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## MSW-4424S

# L2+ Gigabit Carrier Ethernet Switch with Sync. Ethernet

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 10GBase-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-LAN 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 supports advanced service OAM management. MSW-4424S model supports timing synchronization features (Sync. E and IEEE1588v2) to enhance and migrate to a carrier grade network for mobile backhaul application.

#### **Features 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

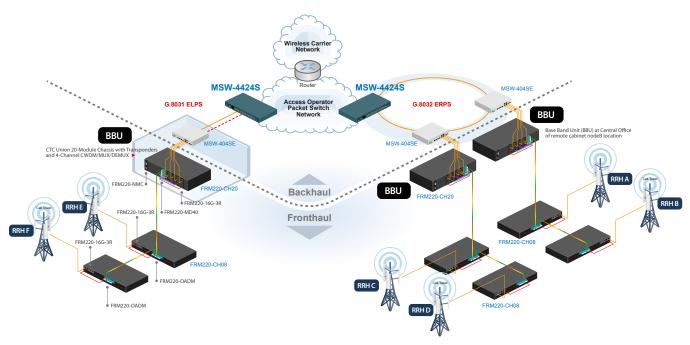
## **Specifications**

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Interface	100/1000Mbps SFP slots *24 + 10Gbps SFP+ slots *4
Console Port	RJ-45 console port x 1
Filter & Forward Rate	10M (14880/14880pps); 100M (148800/148800pps)
	1000M (1488000/1488000pps)
Transmission Method	Store and Forward Switching
Standard	IEEE 802.3u, IEEE 802.3z, IEEE 802.3ae, IEEE 802.3x
	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
Packet Buffer	32M bits
Mac Table Size	32K
Max. Packet Size	10K Bytes
VLAN Feature	IEEE 802.1Q tagged VLAN, port based VLAN,
	MAC based VLAN, protocol based VLAN,
	private VLAN, IEEE 802.1ad Q-in-Q
QoS Feature	
QoS Feature	IEEE 802.1p 8 priority queues per port, CoS based on switch port; VLAN ID; DSCP; TCP/UDP port,
QoS Feature	
L2 switching Protection	switch port; VLAN IĎ; DSCP; TCP/UDP port, IEEE 802.1p priority tag remarking, DSCP remarking, Port

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 source guard
IP Multicasting	IGMP throttling, IGMP filtering, IGMP fast leave
	IGMP snooping v1/v2/v3, MVR, MLD snooping v1/v2
Storm Control	Unicast/Broadcast/Multicast storm suppression
Management	Web/Telnet CLI/SNMP/console interface, Web/CLI
	authentication, SSH v2, HTTPs, port mirroring
	system syslog, IPv6 management, NTP, SNTP
SNMP agent	SNMP v1/v2c/v3
Software upgrade	TFTP / HTTP / HTTPs
Ethernet OAM	IEEE 802.3ah / IEEE 802.1ag / ITU-T Y.1731
Timing Synchronization	Sync. Ethernet, IEEE 1588 V2
LED display	Power, System, Console, Link/Act, Speed
Power input	100V ~ 240VAC
	-30~-60VDC (-48VDC Power)
	-9 ~ -32VDC (-24VDC Power)
Power Consumption	< 60W
Operating Temperature	0 ~ 50°C
Humidity	5% ~ 90% (non-condensing)
Dimensions	270.3 x 437.5 x 43.5 mm (D x W x H)
Certification	FCC, CE, RoHS compliant
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## **Application**



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

## **Ordering Information**

Modername	Description .	
MSW-4424S	$24 \times 100/1000$ Base-X (SFP) + $4 \times 10$ GBase-X SFP+ L2+ Gigabit Carrier Ethernet Switch with Sync. E	
Remark: SFP Transceiver not included		
Optional Power		
4424-AC	100V ~ 240V AC power module (60W)	
4424-DC24	9V ~ 32V DC power module (60W)	
4424-DC48	30V ~ 120V DC power module (60W)	
Optional Cable Tray		
4424-CTY	Front Cable Tray	
Optional FAN		

FAN module (3in1 FAN module, 10000RPM, software real-time status detection)

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