

Cisco Meraki MS355-48X-HW

HARDWARE DATASHEET

MULTIGIGABIT LAYER 3 STACKABLE ENTERPRISE SWITCH

The **Cisco Meraki MS355-48X-HW** is a high-density, multi-gigabit (mGig) Layer 3 switch purpose-built for demanding enterprise Wi-Fi 6 (802.11ax) deployments and campus aggregations. Featuring 16 multigigabit ports with UPoE (up to 60W per port), ultra-fast 400 Gbps physical QSFP28 stacking, flexible 40G/10G uplinks, and complete cloud visibility via the Meraki Dashboard.

16 mGig

+ 32× 1G RJ45

UPoE 60W

740W POWER BUDGET

2× 40G / 4× 10G

FLEXIBLE UPLINKS

400 Gbps

QSFP28 STACKING

HARDWARE ARCHITECTURE & TECHNICAL SPECIFICATIONS

Parameter	Specification Details
Interfaces	16 × 100M/1G/2.5G/5G/10G mGig RJ45, 32 × 1GbE RJ45, 2 × 40G QSFP+ or 4 × 10G SFP+ uplinks
Power over Ethernet	UPoE (up to 60W/port on mGig ports), PoE+ (up to 30W/port on 1G ports). 740W default budget
Switching Capacity	544 Gbps non-blocking switch fabric
Forwarding Rate	405 Mpps (Million Packets Per Second)
Physical Stacking	400 Gbps stacking bandwidth via 2 × 100G QSFP28 dedicated stacking ports (Up to 8 units)
Form Factor & Fans	1U Rack-mountable (4-post rack kit included), 3 × pre-installed modular variable-speed fans
Power Supply System	Dual field-replaceable hot-swappable PSUs (1× 1025W AC MA-PWR-1025WAC included)

MULTIGIGABIT CAPABILITIES & ADVANCED LAYER 3 FEATURES

- **Multigigabit (mGig) Ethernet:** 16 mGig ports support auto-negotiation (100M/1G/2.5G/5G/10G) over standard copper cabling to power Wi-Fi 6 access points without rewiring.
- **60W UPoE Support:** Delivers up to 60W per port for power-hungry devices including high-end wireless APs, PTZ security cameras, and smart building sensors.
- **Next-Gen 400G Hardware Stacking:** High-bandwidth QSFP28 stacking creates a single logical switch fabric with 400 Gbps backplane capacity.
- **Enterprise Routing:** Full Layer 3 dynamic routing with OSPFv2, static routing, DHCP server/relay, and Warm Spare VRRP redundancy.

ENTERPRISE SECURITY & QUALITY OF SERVICE

- **Identity & Access Control:** IEEE 802.1X RADIUS authentication, MAC Authentication Bypass (MAB), Hybrid Authentication, and IPv4/IPv6 ACLs.
- **Network Security:** Dynamic ARP Inspection (DAI), DHCP Snooping, BPDU Guard, Root Guard, and UDLD protection.
- **Advanced QoS:** 8 CoS/DSCP queues optimized for voice and real-time video prioritization across campus networks.

PHYSICAL & POWER SPECIFICATIONS

Feature	Specification
Dimensions (H × W × D)	1.72" × 19.08" × 20.34" (4.37 cm × 48.46 cm × 51.66 cm)
Weight	13.00 lbs (5.90 kg)
Power Consumption	Idle: ~110W Maximum (full PoE load): up to 1793W (with dual PSUs)
Operating Temperature	0°C to 45°C (32°F to 113°F)
Humidity	5% to 95% non-condensing

COMPATIBLE MODULAR COMPONENTS & ACCESSORIES

Power Supplies & Stacking Cables:

- **MA-PWR-1025WAC:** Meraki 1025W AC Modular PSU
- **MA-CBL-100G-0.5M:** 100G QSFP28 Stacking Cable (0.5m)
- **MA-CBL-100G-1M:** 100G QSFP28 Stacking Cable (1m)
- **MA-CBL-100G-3M:** 100G QSFP28 Stacking Cable (3m)

Uplink Optics & Transceivers:

- **MA-QSFP-40G-SR4:** 40G QSFP+ SR4 Fiber Optic Module
- **MA-SFP-10GB-SR:** 10Gbase-SR SFP+ Transceiver
- **MA-SFP-10GB-LR:** 10Gbase-LR SFP+ Transceiver
- **MA-SFP-1GB-SX:** 1GbE SX SFP Transceiver

INTUITIVE CLOUD PLATFORM MANAGEMENT

Through Meraki's unified cloud architecture, administrators gain central visibility into all connected clients, port statuses, application bandwidth usage, and automated firmware upgrades. Features zero-touch deployment and instant remote network diagnostic tools.