (UTM) CAPABILITIES

- Application-aware traffic control: bandwidth policies for Layer 7 application types (e.g., block YouTube, prioritize Skype, throttle BitTorrent)
- Content filtering: CIPA-compliant content filter, safe-search enforcement (Google/Bing), and YouTube for Schools
- Intrusion prevention: PCI-compliant IPS sensor using industry-leading SNORT® signature database from Cisco
- Advanced Malware Protection: file reputation-based protection engine powered by Cisco AMP
- Identity-based security policies and application management

INDUSTRY-LEADING CLOUD MANAGEMENT

- Unified firewall, switching, wireless LAN, and mobile device management through an intuitive web-based dashboard
- Template based settings scale easily from small deployments to tens of thousands of devices
- Role-based administration, configurable email alerts for a variety of important events, and easily auditable change logs
- Summary reports with user, device, and application usage details archived in the cloud

INTELLIGENT SITE-TO-SITE VPN WITH MERAKI SD-WAN

- Auto VPN: automatic VPN route generation using IKE/IPsec setup. Runs on physical MX appliances and as a virtual instance within the Amazon AWS or Microsoft Azure cloud services
- SD-WAN with active / active VPN, policy-based-routing, dynamic VPN path selection and support for application-layer performance profiles to ensure prioritization of the applications types that matter
- Interoperates with all IPsec VPN devices and services
- Automated MPLS to VPN failover within seconds of a connection failure
- Client VPN: L2TP IPsec support for native Windows, Mac OS X, iPad and Android clients with no per-user licensing fees

BRANCH GATEWAY SERVICES

- Built-in DHCP, NAT, QoS, and VLAN management services
- Web caching: accelerates frequently accessed content
- Load balancing: combines multiple WAN links into a single high-speed interface, with policies for QoS, traffic shaping, and failover
- Smart connection monitoring: automatic detection of layer 2 and layer 3 outages and fast failover, including option of integrated LTE Advanced or 3G/4G modems

INSIDE THE CISCO MERAKI MX

MX450 shown, features vary by model

Redundant Power
Reliable, energy efficient design with field replaceable power supplies

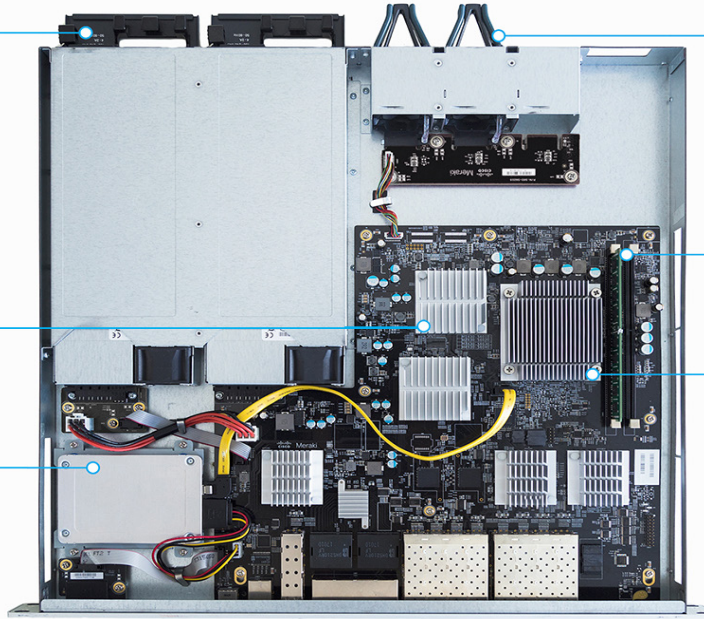
Modular Fans
High-performance front-to-back cooling with field replaceable fans

Cryptographic Acceleration
Reduced load with hardware crypto assist

Additional Memory
For high-performance content filtering

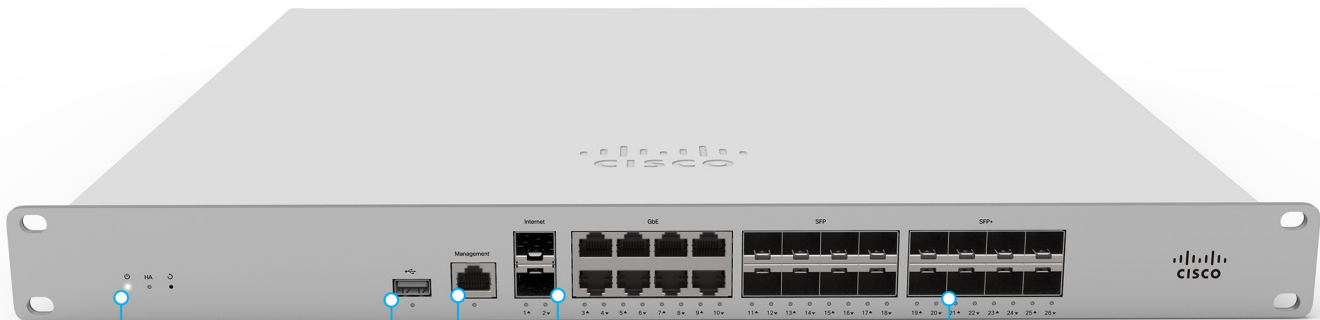
Web Caching
128G SSD disk

Enhanced CPU
Layer 3-7 firewall and traffic shaping



FRONT OF THE CISCO MERAKI MX

MX450 shown, features vary by model



Multicolor Status LED
Monitor device status

3G/4G Modem Support
Automatic cellular failover

Management Interface
Local device access

Dual 10G WAN Interfaces
Load balancing and SD-WAN

1G/10G Ethernet/SFP+ Interfaces
10G SFP+ interfaces for high-speed LAN connectivity

