MSW-4424A



24x GbE, SFP + 4x 10GE SFP+ L2+ Carrier Ethernet Switch





MSW-4424A L2+ managed Gigabit Ethernet switches are positioned as a Carrier Ethernet access switch solution. They are equipped with 24 SFP based 100Base-FX/1000Base-X dual speed optical ports and 4 10G Base-X SFP+ or 1000Base-X SFP uplink ports. The MSW-4424A offers the best flexibility and scalability for operators and service providers to deploy their Metro Ethernet networks. Aimed specifically at Metro Ethernet deployment, the specifications of MSW-4424A fully meet the attributes of Carrier Ethernet proposed by the Metro Ethernet Forum. The switches comply with MEF 9 standard to support E-Line/E-Access services and MEF 14 standard to enable the bandwidth profile configuration for delivering SLA (Service Level Agreement) with predictable end-to-end performance characteristics. MSW-4424A also supports advanced service OAM management to rapidly detect and recover from the network incidents in real time.

Features

Front access and hot swappable design

All of the system modules are front accessible, the hot swappable power and FAN module are designed to keep high network availability without service interruption when components fail

Fully dual rate architecture of fiber link port

Dual speed fiber ports offer scalable physical connections for Metro Ethernet network operators

Fully Ethernet OAM enable

Ethernet OAM features (IEEE 802.3ah/802.1ag/ITU-T Y.1731) help to rapidly detect and recover network faults and save OPEX for operators as well as increase customer satisfaction

| Specifications | |
|----------------------------|---|
| Interface | 24x 100/1000Mbps SFP slots + 4x 1G/10Gbps SFP+ slot |
| Console Port | 1x RJ-45 console port |
| Management Port | 1x 10/100/1000Base-T RJ45 |
| Filter & Forward Rate | 14880pps at 10Mbps, 148800pps at 100Mbps, 1488000pps at 1Gbps, 14880000pps at 10Gbps |
| Switching Fabric Capacity | 128Gbps |
| Packet Forwarding Capacity | 95Mpps |
| Transmission Method | Store and Forward Switching |
| Standards | IEEE 802.3u, IEEE 802.3z, IEEE 802.3ae, IEEE 802.1p |
| | IEEE 802.1Q, IEEE 802.1ad, IEEE 802.1D, IEEE 802.1w |
| | IEEE 802.1s, IEEE 802.1x, IEEE 802.3ad, IEEE 802.3ah |
| | IEEE 802.3az, IEEE 802.1ag, ITU-T Y.1731 |
| Packet Buffer | 32M bits |
| Mac Table Size | 32K |
| Max. Packet Size | 10K Bytes |
| VLAN Feature | IEEE 802.1Q tagged VLAN (Max. 4K VLAN groups) |
| | Port based VLAN, MAC based VLAN, Protocol based VLAN |
| | Private VLAN, IEEE 802.1ad Q-in-Q, VLAN translation, GVRP |
| QoS Feature | IEEE 802.1p 8 priority queues per port, CoS based on switch port, VLAN ID, DSCP, TCP/UDP port |
| | IEEE 802.1p priority tag remarking, DSCP remarking, Port based ingress/egress rate limit |
| | 3 colors marker-CIR/EIR/Burst bandwith control |
| L2 switching Protection | STP, RSTP, MSTP, ITU-T G.8031/G.8032 |
| Trunking | IEEE 802.3ad LACP (Max. 14 trunking group; Max. 8 ports per trunking group) |

L2+ Gigabit Carrier Ethernet Switch

| Security | IEEE 802.1x port based access control, MAC based access control authentication |
|------------------|--|
| | RADIUS authentication, Per port limited MAC address learning, IP/MAC binding, ACL rule based filtering |
| | TACACS+, IP source guard, DHCP client/snooping/relay option 82, ARP inspection |
| IP Multicasting | IGMP throttling, IGMP filtering, IGMP fast leave |
| | IGMP snooping v1/v2/v3, MVR, MLD snooping v1/v2 |
| Storm Control | Unknown Unicast/Broadcast/Multicast storm suppression |
| Management | Web/Telnet CLI/SNMP/console interface, Web/CLI Authentication, SSH v2, HTTPs, Port mirroring |
| | Syslog, IPv6 management, NTP, SNTP, IEEE 802.3az, Energy, Efficient, Ethernet (EEE) power management |
| SNMP Agent | SNMP v1/v2c/v3, RMON Group 1,2,3 and 9 |
| Software upgrade | TFTP / HTTP |
| Ethernet OAM | IEEE 802.3ah / IEEE 802.1ag / ITU-T Y.1731 |
| LED display | Power, System, Console, Link/Act, Speed |
| Power input | 100~240VAC; 36~60VDC |

Application

Operating Temperature

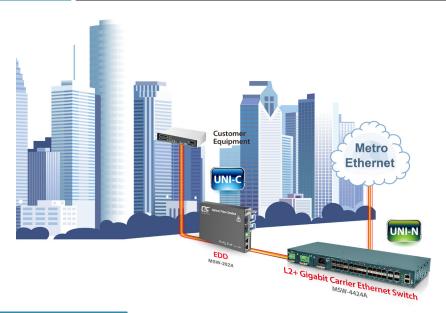
Power Consumption 39 Watts Max.

Certification FCC, CE

Storage Temperature $-25 \sim 70^{\circ}\text{C}$

-10 ~ 60°C

Humidity $5\% \sim 90\%$ (non-condensing) **Dimensions** $270.3 \times 437.5 \times 43.5 \text{ mm (D } \times \text{W } \times \text{H)}$



Ordering Information

| Model Name | Description |
|--------------|---|
| MSW-4424A-AC | L2+ 10G Fiber Access Switch and Build-in Single AC Power Module |
| MSW-4424A-DC | L2+ 10G Fiber Access Switch and Build-in Single DC Power Module |
| MSW-4424A-AA | L2+ 10G Fiber Access Switch and Build-in Dual AC Power Module |
| MSW-4424A-DD | L2+ 10G Fiber Access Switch and Build-in Dual DC power Module |
| MSW-4424A-AD | L2+ 10G Fiber Access Switch and Build-in AC + DC Power Module |

Optional Accessory

• 10G SFP+ Transceiver Module

| Model Name | Description |
|---------------|--|
| SFM-1000-SR85 | 10G SFP+ SR/SW MMF 300m, 850nm VCSEL, 10G Ethernet/FC/SDH/SONET |
| SFS-1010-LR31 | 10G SFP+ LR/LW SMF 10km, 1310nm DFB DML, 10G Ethernet/FC/SDH/SONET |
| SFS-1040-ER55 | 10G SFP+ ER/EW SMF 40km, 1550nm DFB EML, 10G Ethernet/FC/SDH/SONET |
| SFS-1080-ZR55 | 10G SFP+ ZR/EW SMF 80km, 1550nm DFB EML, 10G Ethernet/FC/SDH/SONET |