







MSW-4204

4 × GbE/RJ45 + 2 × 1G/10G SFP+ L2+ Carrier Ethernet Switch

The next generation Carrier Ethernet Network Interface Device (NID) is designed for business connection in Ethernet virtual connection technology. The MSW-4204 is equipped with 2 SFP+ slots, dual rate 1G/10Gbps and 4 ports Gigabit RJ45 network interfaces. It can beconfigurable as either UNI or NNI device which are CE(Carrier Ethernet) 2.0 compliant for Metro Ethernet network deployments.

The MSW-4204 is positioned as an universal network interface device (NID) for most carrier Ethernet access applications. It has built-in hardware based Ethernet OAM engine and is compliant to the latest OAM standards to deliver the committed SLA performance KPIs measurement on a per service basis.

// Features

- The next generation Ethernet demarcation device, at customer premise, fulfills the large-scale carrier Ethernet deployment for intelligent business connection and mobile backhaul services compliant to CE 2.0 standard.
- CE2.0 standards compliant product guarantees the full interoperability with other MEF certified equipment and reduces the risks and cost of Carrier Ethernet network deployment for operators and service providers.

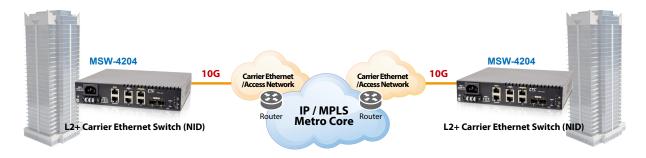
// Specifications

Interface	Fiber port: 1G/10Gbps SFP+ × 2	
	Copper port: 10/100/1000Mbps RJ45 × 4	
Console Port	RJ45 × 1 (RS-232)	
Management Port	10/100/1000Base-T RJ45 × 1	
Switching Fabric Capacity	48Gbps	
Packet Forwarding Rate	14880pps @10Mbps 148800pps @100Mbps 1488000pps @1000Mbps 14880000pps @10Gbps	
Transmission Method	Store and Forward Switching	
Packet Buffer	8M bits	
MAC Table Size	16K	
Jumbo Frame Size	10K Bytes	
VLAN Feature	IEEE 802.1Q tagged VLAN (4K VLAN groups); IEEE 802.1ad QinQ VLAN; Voice VLAN; MAC based VLAN; Protocol based VLAN; IP subnet based VLAN; Private VLAN for port isolation; VLAN translation; GVRP (GARP VLAN registration protocol)	
Link Aggregation	Static trunk (SA, DA, IP, TCP/UDP port); IEEE 802.3ad LACP; 3 LACP trunk groups Max; 6 port Max. per LACP trunk	
L2 Switching Protection	IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP; ITU-T G.8031 ELPS/G.8032 ERPS	
QoS Feature	Hierarchical QoS; IEEE 802.1Qbb priority based flow control; Hard wired IEEE 802.1p 8 priority queues per port; CoS based traffic classification on switch port; VLAN ID; DSCP; TCP/UDP port; IEEE 802.1p priority tag remarking; DSCP remarking; Per Port/Queue based ingress/egress rate limit in steps of 100kbps; 3 colors marker – CIR/EIR/Burst bandwidth control	
Storm Control	Multicast/Broadcast/Unicast storm suppression with flooding control;	
Security	Static port security (MAC based); Per port limited MAC learning; Port based/MAC base/single/multiple IEEE 802.1x access control; 128 ACL rules based on L2~L4 information; RADIUS/TACACS+ AAA; IP/MAC binding; DHCP snooping/relay option 82; IP source guard & ARP inspection	
IP Multicasting	IGMP snooping v1/v2/v3, IGMP proxy reporting; MLD snooping v1/v2; IGMP fast leave; IGMP query; IGMP filtering/throttling; MVR (Multicast VLAN Registration)	



Management	WebGUI/Telnet CLI interface; HTTPs; SSHv2; SNMP v1/v2c/v3; RMON I (1,2,3,9 groups) & RFC1213 MIB II; Private MIB; Dying gasp in SNMP trap message; DHCP client/snooping/relay option 82; TFTP/HTTP based firmware and configuration upgrade; Port mirroring; Event syslog server; DNS client/proxy; NTP client; UPnP; IPv4/IPv6 management; SFF-8472 DDMI; IEEE 802.1ab LLDP; Text based CLI configuration upload and download	
Ethernet OAM	IEEE 802.3ah; IEEE 802.1ag; ITU-T Y.1731; RFC2544; ITU-T Y.1564;	
Power Input	100V~240VAC, -24 ~ -60VDC	
Power Consumption	< 15W	
Operating Temperature	0~50°C	
Storage Temperature	-25~70°C	
Humidity	5%~90% (non-condensing)	
Dimension	215 × 190 × 44 mm (D × W × H)	
Certification	CE, FCC class A	

// Application



// Ordering Information

Model Name	Description
MSW-4204-AC	1G RJ45 \times 4 + 1G/10G SFP+ slots \times 2 L2+ Carrier Ethernet Switch with single AC power supply built-in
MSW-4204-DC	1G RJ45 \times 4 + 1G/10G SFP+ slots \times 2 L2+ Carrier Ethernet Switch with single DC power supply built-in
MSW-4204-AD	1G RJ45 × 4 + 1G/10G SFP+ slots × 2 L2+ Carrier Ethernet Switch with AC & DC power supply built-in

// Accessory Optional

• 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

Rack Mount Kit

Model Name	Description
GSW/MSW-RMK	19" rack mount kit