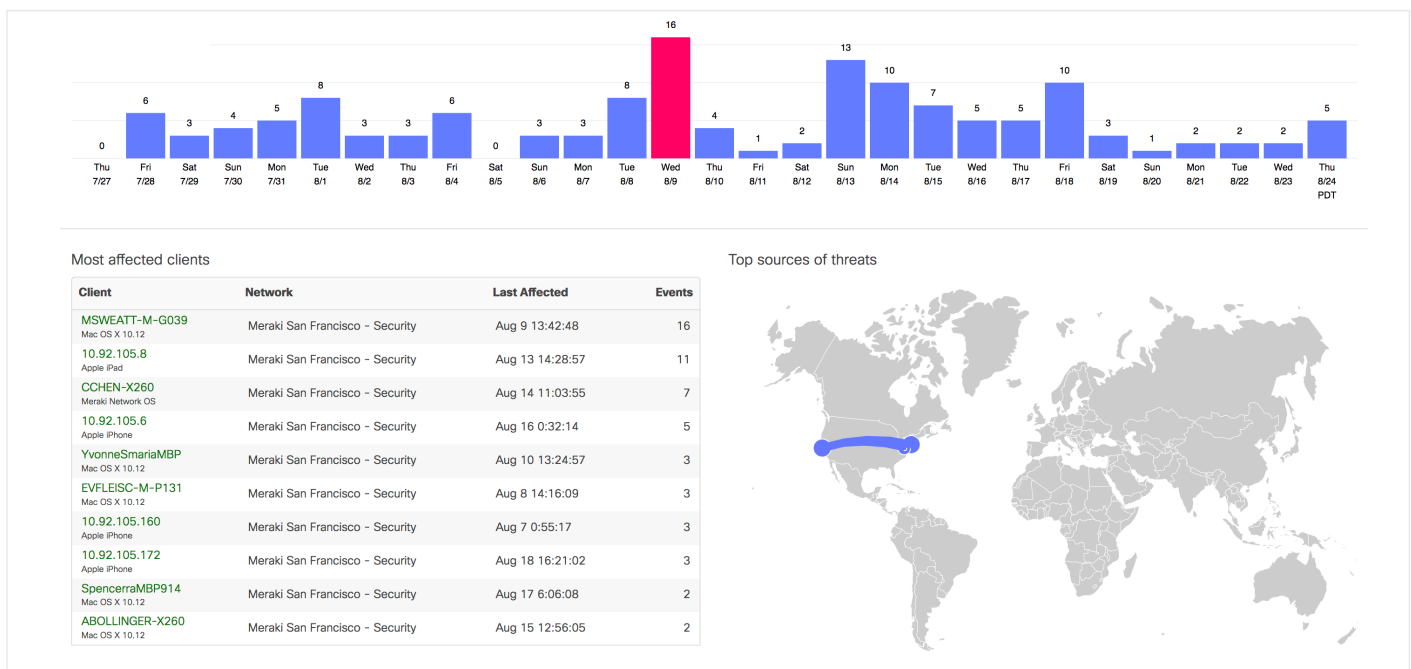
Ironclad Security

The MX platform has an extensive suite of security features including IDS/IPS, content filtering, web search filtering, anti-malware, geo-IP based firewalling, IPsec VPN connectivity and Cisco Advanced Malware Protection, while providing the performance required for modern, bandwidth-intensive networks.

Layer 7 fingerprinting technology lets administrators identify unwanted content and applications and prevent recreational apps like BitTorrent from wasting precious bandwidth.

The integrated Cisco SNORT® engine delivers superior intrusion prevention coverage, a key requirement for PCI 3.2 compliance. The MX also uses the Webroot BrightCloud® URL categorization database for CIPA / IWF compliant content-filtering, Cisco Advanced Malware Protection (AMP) engine for anti-malware, AMP Threat Grid Cloud, and MaxMind for geo-IP based security rules.

Best of all, these industry-leading Layer 7 security engines and signatures are always kept up-to-date via the cloud, simplifying network security management and providing peace of mind to IT administrators.



Organization Level Threat Assessment with Meraki Security Center

Group policies > **Students**

Name:

Bandwidth: unlimited [details](#)

Firewall and traffic shaping:

#	Policy	Protocol	Source	Src port	Destination	Dst port	Comment	Actions
	Allow	Any	Any	Any	Any	Any	Default rule	

[Add a firewall rule](#)

#	Policy	Application	Actions
1	Deny	Peer-to-peer (P2P)	BitTorrent
2	Deny	Online backup	All Online backup

[Add a layer 7 firewall rule](#)

Identity Based Policy Management

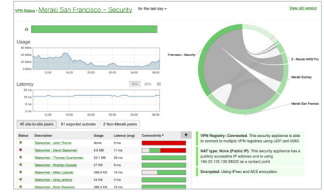
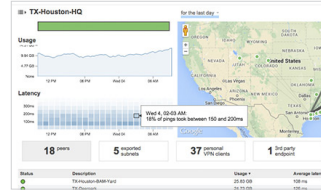
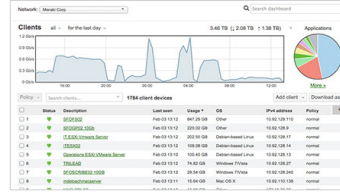
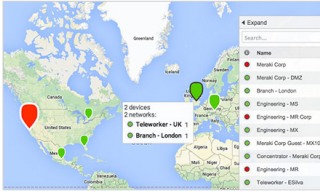
Malicious | 95 Threat score | 10 Behavioral indicators

analyzed
URL: http://198.19.7.11/malware
/8d9a8baf7d10c4022380a912c25842266e9f65d01368bde04dea105e8c2a43f

Cisco Threat Grid Cloud for Malicious File Sandboxing

SD-WAN Made Simple

Software-defined WAN is a new approach to network connectivity that lowers operational costs and improves resource usage for multisite deployments to use bandwidth more efficiently. This allows service providers to offer their customers the highest possible level of performance for critical applications without sacrificing security or data privacy.



Transport independence

Apply bandwidth, routing, and security policies across a variety of mediums (MPLS, Internet, or 3G/4G LTE) with a single consistent, intuitive workflow

Application optimization

Layer 7 traffic shaping and application prioritization optimize the traffic for mission-critical applications and user experience

Intelligent path control

Dynamic policy and performance based path selection with automatic load balancing for maximum network reliability and performance

Secure connectivity

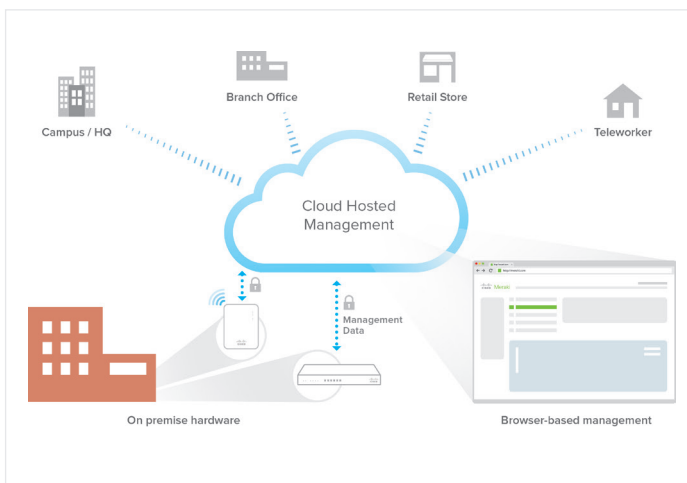
Integrated Cisco Security threat defense technologies for direct Internet access combined with IPsec VPN to ensure secure communication with cloud applications, remote offices, or datacenters

