



## MSW-4424A

24x GbE/SFP + 4x 10G/SFP+  
L2+ Carrier Ethernet Switch

MSW-4424A layer 2+ 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 1G/10Gbps 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

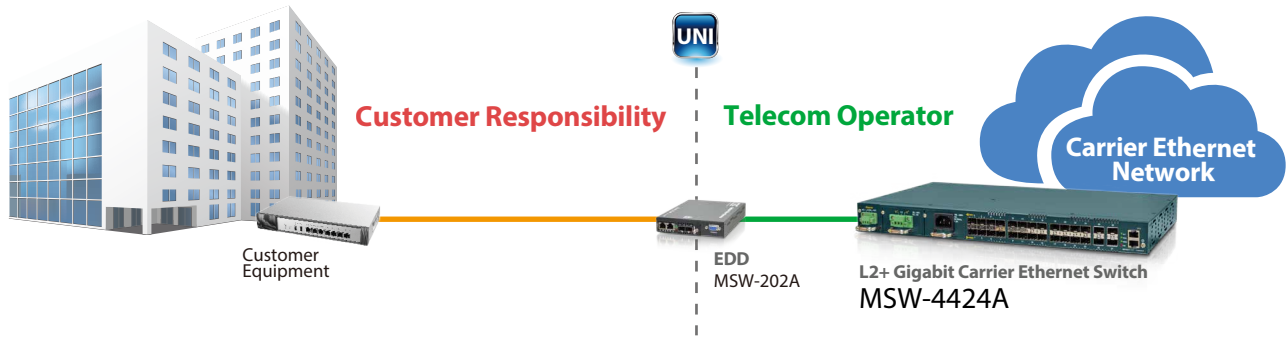
#### Fully Ethernet OAM enabled

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

<b>Interface</b>	100/1000Mbps SFP slots × 24 + 1G/10Gbps SFP+ slot × 4	<b>Security</b>	IEEE 802.1x port based access control MAC based access control authentication RADIUS authentication, limited MAC address learning IP/MAC binding, ACL rule based filtering, TACACS+ IP source guard, DHCP snooping/relay option 82 ARP inspection
<b>Console Port</b>	RJ-45 console port × 1	<b>IP Multicasting</b>	IGMP throttling, IGMP filtering, IGMP fast leave IGMP snooping v1/v2/v3, MVR, MLD snooping v1/v2
<b>Filter &amp; Forward Rate</b>	14880pps at 10Mbps, 148800pps at 100Mbps, 1488000pps at 1Gbps, 14880000pps at 10Gbps	<b>Storm Control</b>	Unknown Unicast/Broadcast/Multicast storm suppression
<b>Switching Fabric Capacity</b>	128Gbps	<b>Management</b>	Web/Telnet CLI/SNMP/console interface, Web/CLI authentication, SSH v2, HTTPS, port mirroring syslog, IPv6 management, NTP, IEEE 802.3az, Energy Efficient, Ethernet (EEE) power management, SFF-8472 DDMI
<b>Packet Forwarding Capacity</b>	95Mpps	<b>SNMP agent</b>	SNMP v1/v2c/v3, RMON Group 1,2,3 and 9
<b>Transmission Method</b>	Store and Forward Switching	<b>Software upgrade</b>	TFTP / HTTP
<b>Standards</b>	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	<b>Ethernet OAM</b>	IEEE 802.3ah / IEEE 802.1ag / ITU-T Y.1731
<b>Packet Buffer</b>	32M bits	<b>LED display</b>	Power, System, Console, Link/Act, Speed
<b>Mac Table Size</b>	32K	<b>Power input</b>	100V ~ 240VAC -36~-75VDC (-48VDC Power) -18~-75VDC (-24VDC Power)
<b>Max. Packet Size</b>	10K Bytes	<b>Power Consumption</b>	< 60W
<b>VLAN Feature</b>	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	<b>Operating Temperature</b>	-10 ~ 60°C
<b>QoS Feature</b>	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 bandwidth control	<b>Storage Temperature</b>	-25 ~ 70°C
<b>L2 switching Protection</b>	STP, RSTP, MSTP, ITU-T G.8031/G.8032	<b>Humidity</b>	5% ~ 90% (non-condensing)
<b>Trunking</b>	IEEE 802.3ad LACP (Max. 14 trunking group, Max. 8 ports per trunking group)	<b>Dimensions</b>	437.5 × 270.3 × 43.5 mm (WxDxH)
		<b>Certification</b>	FCC, CE

## Application



## Ordering Information

Model Name	Description
MSW-4424A	24x100/1000Base-X (SFP) + 4x10GBase-X SFP+ L2+ Gigabit Carrier Ethernet Switch

## 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

- Optional Power

Model Name	Description
4424-AC	100V ~ 240V AC power module (60W)
4424-DC24	18V ~ 75V DC power module (60W)
4424-DC48	36V ~ 75V DC power module (60W)

- Optional FAN

Model Name	Description
4424-FAN	FAN module (3in1 FAN module, 10000RPM, software real-time status detection)