MSW-4424CS

L2+ Gigabit Carrier Ethernet Switch with Sync. Ethernet

The MSW-4424CS is positioned as a layer 2+ Gigabit access switch solution. It equips 20 100Base-FX/1000Base-X dual speed SFP slots, 4 ports GbE combo (10/100/1000Base-T or 100/1000Base-X SFP) ports and 4 1000Base-X/10GBase-X dual speed SFP+ uplink slots. The MSW-4424CS offers the best flexibility and scalability for the operators or service providers to deploy their Metro Ethernet network. With the deployment of MSW-4424CS, the operators or service providers can flexibly provision the bandwidth either 100Mbps or 1000Mbps as well as uplink connection of Gigabit or 10G speed upon their service applications. The MSW-4424CS builds in dual power modules to enable power redundancy function and enhance the high network availability.

To aim at the Metro Ethernet application, the specifications of MSW-4424CS fully meet the attributes of Carrier Ethernet proposed by MEF (Metro Ethernet Forum). It comply MEF 9 standard to support E-Line/E-LAN service, MEF 14 standard to enable the bandwidth profile configuration delivering SLA (Service Level Agreement) for end-to-end performance characteristics as well as Ethernet OAM functionality to support carrier grade service OAM management rapidly detecting and recovering from the network incidents in real time. MSW-4424CS supports timing synchronization features (Sync.E & IEEE 1588v2) to enhance and migrate a carrier grade network for mobile backhaul application.

Features and Benefits

Fully dual rate architecture of fiber link port
Completely dual speed ports of fiber link to offer the scalable physical connection of Metro Ethernet network for operators

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

Timing synchronization
Advanced synchronization features such as Sync. Ethernet or IEEE 1588v2 to allow operators delivering service with optimal stability and continuity in the end-to-end connectivity.
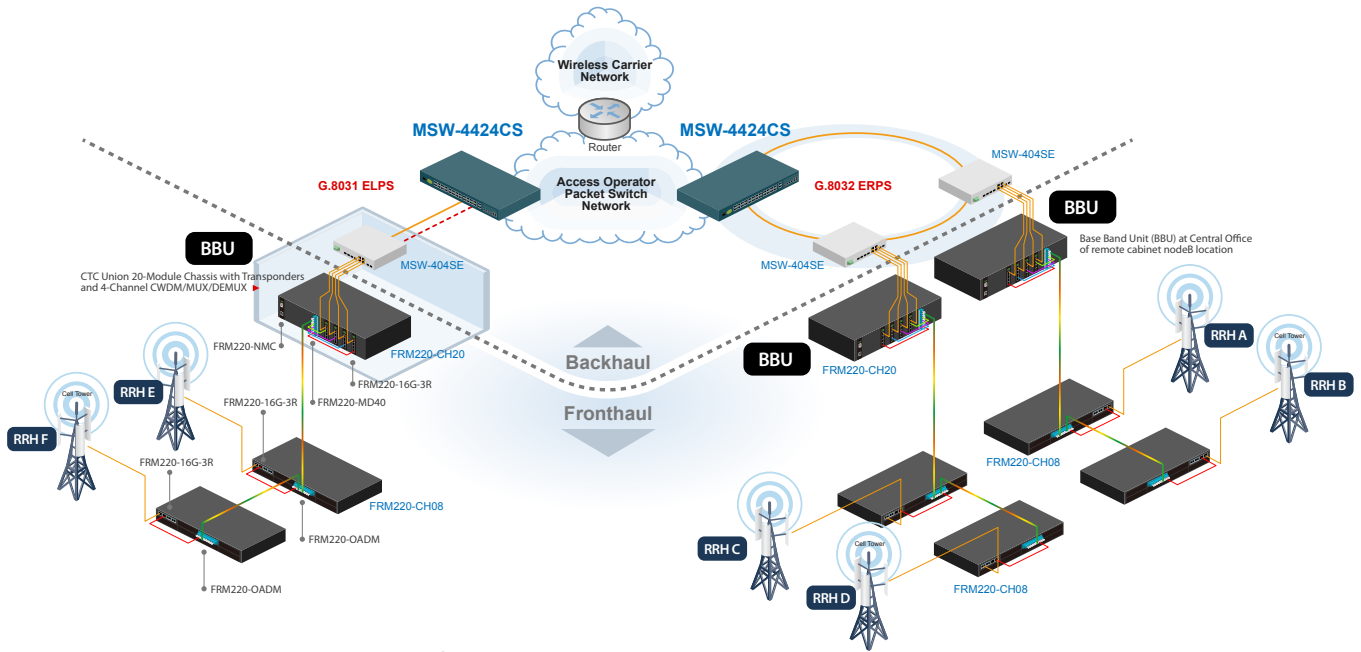
MEF standards compliant solution
MEF 9/14 compliant product to guarantee the compatibility with other MEF certified equipment and reduce the risk and cost for Metro Ethernet network deployment of operators

Specifications

Interface	100/1000Mbps SFP slots* 20 + GbE combo port (10/100/1000Base-T or 100/1000Mbps SFP slot)* 4 + 1/10Gbps SFP+ slots* 4
Console Port	RJ-45 console port * 1
Management Port	10/100/1000Base-T RJ45 * 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, ITU-T G.8262, IEEE 1588 v2
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	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
L2 switching Protection	STP, RSTP, MSTP, ITU-T G.8031/G.8032
Trunking	IEEE 802.3ad LACP

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
Ethernet OAM	IEEE 802.3ah/IEEE 802.1ag/ITU-T Y.1731
Timing synchronization	ITU-T G.8262 Sync. Ethernet, IEEE 1588 v2
LED display	Power, System, Console, Link/Act, Speed
Power input	100V ~ 240V AC, -36 ~ -60V DC
Build in power module combination	AC, DC, AD (AC+DC), AA (AC+AC) or DD (DC+DC)
Power Consumption	< 60W
Operating Temperature	0 ~ 50℃
Humidity	5% ~ 90% (non-condensing)
Dimensions	250x 440x 43.5mm (DxWxH)
Certification	FCC, CE, RoHS

Application

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

Ordering Information

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

Remark: SFP Transceiver not included