Cloud Managed Architecture

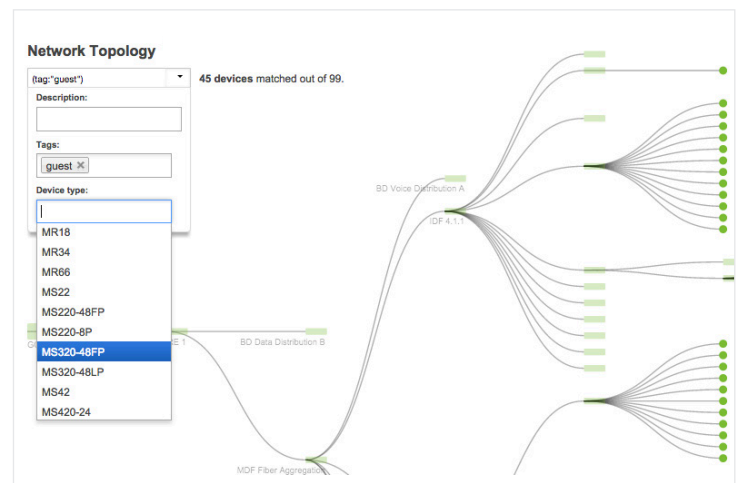
Built on Cisco Meraki's award-winning cloud architecture, the MX is the industry's only 100% cloud-managed solution for Unified Threat Management (UTM) and SD-WAN in a single appliance. MX appliances self-provision, automatically pulling policies and configuration settings from the cloud. Powerful remote management tools provide network-wide visibility and control, and enable administration without the need for on-site networking expertise.

Cloud services deliver seamless firmware and security signature updates, automatically establish site-to-site VPN tunnels, and provide 24x7 network monitoring. Moreover, the MX's intuitive browser-based management interface removes the need for expensive and time-consuming training.

For customers moving IT services to a public cloud service, Meraki offers a virtual MX for use in Amazon Web Services and Microsoft Azure, enabling Auto VPN peering and SD-WAN for dynamic path selection.



Cisco Meraki Cloud Management Architecture



End-to-End Network Visibility and Troubleshooting

Integrated 802.11ac Wave 2 Wireless

The MX67W, MX68W, and MX68CW integrate Cisco Meraki's award-winning wireless technology with the powerful MX network security features in a compact form factor ideal for branch offices or small enterprises.

- Dual-band 802.11n/ac Wave 2, 2x2 MU-MIMO with 2 spatial streams
- Unified management of network security and wireless
- Integrated enterprise security and guest access



MX68CW Security Appliance

LTE Advanced

While all MX models feature a USB port for 3G/4G failover, the MX67C and MX68CW include a SIM slot and internal LTE modem. This integrated functionality removes the need for external hardware and allows for cellular visibility and configuration within the Meraki dashboard.

- 1 x CAT 6, 300 Mbps LTE modem
- 1 x Nano SIM slot (4ff form factor)
- Global coverage with individual orderable SKUs for North America and Worldwide



MX67C SIM slot

Power over Ethernet

The MX65, MX65W, MX68, MX68W, and MX68CW include two ports with 802.3at (PoE+). This built-in power capability removes the need for additional hardware to power critical branch devices.

- 2 x 802.3at (PoE+) ports capable of providing a total of 60W
- APs, phones, cameras, and other PoE enabled devices can be powered without the need for AC adapters, PoE converters, or unmanaged PoE switches.



MX68 Port Configuration




Meraki vMX100

Virtual MX is a virtual instance of a Meraki security appliance, dedicated specifically to providing the simple configuration benefits of site-to-site Auto VPN for customers running or migrating IT services to the public cloud. A virtual MX is added via the Amazon Web Services or Azure marketplace and then configured in the Meraki dashboard, just like any other MX. It functions like a VPN concentrator, and features SD-WAN functionality like other MX devices.

- An Auto VPN to a virtual MX is like having a direct Ethernet connection to a private datacenter. The virtual MX can support up to 500 Mbps of VPN throughput, providing ample bandwidth for mission critical IT services hosted in the public cloud, like Active Directory, logging, or file and print services.
- Support for Amazon Web Services (AWS) and Azure
- No hardware, only a Meraki license is required



Desktop and All-in-One Models







	MX64	MX64W	MX65	MX65W
				
Recommended Use Cases	Small branch	Small branch	Small branch	Small branch
Recommended Clients	50	50	50	50
Stateful Firewall Throughput	250 Mbps	250 Mbps	250 Mbps	250 Mbps
Advanced Security Throughput	200 Mbps	200 Mbps	200 Mbps	200 Mbps
Maximum VPN Throughput	100 Mbps	100 Mbps	100 Mbps	100 Mbps
Maximum Concurrent VPN Tunnels³	50	50	50	50
WAN Interfaces				
Dedicated	1 x GbE RJ45 1 x USB (cellular failover ¹)	1 x GbE RJ45 1 x USB (cellular failover ¹)	2 x GbE RJ45 1 x USB (cellular failover ¹)	2 x GbE RJ45 1 x USB (cellular failover ¹)
Dual-purpose²	1 x GbE RJ45	1 x GbE RJ45	-	-
LAN Interfaces				
Fixed	4 x GbE RJ45	4 x GbE RJ45	10 x GbE RJ45 (2 x PoE+)	10 x GbE RJ45 (2 x PoE+)
Web Caching	-	-	-	-
Mounting	Desktop or Wall mount	Desktop or Wall mount	Desktop or Wall mount	Desktop or Wall mount
Dimensions (w x d x h)	9.5" x 5.2" x 1" (239mm x 132mm x 25mm)	9.5" x 5.2" x 1" (239mm x 132mm x 25mm)	10.0" x 5.2" x 1" (256mm x 132mm x 25mm)	10.0" x 5.2" x 1" (256mm x 132mm x 25mm)
Weight	1.61 lb (0.7 kg)	3.04 lb (1.4 kg)	1.98 lb (0.9 kg)	3.37 lb (1.53 kg)
Power Supply	30W DC (included)	30W DC (included)	90W DC (included)	90W DC (included)
Power Load (idle/max)	4W / 10W	6W / 13W	6W / 72W	9W / 79W
Operating Temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Humidity	5% to 95%	5% to 95%	5% to 95%	5% to 95%

¹ Requires separate cellular modem

² Interface configurable for WAN or LAN use

³ The maximum concurrent VPN tunnels are based on lab testing scenarios where no client traffic is transferring over the VPN tunnels. For information on Recommended maximum concurrent VPN tunnels, visit [MX Sizing Guide](#).

