

MS390-48

Cloud-Managed Switching for High-Performance Networks



Highlights

Switch ports/stacking ports

- MS390-48: 48 x 1GbE
- MS390-48P: 48 x 1GbE PoE+
- MS390-48U: 48 x GbE UPoE
- MS390-48UX: 36 x 2.5GbE UPoE + 12 x mGbE UPoE
- MS390-48UX2: 48 x 5GbE UPoE
- 2 x 40G or 4/8 x 10G modular fiber uplinks
- Stack up to 8 units
- 480 Gbps of physical stacking

Power/PoE

- All models include a power supply
 - Modular power supply/fans
 - StackPower
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Hardware platform

- Reliable platform with 24/7 Meraki Support
- 1RU rack mountable
- Flexible mounting options
- Non-blocking switch fabric

Cloud management

- Email alerts for switch management
 - Remote troubleshooting tools
 - Manage ports from a GUI-based dashboard
 - Zero-touch provisioning
 - Per-port and per-client usage statistics
 - Secure, user-scheduled firmware updates
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Switching capabilities

- Layer 3
- OSPF Routing
- MAC forwarding entries, up to 32K
- DHCP Server, DHCP Relay
- 802.1X Authentication
- DHCP Snooping
- STP Enhancements
- IPv4 and IPv6 ACLs
- Adaptive Policy*

*Available exclusively with the Advanced License

• Interfaces

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- 48 × 100/1/2.5/5/10G Ethernet (RJ45)
 - 4/8 × 10G SFP+ uplink modules
 - 2 × 40G QSFP uplink modules
 - Auto-negotiation and crossover detection
 - 2 × dedicated stacking ports
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• Management

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- Managed via the Web with the Meraki cloud management platform

- Integrated with Meraki wireless and complete portfolio of IT products and solutions
- Zero-touch remote provisioning (no staging needed)
- Detailed historical per-port and per-client usage statistics
- Operating system, device, and hostname fingerprinting
- SNMP and SYSLOG support for integration with other network management solutions
- Automatic firmware upgrades with scheduling control

- **Remote Diagnostics**

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- Email, SMS, and Mobile push notification alerts
 - Ping, traceroute, cable testing, and link failure detection with alerting

- **Remote packet capture**

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- Dynamic and interactive network discovery and topology
 - Combined event and configuration change logs with instant search

- **Stacking**

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- Virtual Stacking supports thousands of switch ports in a single logical stack for unified management, monitoring, and configuration

- **Ethernet Switching Capabilities**

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- 802.1Q VLAN and trunking support for up to 4,094 VLANs (1000 active VLANs with STP enabled)
 - Single instance of 802.1s Multiple Spanning Tree Protocol (interoperable with RSTP, STP, PVST, RPVST)
 - STP Enhancements: BPDU guard, Root guard, Loop guard, UDLD
 - Broadcast storm control
 - 802.1ab Link Layer Discovery Protocol (LLDP) and Cisco Discovery Protocol (CDP)
 - 802.3ad Link aggregation with up to 8 ports per aggregate, Multichassis aggregates supported on stacked switches
 - Port mirroring
 - IGMP snooping for multicast filtering
 - MAC forwarding entries: 32K

- **Security**

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- Integrated multi-factor authentication for cloud management platform
 - Role-based access control (RBAC) with granular device and configuration control
 - Corporate-wide password policy enforcement

- IEEE 802.1X RADIUS and MAB, hybrid authentication, and RADIUS server testing
- Single-Host/Multi-Domain/Multi-Host/Multi Authentication
- Port security: Sticky MAC, MAC whitelisting
- DHCP snooping, detection and blocking, Dynamic ARP Inspection
- IPv4 and IPv6 ACLs

- **Adaptive Policy**

- Software feature exclusively on the MS390 to provide an additional layer of security based on the intent of the user, device, and application.

- **SecureConnect**

- SecureConnect enables MS210 and above to detect and verify that the MR connected to a port belongs to the same organization and then automatically configure it.

- **Performance**

- Switching capacity: MS390-48: 256 Gbps, MS390-48P: 256 Gbps, MS390-48U: 256 Gbps, MS390-48UX: 580 Gbps, MS390-48UX2: 640 Gbps
- Forwarding rate: MS390-48: 190 Mpps, MS390-48P: 190 Mpps, MS390-48U: 190 Mpps, MS390-48UX: 431.54 Mpps, MS390-48UX2: 476.19 Mpps
- Jumbo frame support (9600 byte Ethernet frame)
- Flow control
- Stacking bandwidth of 480 Gbps

- **Layer 3 Capabilities**

- Static routing, OSPFv2 (with support for up to 16 ECMP Routes)
- Multicast routing [PIM-ASM]
- Warm spare (VRRP)
- DHCP Relay, DHCP Server

- **Power**

- Power input: 100-240V~, 50-60Hz
- Power consumption
 - MS390-48-HW: 83.9 / 109.9 W (idle/max)
 - MS390-48P-HW: 92.6 / 555 W (idle/max)
 - MS390-48U-HW: 145 / 844.9 W (idle/max)
 - MS390-48UX-HW: 218.5 / 785.5 W (idle/max)
 - MS390-48UX2-HW: 157.9 / 843.8 W (idle/max)

- **Mounting**

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- 1U Rack-mountable with included rack mount hardware
 - 2-post front mounting options available
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- **Environment**

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- Operating temperature: 0°C to 45°C
 - Humidity: 5 to 95% RH
 - Variable speed fans
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- **Regulatory (For international availability, please contact sales@meraki.com)**

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- FCC Part 15 (CFR 47) Class A, ICES-003 Class A, CISPR22 Class A, CNS13438, EN 300 386 V1.6.1, EN 55022 Class A, EN 61000-3-2, EN61000-3-3, KN 32, TCVN 7189 Class A, EN 55032 , CISPR 32 Class A, V-2/2015.04, V-3/2015.04, VCCI-CISPR 32 Class A, CISPR24, EN 300 386 V1.6.1, EN 55024, KN35, TCVN 7317
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- **Safety Compliance**

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- CAN/CSA-C22.2 No. 60950-1, UL 60950-1, EN 60950-1, IEC 60950-1, AS/NZS 60950.1
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- **Warranty**

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- Full lifetime hardware warranty with next-day advanced replacement included
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- **MTBF (at 25°C)**

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- MS390-48-HW: 305,870
 - MS390-48P-HW: 277,770
 - MS390-48U-HW: 227,410
 - MS390-48UX-HW: 202,160
 - MS390-48UX2-HW: 198,647
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- **Physical Specifications (H × W × D)**

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- MS390-48-HW
 - 1.73" × 17.5" × 17.7"(4.4 × 44.5 × 44.9cm)
 - Weight: 16.43 lb (7.45 kg)
 - MS390-48P-HW
 - 1.73" × 17.5" × 17.7"(4.4 × 44.5 × 44.9cm)
 - Weight: 16.73 lb (7.59 kg)
 - MS390-48U-HW
 - 1.73" × 17.5" × 19.2"(4.4 × 44.5 × 48.8cm)
 - Weight: 17.03 lb (7.72 kg)
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- MS390-48UX-HW
 - 1.73" × 17.5" × 22.2" (4.4 × 44.5 × 56.4cm)
 - Weight: 20.50 lb (9.34 kg)