



OS3254M

L3 Managed Switch with 24x1000Base-T Ports, 24xSFP Ports, and 6x10G SFP+ Ports

24x10/100/1000Base-T (RJ-45), 24x100/1000Base-X SFP, 6x10GBase-X SFP+, Console RJ-45, 100Base-TX (OOB), USB 2.0, 2xAC Power Modules, 3xFan Modules, 19" rack mounting



The ORIGO OS3254M is a managed L3 switch with 24x1000Base-T RJ-45 ports, 24x100/1000Mbps SFP slots, and 6x10G SFP+ uplinks.

The OS3254M switch is designed for deployment in enterprise and ISP networks, delivering a high-performance and resilient distribution-layer solution with 10G connectivity and a high density of both copper and fiber Gigabit interfaces.

The OS3254M is equipped with three fan modules with automatic speed control and two hot-swappable AC power modules. Built-in 6kV surge protection meets industry surge standards, guarding the switch and connected devices from damage and network instability caused by ESD and lightning-induced surges. This design guarantees continuous availability and fault tolerance in mission-critical environments.

The switch combines powerful L3 routing capabilities (RIP, IS-IS, OSPF, BGP, PIM) with advanced security, QoS, and flexible VLAN features. Designed for reliable performance, the switch supports link aggregation (LACP, MLAG), redundancy protocols (STP/RSTP/MSTP), and ERPS technology for fast recovery in case of link failure within a ring topology. Built-in OAM tools provide comprehensive monitoring and troubleshooting, making network management simple and efficient.

Key Features

- 24 x 10/100/1000Base-T (RJ-45) ports
- 24 x 100/1000Base-X SFP ports
- 6 x 10G SFP+ uplinks
- 2 hot-swappable AC power modules
- 3 fan modules with automatic speed control
- Built-in 6kV surge protection
- Dynamic routing: RIP, IS-IS, OSPF, BGP
- PIM-SM for multicast routing
- 802.1Q VLAN, Selective Q-in-Q, Multicast VLAN
- MLAG, ERPS, STP/RSTP/MSTP for high availability
- 802.1X authentication, ACL, IP Source Guard
- Management via Web UI, CLI (Telnet, SSH, Console), and SNMP



Specifications

Hardware

CPU and memory	• CPU: RTL9311 • RAM: 1 GB • Flash: 64 MB
Interfaces	• 24 x 10/100/1000Base-T (RJ-45) • 24 x 100/1000Base-X SFP • 6 x 10G Base-X SFP+ • 1 x RJ-45 console port • 10/100Base-TX management port (OOB) • USB 2.0 Port
Standards and Functions	• IEEE 802.3 10Base-T • IEEE 802.3u 100Base-TX • IEEE 802.3ab 1000Base-T • IEEE 802.3u 100Base-FX • IEEE 802.3z 1000Base-X • IEEE 802.3ae 10GBase-X
LEDs	• PWR • Link/Act • SYS • MGMT • PSU0 • PSU1
Power	• 2 x pluggable AC power modules • 1+1 redundancy • Hot-swappable
Ventilation	• 3 x pluggable fan modules • Automatic speed control
Housing	• Metal
Mounting	• Desktop • 19" rackmount

Performance

Switching Capacity	• 216 Gbps
Packet Forwarding Rate	• 160.71 Mpps
Packet Buffer	• 2 MB
Transfer Mode	• Store-and-forward
MAC Address Table	• 32K entries
Routing Table Size	• 12K
L3 Forwarding Table	• 12K
Jumbo Frame	• 12 KB