Desktop and All-in-One Models





	MX67	MX67W	MX67C	MX68	MX68W	MX68CW
						
Recommended Use Cases	Small branch	Small branch	Small branch	Small branch	Small branch	Small branch
Recommended Clients	50	50	50	50	50	50
Stateful Firewall Throughput	450 Mbps	450 Mbps	450 Mbps	450 Mbps	450 Mbps	450 Mbps
Advanced Security Throughput	300 Mbps	300 Mbps	300 Mbps	300 Mbps	300 Mbps	300 Mbps
Maximum VPN Throughput	200 Mbps	200 Mbps	200 Mbps	200 Mbps	200 Mbps	200 Mbps
Maximum Concurrent VPN Tunnels³	50	50	50	50	50	50
WAN Interfaces Dedicated	1 x GbE RJ45 1 x USB (cellular failover ¹)	1 x GbE RJ45 1 x USB (cellular failover ¹)	1 x GbE RJ45 1 x USB (cellular failover ¹) 1 x Integrated CAT 6 LTE Cellular Modem (cellular failover)	2 x GbE RJ45 1 x USB (cellular failover ¹)	2 x GbE RJ45 1 x USB (cellular failover ¹)	2 x GbE RJ45 1 x USB (cellular failover ¹) 1 x Integrated CAT 6 LTE Cellular Modem (cellular failover)
Dual-purpose²	1 x GbE RJ45	1 x GbE RJ45	1 x GbE RJ45	-	-	-
LAN Interfaces Fixed	4 x GbE RJ45	4 x GbE RJ45	4 x GbE RJ45	10 x GbE RJ45 (2 x PoE+)	10 x GbE RJ45 (2 x PoE+)	10 x GbE RJ45 (2 x PoE+)
Web Caching	-	-	-	-	-	-
Mounting	Desktop or wall mount	Desktop or wall mount	Desktop or wall mount	Desktop or wall mount	Desktop or wall mount	Desktop or wall mount
Dimensions (w x d x h)	9.4" x 5.1" x 1.1" (239mm x 130mm x 27mm)	9.4" x 6.5" x 1.1" (239mm x 164mm x 27mm)	9.4" x 6.9" x 1.1" (239mm x 176mm x 27mm)	11.2" x 5.8" x 1.1" (284mm x 148mm x 27mm)	11.2" x 6.8" x 1.1" (284mm x 172mm x 27mm)	11.2" x 7" x 1.1" (284mm x 178mm x 27mm)
Weight	1.74 lb (0.7kg)	1.84 lb (0.83 kg)	1.87 lb (0.85 kg)	2.46 lb (1.12 kg)	2.55 lb (1.16 kg)	2.61 lb (1.18 kg)
Power Supply	30W DC	30W DC	30W DC	100W DC	100W DC	100W DC
Power Load (idle/max)	5W / 14W	15W / 23W	6W / 17W	11W / 79W	19W / 87W	19W / 89W
Operating Temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)
Humidity	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%

¹ Requires separate cellular modem

² Interface configurable for WAN or LAN use

³ The maximum concurrent VPN tunnels are based on lab testing scenarios where no client traffic is transferring over the VPN tunnels. For information on Recommended maximum concurrent VPN tunnels, visit [MX Sizing Guide](#).

Rack Mount Models

	MX84 	MX100 	MX250 	MX450 
Recommended Use Cases	Medium branch	Large branch	Campus or VPN concentrator	Campus or VPN concentrator
Recommended Clients	200	500	2,000	10,000
Stateful Firewall Throughput	500 Mbps	750 Mbps	4 Gbps	6 Gbps
Advanced Security Throughput	320 Mbps	650 Mbps	2 Gbps	4 Gbps
Maximum VPN Throughput	250 Mbps	500 Mbps	1 Gbps	2 Gbps
Maximum Concurrent VPN Tunnels³	100	250	3,000	5,000
WAN Interfaces Dedicated	2 x GbE RJ45 1 x USB (cellular failover ¹)	1 x GbE RJ45 1 x USB (cellular failover ¹)	2 x 10GbE SFP+ 1 x USB (cellular failover ¹)	2 x 10GbE SFP+ 1 x USB (cellular failover ¹)
Dual-purpose²	-	1 x GbE RJ45	-	-
LAN Interfaces Fixed	8 x GbE2 x GbE (SFP)	8 x GbE 2 x GbE (SFP)	8 x GbE (RJ45) 8 x GbE (SFP) 8 x 10GbE (SFP+)	8 x GbE (RJ45) 8 x GbE (SFP) 8 x 10GbE (SFP+)
Web Caching	1TB	1TB	128GB (SSD)	128GB (SSD)
Mounting	1U rack	1U rack	1U rack	1U rack
Dimensions (w x d x h)	19" x 10 " x 1.75" (483 mm x 254 mm x 44 mm)	19" x 10 " x 1.75" (483 mm x 254 mm x 44 mm)	19" x 17.3 " x 1.75" (483 mm x 440 mm x 44 mm)	19" x 17.3 " x 1.75" (483 mm x 440 mm x 44 mm)
Weight	9 lb (4.1kg)	9 lb (4.1kg)	16 lb (7.3kg)	16 lb (7.3kg)
Power Supply	Internal 100-220V 50/60Hz AC	Internal 100-220V 50/60Hz AC	Modular 100-220V 50/60Hz AC 2 x 250WAC PSU	Modular 100-220V 50/60Hz AC 2 x 250WAC PSU
Power Load (idle/max)	26W / 32W	30W / 55W	105W / 190W	105W / 190W
Operating Temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Humidity	5% to 95%	5% to 95%	5% to 95%	5% to 95%

¹ Requires separate cellular modem

² Interface configurable for WAN or LAN use

³ The maximum concurrent VPN tunnels are based on lab testing scenarios where no client traffic is transferring over the VPN tunnels. For information on Recommended maximum concurrent VPN tunnels, visit [MX Sizing Guide](#).

Virtual Appliances

vMX100



Recommended use cases	Extend Auto-VPN and SD-WAN to public cloud services
Supported Platforms	Amazon Web Services (AWS) and Microsoft Azure
Interfaces	1 + Virtual
VPN Throughput	500 Mbps
Web Caching	Not applicable

Included in the Box

Package Contents	Platform(s)
Mounting kit	All
Cat 5 Ethernet cable (2)	All
AC Power Adapter	MX64, MX64W, MX65, MX65W, MX67, MX67W, MX67C, MX68, MX68W, MX68CW
Wireless external omni antenna (2)	MX64W, MX65W, MX67W, MX68W
250W Power Supply (2)	MX250, MX450
System Fan (2)	MX250, MX450
SIM card ejector tool	MX67C, MX68CW
Fixed external wireless and LTE paddle antennas	MX68CW
Removable external LTE paddle antennas	MX67C

Lifetime Warranty with Next-day Advanced Replacement

Cisco Meraki MX appliances include a limited lifetime hardware warranty that provides next-day advance hardware replacement. Cisco Meraki's simplified software and support licensing model also combines all software upgrades, centralized systems management, and phone support under a single, easy-to-understand model. For complete details, please visit meraki.cisco.com/support.

