

L2+ Gigabit Carrier Ethernet Switch



MSW-4424S

24x GbE, SFP + 4x 10GbE (SFP+) L2+ Carrier Ethernet Switch with SyncE

MSW-4424S 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 10G Base-X SFP+ or 1000Base-X SFP uplink ports. The MSW-4424S 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-4424S 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-4424S also supports advanced service OAM management. MSW-4424S model supports timing synchronization features (Sync. E and IEEE 1588v2) to enhance and migrate to a carrier grade network for mobile backhaul applications.

Feature and Benefits

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

Supports Sync. Ethernet

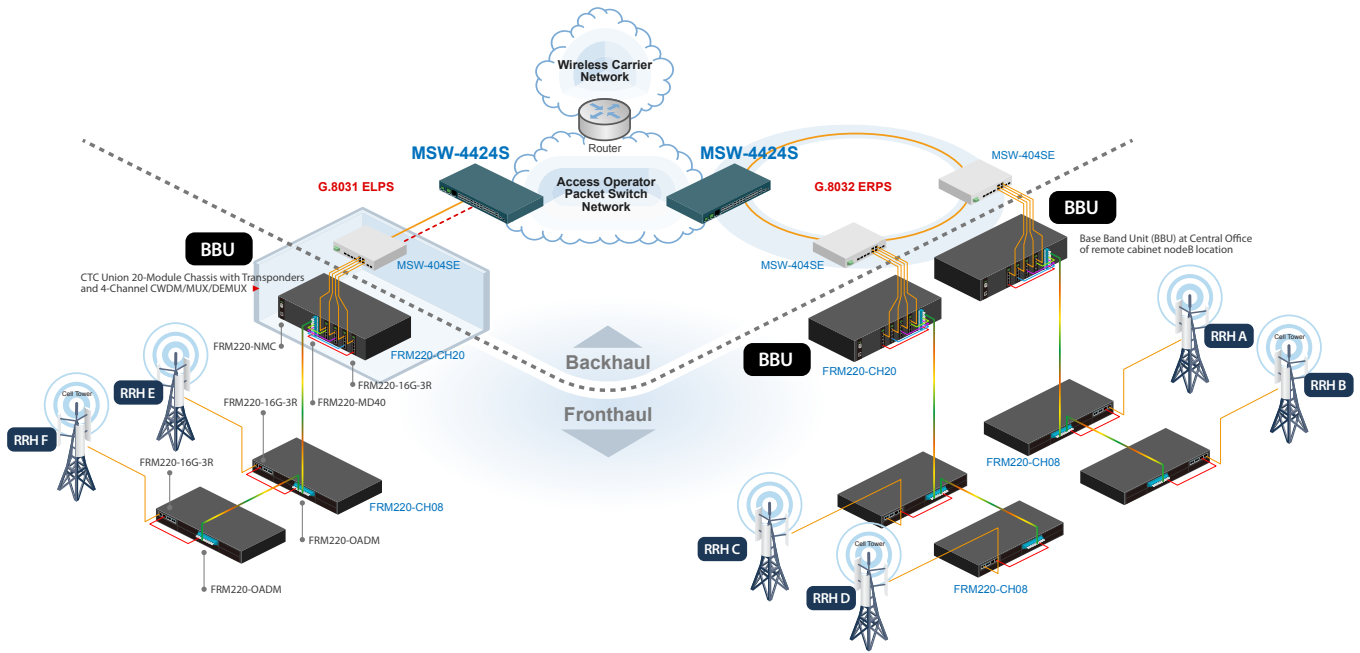
Advanced synchronization features for carrier Ethernet networks allow operators to deliver services with optimal stability and continuity in the end-to-end connectivity

Specifications

Interface	100/1000Mbps SFP slots x 24 + 1G/10Gbps SFP+ slot x 4
Console Port	RJ-45 console port x 1
1PPS/ToD port	RJ45 x 1
Filter & Forward Rate	14880pps at 10Mbps, 148800pps at 100Mbps, 1488000pps at 1Gbps, 14880000pps at 10Gbps
Switching Capacity	128Gbps
Packet Forwarding Capacity	95Mpps
Transmission Method	Store and Forward Switching
Standard	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 802.1ag, ITU-T Y.1731, ITU-T G.8262, IEEE 1588V2
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 bandwidth 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)

Security	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
IP Multicasting	IGMP throttling, IGMP filtering, IGMP fast leave IGMP snooping v1/v2/v3, MVR, MLD snooping v1/v2
Storm Control Management	Unicast/Broadcast/Multicast storm suppression Web/Telnet CLI/SNMP/console interface, Web/CLI authentication, SSH v2, HTTPS, port mirroring syslog, IPv6 management, NTP, SNTP
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
Timing Synchronization	SyncE, IEEE 1588 V2
LED display	Power, System, Console, Link/Act, Speed
Power input	100V ~ 240VAC -30~-60VDC (-48VDC Power) -18 ~ -60VDC (-24VDC Power)
Power Consumption	< 60W
Operating Temperature	-10 ~ 60°C
Humidity	5% ~ 90% (non-condensing)
Dimensions	270.3 x 437.5 x 43.5 mm (D x W x H)
Certification	FCC, CE

Application



- Carrier Ethernet with multiple class of service
- Traffic Synchronization
- Precisely delivery of time-sensitive service

Ordering Information

Model Name	Description
MSW-4424S-AC	L2+ 10G Fiber Access Switch with SyncE and build-in single AC power module
MSW-4424S-DC	L2+ 10G Fiber Access Switch with SyncE and build-in single DC power module
MSW-4424S-AA	L2+ 10G Fiber Access Switch with SyncE and build-in dual AC power module
MSW-4424S-DD	L2+ 10G Fiber Access Switch with SyncE and build-in dual DC power module
MSW-4424S-AD	L2+ 10G Fiber Access Switch with SyncE and build-in AC + DC power module

Power Type
MSW - 4424S -
 Example: **MSW - 4424S - AC**

Accessories

10G SFP+ Transceiver Module

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