Software

L2 Features	• Flow Control • Link Aggregation - Static - 802.3ad - Up to 64 groups per device / up to 8 ports per group • Load Balance - src-mac - dst-mac - src-ip - dst-ip • Loopback Detection • ERPS • MRPP • ULPP • ULSM • Spanning Tree Protocol - 802.1D STP - 802.1w RSTP - 802.1s MSTP (64 instances) - Root Guard (Restriction) - BPDU Guard (Restriction)
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	• LLDP • LLDP-MED • Port Mirroring - One-to-One - Many-to-One - Flow-based - CPU-based - Ingress/egress/both • RSPAN • L2 Protocol Tunneling • Multi-Chassis Link Aggregation Group (MLAG) • Smart Link
VLAN	• 802.1Q, 4094 VLAN • Port-based VLAN • MAC-based VLAN • Protocol-based VLAN (802.1v) • Subnet-based VLAN • Private VLAN • VLAN Filtering • Voice VLAN • GVRP • MVRP • Double VLAN (Q-in-Q) - Selective Q-in-Q - Port-based Q-in-Q • VLAN Translation • Multicast VLAN
L2 Multicast	• IGMP Snooping - IGMP v1/v2/v3 - Supports up to 4K groups - IGMP Snooping Fast Leave - IGMP Proxy - IGMP Authentication (RADIUS) • MLD Snooping - MLD v1/v2

	- Supports up to 4K groups • Multicast Source/Destination (DCSCM)
L3 Features	• Maximum number of IP interfaces: 32 • 8K ARP entries • Static routing for IPv4/IPv6 - 12K IPv4 routes - 12K IPv6 routes • Gratuitous ARP • GLPD (GARP Leave Proxy Device) • Bidirectional Forwarding Detection (BFD) • RIPv1/v2 • OSPFv2 • BGPv4 • IS-IS • IS-ISv6 • VRRP
L3 Multicast	• PIM-SM
QoS	• 802.1p • CoS based on: - DSCP - VLAN ID - IP Precedence - IP ACL/ MAC ACL/ IPv6 ACL - IPv6 Flow Labels • Queue Handling - Strict Priority (SP) - Weighted Round Robin (WRR) - Weighted Deficit Round Robin (WDRR) • Port-based bandwidth control • Supports up to 8 egress queues per port
Security	• IP Source Guard • Port Isolation • Storm Control • Dynamic ARP Inspection

	• ARP Spoofing Protection • ARP Scanning Prevention • ARP Guard • DoS Attack Prevention • DHCP Snooping • DHCPv6 Snooping • IPv6 SAVI • Security RA • CPU Protection
AAA	• 802.1X Authentication: - Port-Based - MAC-Based • Guest VLAN • IPv6 RADIUS Server • RADIUS/TACACS+ Authentication
Access Control Lists (ACL)	• Up to 4K ACL entries • ACL based on: - VLAN - MAC address - IPv4 address - DSCP - ToS - TCP/UDP port number - User-defined ACL • Time-based ACL
OAM	• Cable Diagnostics • ULDP (Unidirectional Link Detection Protocol) • 802.3ah Ethernet Link OAM • 802.1ag Connectivity Fault Management (CFM) • DDM (Digital Diagnostics Monitoring) • Watchdog
Management	• Web-based UI • CLI • Telnet

	• SSH • FTP • TFTP • System Log • SNMP v1/v2c/v3 • SNMP Traps • SNTP • NTP • Firmware Backup/Upgrade • Ping/Traceroute (IPv4/IPv6) • DHCP Server • DHCPv6 Server • BootP/DHCP Client • DHCP Relay • DHCPv6 Relay • DHCP Option 82, 43, 60, 61, 67 • DNS Client (IPv4/IPv6) • Precision Time Protocol (PTP)
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Physical Parameters

Dimensions (W × D× H)	• 440 x 380 x 44 mm
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Operating Conditions

Power Input	• 100-240V AC, 50/60 Hz
Surge Protection	• Up to 6kV (copper ports)
Temperature	• Operating: 0 to 50 °C • Storage: -40 to 70 °C
Humidity	• Operating: 20% to 90% (non-condensing) • Storage: 20% to 90% (non-condensing)

Package Contents

Package Contents	• OS3254M Switch • 2xAC Power Modules • 3xFan Modules • 2xPower Cords • RJ-45 Console Cable • Grounding Wire • Rack-Mount Kit • Quick Installation Guide
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Order Info

OS3254M	Managed L3 PoE Switch, 24x1000Base-T, 24x1000Base-X SFP, 6x10GBase-X SFP+ <i>With 2 AC power modules and 3 fan modules included</i>
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