Accessories

The Cisco Meraki MX84, MX100, MX250, MX450 models support pluggable optics for high-speed backbone connections between wiring closets or to aggregation switches. Cisco Meraki offers several standards-based Gigabit and 10 Gigabit pluggable modules. Each appliance has also been tested for compatibility with several third-party modules.



Pluggable (SFP) Optics for MX84, MX100, MX250, MX450

ACCESSORIES / SFP TRANSCEIVERS

Supported Cisco Meraki accessory modules

MODEL	DESCRIPTION
MA-SFP-1GB-SX	Cisco Meraki 1 GbE SFP SX Fiber Module (1000BASE-SX, range: 550m) for MX84, MX100, MX250, MX450
MA-SFP-1GB-TX	Cisco Meraki 1 GbE RJ45 Copper Module (1000BASE-T for twisted pair) for MX84, MX100, MX250, MX450
MA-SFP-10GB-SR	Cisco Meraki 10 GbE Short Range SFP+ Module (10GBASE-SR, range: 400m) for MX250, MX450
MA-CBL-TA-1M	Cisco Meraki 10 GbE Twinax Cable with SFP+ Connectors (10GSFP+Cu, range: 1m) for MX250, MX450
MA-CBL-TA-3M	Cisco Meraki 10 GbE Twinax Cable with SFP+ Connectors (10GSFP+Cu, range: 3m) for MX250, MX450
MA-PWR-30WAC	Replacement Power Adapter (30W) for MX64, MX64W, MX67, MX67W, MX67C
MA-PWR-90WAC	Replacement Power Adapter (90W) for MX65, MX65W
MA-PWR-250WAC	Meraki MX250/MX450 Power Supply Unit (PSU)
MA-FAN-18K	Meraki 18K RPM system fan for MX250 and MX450
MA-ANT-MX	One pair of external dual-band dipole antennas (connector type: RP-SMA) for MX64W or MX65W

Note: Please refer to meraki.com for additional single-mode and multi-mode fiber transceiver modules

POWER CABLES

1x power cable required for each MX, 2x power cables required for MX250 and MX450. For US customers, all required power cables will be automatically included. Customers outside the US are required to order power cords separately.

SKU

MA-PWR-CORD-US

MA-PWR-CORD-EU

MA-PWR-CORD-UK

MA-PWR-CORD-AU



Specifications

Management

Managed via the web using the Cisco Meraki dashboard
Single pane-of-glass into managing wired and wireless networks
Zero-touch remote deployment (no staging needed)
Automatic firmware upgrades and security patches
Templates based multi-network management
Org-level two-factor authentication and single sign-on
Role based administration with change logging and alerts

Monitoring and Reporting

Throughput, connectivity monitoring and email alerts
Detailed historical per-port and per-client usage statistics
Application usage statistics
Org-level change logs for compliance and change management
VPN tunnel and latency monitoring
Network asset discovery and user identification
Periodic emails with key utilization metrics
Device performance and utilization reporting
Netflow support
Syslog integration

Remote Diagnostics

Live remote packet capture
Real-time diagnostic and troubleshooting tools
Aggregated event logs with instant search

Network and Firewall Services

Stateful firewall, 1:1 NAT, DMZ
Identity-based policies
Auto VPN: Automated site-to-site (IPsec) VPN, for hub-and-spoke or mesh topologies
Client (IPsec L2TP) VPN
Multiple WAN IP, PPPoE, NAT
VLAN support and DHCP services
Static routing
User and device quarantine

WAN Performance Management

Web caching (available on the MX84, MX100, MX250, MX450)
WAN link aggregation
Automatic Layer 3 failover (including VPN connections)
3G / 4G USB modem failover or single-uplink
Application level (Layer 7) traffic analysis and shaping
Ability to choose WAN uplink based on traffic type
SD-WAN: Dual active VPN with policy based routing and dynamic path selection
CAT 6 LTE modem for failover or single-uplink ¹

¹ MX67C and MX68CW only

Advanced Security Services¹

Content filtering (Webroot BrightCloud CIPA compliant URL database)
Web search filtering (including Google / Bing SafeSearch)
YouTube for Schools
Intrusion-prevention sensor (Cisco SNORT® based)
Advanced Malware Protection (AMP)
AMP Threat Grid ²
Geography based firewall rules (MaxMind Geo-IP database)

¹ Advanced security services require Advanced Security license

² Threat Grid services require additional sample pack licensing

Integrated Wireless (MX64W, MX65W, MX67W, MX68W, MX68CW)

1 x 802.11a/n/ac (5 GHz) radio
1 x 802.11b/g/n (2.4 GHz) radio
Max data rate 1.2 Gbps aggregate (MX64W, MX65W), 1.3Gbps aggregate (MX67W, MX68W, MX68CW)
2 x 2 MU-MIMO with two spatial streams (MX67W, MX68W, MX68CW)
2 external dual-band dipole antennas (connector type: RP-SMA)
Antenna gain: 3.0 dBi @ 2.4 GHz, 3.5 dBi @ 5 GHz
WEP, WPA, WPA2-PSK, WPA2-Enterprise with 802.1X authentication
FCC (US): 2.412-2.462 GHz, 5.150-5.250 GHz (UNII-1), 5.250-5.350 GHz (UNII-2), 5.470-5.725 GHz (UNII-2e), 5.725 -5.825 GHz (UNII-3)
CE (Europe): 2.412-2.484 GHz, 5.150-5.250 GHz (UNII-1), 5.250-5.350 GHz (UNII-2), 5.470-5.600 GHz, 5.660-5.725 GHz (UNII-2e)
Additional regulatory information: IC (Canada), C-Tick (Australia/New Zealand), RoHS

Integrated Cellular (MX67C and MX68CW only)

LTE bands: 2, 4, 5, 12, 13, 17, and 19 (North America), 1, 3, 5, 7, 8, 20, 26, 28A, 28B, 34, 38, 39, 40, and 41 (Worldwide)
300 Mbps CAT 6 LTE
Additional regulatory information: PTCRB (North America), RCM (ANZ, APAC), GCF (EU)

Power over Ethernet (MX65, MX65W, MX68, MX68W, MX68CW)

2 x PoE+ (802.3at) LAN ports
30W maximum per port

Regulatory

FCC (US)
CB (IEC)
CISPR (Australia/New Zealand)
PTCRB (North America)
RCM (Australia/New Zealand, Asia Pacific)
GCF (EU)

Warranty

Full lifetime hardware warranty with next-day advanced replacement included.
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Ordering Guide

To place an order for an MX appliance, pair a specific hardware model with a single license (which includes cloud services, software upgrades and support). For example, to order an MX64 with 3 years of Advanced Security license, order an MX64-HW with LIC-MX64-SEC-3YR. Lifetime warranty with advanced replacement is included on all hardware at no additional cost.

