



# MSW-4204

## Network Interface Device

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

**CE**<sup>2.0</sup>



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 be configurable 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

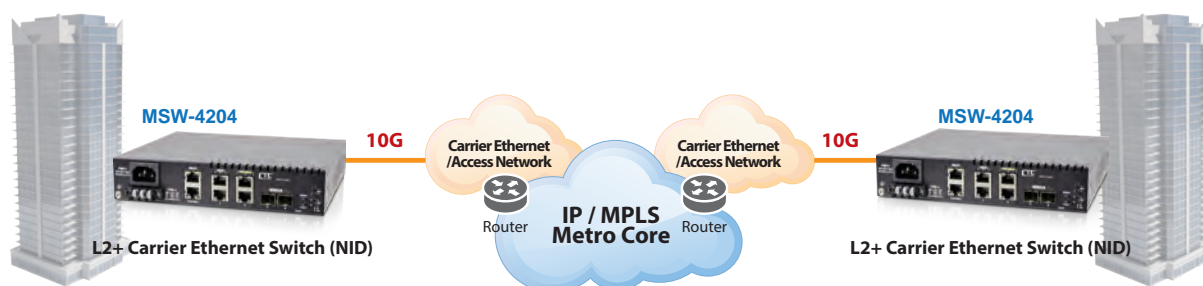
- The next generation Ethernet demarcation device, at customer premise, fulfills the large-scale carrier Ethernet deployment for intelligent business connection and mobile backhaul services compliant to CE 2.0 standard.
- CE2.0 standards compliant product guarantees the full interoperability with other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

### Specifications

<b>Interface</b>	Fiber port: 2x 1G/10Gbps SFP+ slots Copper port: 4x 10/100/1000Mbps RJ45	
<b>Console/ToD Port</b>	1x RJ45 (RS-232)	
<b>Management Port</b>	1x 10/100/1000Base-T RJ45	
<b>Switching Fabric Capacity</b>	48Gbps	
<b>Packet Forwarding Rate</b>	14880pps	@10Mbps
	148800pps	@100Mbps
	1488000pps	@1000Mbps
	14880000pps	@10Gbps
<b>Transmission Method</b>	Store and Forward Switching	
<b>Packet Buffer</b>	8M bits	
<b>MAC Table Size</b>	16K	
<b>Jumbo Frame Size</b>	10K Bytes	
<b>VLAN Feature</b>	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)	
<b>Link Aggregation</b>	Static trunk (SA, DA, IP, TCP/UDP port), IEEE 802.3ad LACP, 3 LACP trunk groups Max; 6 port Max. per LACP trunk	
<b>L2 Switching Protection</b>	IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP, ITU-T G.8031 ELPS/G.8032 ERPS	
<b>QoS Feature</b>	Hierarchical QoS, IEEE 802.1Qbb priority based flow control	
	Hard wired IEEE 802.1p 8 priority queues per port, IEEE 802.1p priority tag remarking, DSCP remarking	
	CoS based traffic classification on switch port, VLAN, ID, DSCP, TCP/UDP port	
	Per port/queue based ingress/egress rate limit in steps of 100kbps 3 colors marker – CIR/EIR/Burst bandwidth control	
<b>Storm Control</b>	Multicast/Broadcast/Unicast storm suppression with flooding control	
<b>Security</b>	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 client/snooping/relay option 82, IP source guard & ARP inspection	
<b>IP Multicasting</b>	IGMP snooping v1/v2/v3, IGMP proxy, MLD snooping v1/v2, IGMP fast leave	
	IGMP query, IGMP filtering/throttling, MVR (Multicast VLAN Registration)	

<b>Management</b>	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 Text based CLI configuration upload and download
<b>Ethernet OAM</b>	IEEE 802.3ah, IEEE 802.1ag, ITU-T Y.1731, RFC2544, ITU-T Y.1564
<b>Power Input</b>	100V~240VAC, 18~60VDC
<b>Power Consumption</b>	13.65 Watts Max.
<b>Operating Temperature</b>	0~50°C
<b>Storage Temperature</b>	-25~70°C
<b>Humidity</b>	5%~90% (non-condensing)
<b>Dimension</b>	215 × 190 × 44 mm (W×D×H)
<b>Certification</b>	CE, FCC class A

## Application



## Ordering Information

Model Name	Description
<b>MSW-4204-AC</b>	4x 1G RJ45 + 2x 1G/10G SFP+ Slots L2+ Carrier Ethernet Switch with single AC Power Supply Built-In
<b>MSW-4204-DC</b>	4x 1G RJ45 + 2x 1G/10G SFP+ Slots L2+ Carrier Ethernet Switch with single DC Power Supply Built-In
<b>MSW-4204-AD</b>	4x 1G RJ45 + 2x 1G/10G SFP+ Slots L2+ Carrier Ethernet Switch with AC & DC Power Supply Built-In

## Optional Accessory

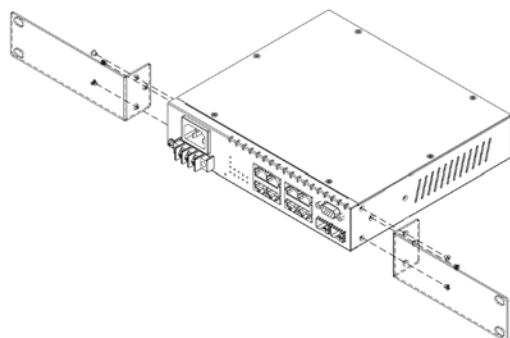
### • 10G SFP+ Transceiver Module

Model Name	Description
<b>SFM-1000-SR85</b>	10G SFP+ SR/SW MMF 300m, 850nm VCSEL, 10G Ethernet/FC/SDH/SONET
<b>SFS-1010-LR31</b>	10G SFP+ LR/LW SMF 10km, 1310nm DFB DML, 10G Ethernet/FC/SDH/SONET
<b>SFS-1040-ER55</b>	10G SFP+ ER/EW SMF 40km, 1550nm DFB EML, 10G Ethernet/FC/SDH/SONET
<b>SFS-1080-ZR55</b>	10G SFP+ ZR/EW SMF 80km, 1550nm DFB EML, 10G Ethernet/FC/SDH/SONET

### • Rack Mount Kit

Model Name	Description
<b>RMK07-SS</b>	Rack Mounting Kits for GSW-4208CM/MSW-4204 Series Single Unit Chassis Mounting in 19" Rack
<b>RMK07-DS</b>	Rack Mounting Kits for GSW-4208CM/MSW-4204 Series Two Units Chassis Mounting in 19" Rack

RMK07-SS



RMK07-DS