MODEL	LICENSE	DESCRIPTION
MX64-HW	LIC-MX64-ENT-1YR LIC-MX64-ENT-3YR LIC-MX64-ENT-5YR LIC-MX64-SEC-1YR LIC-MX64-SEC-3YR LIC-MX64-SEC-5YR	Cisco Meraki MX64, 1 year Enterprise License and Support Cisco Meraki MX64, 3 year Enterprise License and Support Cisco Meraki MX64, 5 year Enterprise License and Support Cisco Meraki MX64, 1 year Advanced Security License and Support Cisco Meraki MX64, 3 year Advanced Security License and Support Cisco Meraki MX64, 5 year Advanced Security License and Support
MX64W-HW	LIC-MX64W-ENT-1YR LIC-MX64W-ENT-3YR LIC-MX64W-ENT-5YR LIC-MX64W-SEC-1YR LIC-MX64W-SEC-3YR LIC-MX64W-SEC-5YR	Cisco Meraki MX64W, 1 year Enterprise License and Support Cisco Meraki MX64W, 3 year Enterprise License and Support Cisco Meraki MX64W, 5 year Enterprise License and Support Cisco Meraki MX64W, 1 year Advanced Security License and Support Cisco Meraki MX64W, 3 year Advanced Security License and Support Cisco Meraki MX64W, 5 year Advanced Security License and Support
MX65-HW	LIC-MX65-ENT-1YR LIC-MX65-ENT-3YR LIC-MX65-ENT-5YR LIC-MX65-SEC-1YR LIC-MX65-SEC-3YR LIC-MX65-SEC-5YR	Cisco Meraki MX65, 1 year Enterprise License and Support Cisco Meraki MX65, 3 year Enterprise License and Support Cisco Meraki MX65, 5 year Enterprise License and Support Cisco Meraki MX65, 1 year Advanced Security License and Support Cisco Meraki MX65, 3 year Advanced Security License and Support Cisco Meraki MX65, 5 year Advanced Security License and Support
MX65W-HW	LIC-MX65W-ENT-1YR LIC-MX65W-ENT-3YR LIC-MX65W-ENT-5YR LIC-MX65W-SEC-1YR LIC-MX65W-SEC-3YR LIC-MX65W-SEC-5YR	Cisco Meraki MX65W, 1 year Enterprise License and Support Cisco Meraki MX65W, 3 year Enterprise License and Support Cisco Meraki MX65W, 5 year Enterprise License and Support Cisco Meraki MX65W, 1 year Advanced Security License and Support Cisco Meraki MX65W, 3 year Advanced Security License and Support Cisco Meraki MX65W, 5 year Advanced Security License and Support
MX84-HW	LIC-MX84-ENT-1YR LIC-MX84-ENT-3YR LIC-MX84-ENT-5YR LIC-MX84-SEC-1YR LIC-MX84-SEC-3YR LIC-MX84-SEC-5YR	Cisco Meraki MX84, 1 year Enterprise License and Support Cisco Meraki MX84, 3 year Enterprise License and Support Cisco Meraki MX84, 5 year Enterprise License and Support Cisco Meraki MX84, 1 year Advanced Security License and Support Cisco Meraki MX84, 3 year Advanced Security License and Support Cisco Meraki MX84, 5 year Advanced Security License and Support
MX100-HW	LIC-MX100-ENT-1YR LIC-MX100-ENT-3YR LIC-MX100-ENT-5YR LIC-MX100-SEC-1YR LIC-MX100-SEC-3YR LIC-MX100-SEC-5YR	Cisco Meraki MX100, 1 year Enterprise License and Support Cisco Meraki MX100, 3 year Enterprise License and Support Cisco Meraki MX100, 5 year Enterprise License and Support Cisco Meraki MX100, 1 year Advanced Security License and Support Cisco Meraki MX100, 3 year Advanced Security License and Support Cisco Meraki MX100, 5 year Advanced Security License and Support
vMX100	LIC-VMX100-1YR LIC-VMX100-3YR LIC-VMX100-5YR	Cisco Meraki vMX100, 1 year License and Support Cisco Meraki vMX100, 3 year License and Support Cisco Meraki vMX100, 5 year License and Support

*Note: For each MX product, additional 7 or 10 year Enterprise or Advanced Security licensing options are also available (ex: LIC-MX100-SEC-7YR).

Ordering Guide

To place an order for an MX appliance, pair a specific hardware model with a single license (which includes cloud services, software upgrades and support). For example, to order an MX64 with 3 years of Advanced Security license, order an MX64-HW with LIC-MX64-SEC-3YR. Lifetime warranty with advanced replacement is included on all hardware at no additional cost.

MODEL	LICENSE	DESCRIPTION
MX67-HW	LIC-MX67-ENT-1YR LIC-MX67-ENT-3YR LIC-MX67-ENT-5YR LIC-MX67-ENT-7YR LIC-MX67-ENT-10YR LIC-MX67-SEC-1YR LIC-MX67-SEC-3YR LIC-MX67-SEC-5YR LIC-MX67-SEC-7YR LIC-MX67-SEC-10YR	Cisco Meraki MX67, 1 year Enterprise License and Support Cisco Meraki MX67, 3 year Enterprise License and Support Cisco Meraki MX67, 5 year Enterprise License and Support Cisco Meraki MX67, 7 year Enterprise License and Support Cisco Meraki MX67, 10 year Enterprise License and Support Cisco Meraki MX67, 1 year Advanced Security License and Support Cisco Meraki MX67, 3 year Advanced Security License and Support Cisco Meraki MX67, 5 year Advanced Security License and Support Cisco Meraki MX67, 7 year Advanced Security License and Support Cisco Meraki MX67, 10 year Advanced Security License and Support
MX67W-HW	LIC-MX67W-ENT-1YR LIC-MX67W-ENT-3YR LIC-MX67W-ENT-5YR LIC-MX67W-ENT-7YR LIC-MX67W-ENT-10YR LIC-MX67W-SEC-1YR LIC-MX67W-SEC-3YR LIC-MX67W-SEC-5YR LIC-MX67W-SEC-7YR LIC-MX67W-SEC-10YR	Cisco Meraki MX67W, 1 year Enterprise License and Support Cisco Meraki MX67W, 3 year Enterprise License and Support Cisco Meraki MX67W, 5 year Enterprise License and Support Cisco Meraki MX67W, 7 year Enterprise License and Support Cisco Meraki MX67W, 10 year Enterprise License and Support Cisco Meraki MX67W, 1 year Advanced Security License and Support Cisco Meraki MX67W, 3 year Advanced Security License and Support Cisco Meraki MX67W, 5 year Advanced Security License and Support Cisco Meraki MX67W, 7 year Advanced Security License and Support Cisco Meraki MX67W, 10 year Advanced Security License and Support
MX67C-HW-NA (North America) MX67C-HW-WW (Worldwide)	LIC-MX67C-ENT-1YR LIC-MX67C-ENT-3YR LIC-MX67C-ENT-5YR LIC-MX67C-ENT-7YR LIC-MX67C-ENT-10YR LIC-MX67C-SEC-1YR LIC-MX67C-SEC-3YR LIC-MX67C-SEC-5YR LIC-MX67C-SEC-7YR LIC-MX67C-SEC-10YR	Cisco Meraki MX67C, 1 year Enterprise License and Support Cisco Meraki MX67C, 3 year Enterprise License and Support Cisco Meraki MX67C, 5 year Enterprise License and Support Cisco Meraki MX67C, 7 year Enterprise License and Support Cisco Meraki MX67C, 10 year Enterprise License and Support Cisco Meraki MX67C, 1 year Advanced Security License and Support Cisco Meraki MX67C, 3 year Advanced Security License and Support Cisco Meraki MX67C, 5 year Advanced Security License and Support Cisco Meraki MX67C, 7 year Advanced Security License and Support Cisco Meraki MX67C, 10 year Advanced Security License and Support
MX68-HW	LIC-MX68-ENT-1YR LIC-MX68-ENT-3YR LIC-MX68-ENT-5YR LIC-MX68-ENT-7YR LIC-MX68-ENT-10YR LIC-MX68-SEC-1YR LIC-MX68-SEC-3YR LIC-MX68-SEC-5YR LIC-MX68-SEC-7YR LIC-MX68-SEC-10YR	Cisco Meraki MX68, 1 year Enterprise License and Support Cisco Meraki MX68, 3 year Enterprise License and Support Cisco Meraki MX68, 5 year Enterprise License and Support Cisco Meraki MX68, 7 year Enterprise License and Support Cisco Meraki MX68, 10 year Enterprise License and Support Cisco Meraki MX68, 1 year Advanced Security License and Support Cisco Meraki MX68, 3 year Advanced Security License and Support Cisco Meraki MX68, 5 year Advanced Security License and Support Cisco Meraki MX68, 7 year Advanced Security License and Support Cisco Meraki MX68, 10 year Advanced Security License and Support
MX68W-HW	LIC-MX68W-ENT-1YR LIC-MX68W-ENT-3YR LIC-MX68W-ENT-5YR LIC-MX68W-ENT-7YR LIC-MX68W-ENT-10YR LIC-MX68W-SEC-1YR LIC-MX68W-SEC-3YR LIC-MX68W-SEC-5YR LIC-MX68W-SEC-7YR LIC-MX68W-SEC-10YR	Cisco Meraki MX68W, 1 year Enterprise License and Support Cisco Meraki MX68W, 3 year Enterprise License and Support Cisco Meraki MX68W, 5 year Enterprise License and Support Cisco Meraki MX68W, 7 year Enterprise License and Support Cisco Meraki MX68W, 10 year Enterprise License and Support Cisco Meraki MX68W, 1 year Advanced Security License and Support Cisco Meraki MX68W, 3 year Advanced Security License and Support Cisco Meraki MX68W, 5 year Advanced Security License and Support Cisco Meraki MX68W, 7 year Advanced Security License and Support Cisco Meraki MX68W, 10 year Advanced Security License and Support
MX68CW-HW-NA (North America) MX68CW-HW-WW (Worldwide)	LIC-MX68CW-ENT-1YR LIC-MX68CW-ENT-3YR LIC-MX68CW-ENT-5YR LIC-MX68CW-ENT-7YR LIC-MX68CW-ENT-10YR LIC-MX68CW-SEC-1YR LIC-MX68CW-SEC-3YR LIC-MX68CW-SEC-5YR LIC-MX68CW-SEC-7YR LIC-MX68CW-SEC-10YR	Cisco Meraki MX68CW, 1 year Enterprise License and Support Cisco Meraki MX68CW, 3 year Enterprise License and Support Cisco Meraki MX68CW, 5 year Enterprise License and Support Cisco Meraki MX68CW, 7 year Enterprise License and Support Cisco Meraki MX68CW, 10 year Enterprise License and Support Cisco Meraki MX68CW, 1 year Advanced Security License and Support Cisco Meraki MX68CW, 3 year Advanced Security License and Support Cisco Meraki MX68CW, 5 year Advanced Security License and Support Cisco Meraki MX68CW, 7 year Advanced Security License and Support Cisco Meraki MX68CW, 10 year Advanced Security License and Support

*Note: For each MX product, additional 7 or 10 year Enterprise or Advanced Security licensing options are also available (ex: LIC-MX100-SEC-7YR).

Ordering Guide

To place an order for an MX appliance, pair a specific hardware model with a single license (which includes cloud services, software upgrades and support). For example, to order an MX64 with 3 years of Advanced Security license, order an MX64-HW with LIC-MX64-SEC-3YR. Lifetime warranty with advanced replacement is included on all hardware at no additional cost.

MODEL	LICENSE	DESCRIPTION
MX250-HW	LIC-MX250-ENT-1YR LIC-MX250-ENT-3YR LIC-MX250-ENT-5YR LIC-MX250-SEC-1YR LIC-MX250-SEC-3YR LIC-MX250-SEC-5YR	Cisco Meraki MX250, 1 year Enterprise License and Support Cisco Meraki MX250, 3 year Enterprise License and Support Cisco Meraki MX250, 5 year Enterprise License and Support Cisco Meraki MX250, 1 year Advanced Security License and Support Cisco Meraki MX250, 3 year Advanced Security License and Support Cisco Meraki MX250, 5 year Advanced Security License and Support
MX450-HW	LIC-MX450-ENT-1YR LIC-MX450-ENT-3YR LIC-MX450-ENT-5YR LIC-MX450-SEC-1YR LIC-MX450-SEC-3YR LIC-MX450-SEC-5YR	Cisco Meraki MX450, 1 year Enterprise License and Support Cisco Meraki MX450, 3 year Enterprise License and Support Cisco Meraki MX450, 5 year Enterprise License and Support Cisco Meraki MX450, 1 year Advanced Security License and Support Cisco Meraki MX450, 3 year Advanced Security License and Support Cisco Meraki MX450, 5 year Advanced Security License and Support

*Note: For each MX product, additional 7 or 10 year Enterprise or Advanced Security licensing options are also available (ex: LIC-MX100-SEC-7YR).

ThunderIT for the REMC SAVE Contract

ThunderIT offers products and services for REMC SAVE contract customers at a discounted price in accordance to the REMC price list.

Overview for the REMC SAVE contract

REMC SAVE provides large volume contracts for a variety of educational resources, including furniture, school and office supplies, software and digital services, and technology.

The program saves time and money by providing bids compliant with the Michigan Revised School Code that also provides local school districts with the authority to purchase using REMC contracts. The legislation that established REMCs (Michigan Compiled Laws Act 451 Section 380.671), and State Board of Education Rules, enables REMCs to bid on behalf of local school districts and also provide local school districts with the authority to purchase using REMC contracts. All items and vendors are awarded through a sealed bid process by the REMC SAVE Bid Project and approved by the REMC Association.

REMC SAVE is provided as a project of the REMC Association of Michigan for all Michigan schools. REMC SAVE provides large-volume contracts for a variety of educational resources. By using REMC SAVE contracts, Michigan schools have saved more than \$1 billion since 1990. Every dollar saved through REMC SAVE today is one more dollar to invest in instruction tomorrow.

ThunderIT services the following REMC districts; REMC 1, REMC 2N, REMC 2C, REMC 2S, REMC 3, REMC 4, REMC 5, REMC 6, REMC 7, REMC 8, REMC 9, REMC 10, REMC 11, REMC 12W, REMC 12E, REMC 13, REMC 14W, REMC 14E, REMC 15, REMC 16, REMC 17, REMC 18S, REMC 18N, REMC 19W, REMC 19E, REMC 20, REMC 21, REMC 22

ThunderIT services the following REMC customers; AKIVA HEBREW DAY SCHOOL, BIRNEY MIDDLE SCHOOL, BUSSEY CTR-EARLY CHILDHOOD DEV, DEVRY UNIVERSITY - SOUTHFIELD – CENTRAL, HAMILTON ACADEMY CENTRAL OFFICE, LEONHARD ELEMENTARY SCHOOL, MCINTYRE ELEMENTARY SCHOOL, OAKLAND INTERNATIONAL ACADEMY

Other REMC contract holders include: Inacomp Technical Services Group, Sentinel Technologies, Software Services Group, Insight Direct USA, Information Systems Intelligence, Netech, Secant Technologies, CDW Logistics Inc (CDWG)

ThunderIT offers a variety of Solutions & Services to meet your every need

Digital Workplace

Transform your digital workplace and empower employees to drive your business forward. We deliver flexible, tailored, end-to-end solutions to keep your workforce engaged and productive. With an innovative approach centered around exceptional user experiences.

Smart Spaces

We provide smart workspace solutions to help you deliver consistent network performance and give guests, employees and students an uninterrupted experience.

Secure Network Solutions

Our security solutions help protect your network and critical data from cybersecurity threats

Safe Environments

We believe that employee, student, and customer safety is paramount in any environment. That's why our solutions provide a cloud based platform to help you intuitively manage and monitor physical locations to ensure a safe experience for everyone.

Next Generation WiFi

Power new and improved user experiences with our managed wifi solutions, offering faster speeds for enhanced application experience and more capacity for high density indoor and outdoor environments.

Remote Work Solutions

With our remote work solutions, working away from the office is no big deal. Give employees a secure, optimized connection to your entire network from anywhere.

Hybrid Workforce

We provide a seamless hybrid workforce solution that embraces change and operational scale. Give your employees and customers unrivaled experiences with a cloud platform that unifies best-in-class technologies.

Free Network Evaluation & Demo

ThunderIT offers a FREE Network Evaluation and/or product Demo to help ensure you are well informed and confident when choosing the right Cisco Meraki solution for your needs. During our call we'll architect a custom built Cisco Meraki solution for your business or environment.

Migration & Deployment

ThunderIT offers Migration and Deployment Services for your Cisco Meraki solution. Our experienced team of IT Professionals can configure, deploy and support your products to meet your needs. Our custom solutions ensure maximum efficiency and provide a clear path for your business going forward.

Managed Security

ThunderIT offers the best and most cost-effective solution to lower your risk in a heightened threat environment. Our team of certified Cisco engineers are ready to ensure that your network is secure, and your firewall is optimally configured to defend your business.

Mobile device management (MDM) Services

Our Mobile Device Management (MDM) solution unifies management of thousands of endpoint devices in a secure cloud platform, driving your organization's mobility initiatives, while maintaining an environment of agility and security.

Support & Monitoring

ThunderIT offers network support and monitoring services that are designed to fit the needs of every customer.

FAQs for the REMC SAVE Contract

Q: Does REMC SAVE meet the legal requirement for competitive bidding? A: The legislation that established REMCs (Michigan Compiled Laws Act 451 Section 380.671), and State Board of Education Rules, enables REMCs to bid on behalf of local school districts and also provide local school districts with the authority to purchase using REMC contracts. All items are competitively bid by REMC SAVE and awarded by the REMC Association.

Q: Who can Use REMC SAVE contracts? A: The following agencies are eligible to purchase using REMC SAVE contracts: PreK-12 Public, Charter (PSA) and Non-Public Schools, Community Colleges, Universities and Colleges, Public Libraries, Museums, State, County, and Local Government Agencies, Educational Non-profit Organizations and Health Care Facilities. Personal purchases at awarded bid pricing are at the discretion of the vendors.

Q: What is REMC SAVE? A: REMC SAVE is a free service of the REMC Association for all Michigan schools. There are 3 staff of REMC SAVE, and they conduct all of the bids and maintain vendor contracts. You can ask your local REMC Center questions. Find your local REMC Center by scrolling down the REMC SAVE home screen to view the map for your region or look up by zip code.

Q: How do I provide feedback? A: Your local REMC SAVE contact will always listen to any feedback you wish to provide. If you have feedback about the product, scroll down the home screen at remcsave.org and click 'View All Vendors' and you can complete a vendor evaluation form.

Q: What if my company wishes to become an awarded vendor? A: Go to vendorcenter.remcbids.org and create an account by clicking Login or Register in the upper right corner. Follow the directions! The only requirement is that you need five Michigan K12 school references. Customers can send their vendor recommendations to their local REMC contact or email remcsave@remc.org

Q: How are the vendors and products selected? A: Products and Vendors are awarded through a competitive bid process. REMC SAVE staff analyzes all bids and make recommendations to the REMC SAVE Advisory Committee for award. Once the REMC SAVE Advisory Committee votes on the award recommendations, they are then voted on by the REMC Association Board of Directors for final award.

Q: Where do I send my order or contact an awarded vendor? To contact vendors, navigate to the vendor listing by scrolling down the home screen and click 'view all vendors,' or navigate to <https://www.remcsave.org/vendors>. Click on the vendor name to find their contact information.

Q: What do I need to include on my purchase order? Please make sure your purchase order is itemized and includes the REMC item number, the model number/name, the reseller product number (if available), the quantity of each item to be purchased, and the unit price. A quote may be attached, but the purchase order should still be itemized. Sometimes the item numbers for the warranties, accessories, and upgrades are located on the spec sheet, linked from the awarded item page – be sure to include on the Purchase Order.