MSW-404

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

CTC Union Technologies unveils a new generation of carrier grade Ethernet demarcation device, MSW-404, which is designed for business connection and mobile backhaul transportation service delivered by carriers. It is equipped 4 SFP slots as dual rate 100/1000Base-X and 4 ports 10/100/1000Base-T RJ45 network interfaces. It is designed to enable E-Line, E-LAN, E-Tree services which are CE (Carrier Ethernet) 2.0 compliant for Metro Ethernet network deployments.

The MSW-404 device enables carriers and service providers to deliver SLA-based network service with extensive fault detection and diagnostic capabilities which are compliant with the latest Ethernet OAM standards such as IEEE 802.3ah, IEEE 802.1ag and ITU-T Y.1731. With built-in RFC2544 and ITU-T Y.1564 feature sets, the MSW-404 also enables the service providers to perform the SLA verification anytime to ensure the quantitative latency, jitter and throughput delivery performance indexes. The CE2.0 compliant functions support EVCs and 3 colors marker QoS traffic management to enable service providers management of bandwidth and to enforce SLA guarantees.

▌ Specifications

Interface	Copper port: 10/100/1000Base-T RJ45 × 4 Uplink port: 1000Base-X SFP slot × 4 Console port: RS-232 in RJ45 × 1
Switching Fabric Capacity	16Gbps
Packet Forwarding Rate	14880pps @10Mbps 148800pps @100Mbps 1488000pps @1000Mbps
Transmission Method	Store and Forward Switching
Packet Buffer	8M bits
MAC Table Size	8K
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; 4 LACP trunk groups Max; 8 port Max. per LACP trunk group
L2 Switching Protection	IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP; ITU-T G.8031 ELPS; ITU-T G.8032 ERPS; Loop Protection;
QoS Feature	Hard wired IEEE 802.1p 8 priority queues per port; Traffic scheduling based on strict/WRR priority; CoS based traffic classification on switch port; VLAN ID; DSCP; TCP/UDP port; IEEE 802.1p priority tag remarking; DSCP remarking; Per Port/Service based ingress/egress rate limit in steps of 100kbps; 3 colors marker-CIR/EIR/Burst bandwidth control; IEEE 802.3x flow control; Multicast/Broadcast/Unicast storm control 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; 256 ACL rules based on L2~L4 information; RADIUS/TACACS+ AAA; HTTPs & SSH v2; IP/MAC binding; 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; SNMP v1/v2c/v3; RMON I (1,2,3,9 groups); RFC1213 MIB II; Private MIB; DHCP client/snooping/relay option 82; TFTP/HTTP based firmware and configuration upgrade; Port mirroring, RSPAN; Event syslog server; DNS client/proxy; NTPv4 client; UPnP; IPv4/IPv6 management; SFF-8472 DDMI; IEEE 802.1ab LLDP; Text based CLI configuration download and upload
Ethernet OAM	IEEE 802.3ah, IEEE 802.1ag, ITU-T Y.1731; RFC2544, ITU-T Y.1564;
MPLS feature	MPLS-TP compliant to ITU-T G.8113.1
Power Input	AC power input (100~240V) ; -18~-72VDC
Operating Temperature	0~50℃

Storage Temperature	-25~70°C
Humidity	5%~95% (non-condensing)
Dimension	219.4 × 167.4 × 44.5 mm (W×D×H)
Certification	CE, FCC class A

Application

Figure 1 : Ethernet Backbone Application
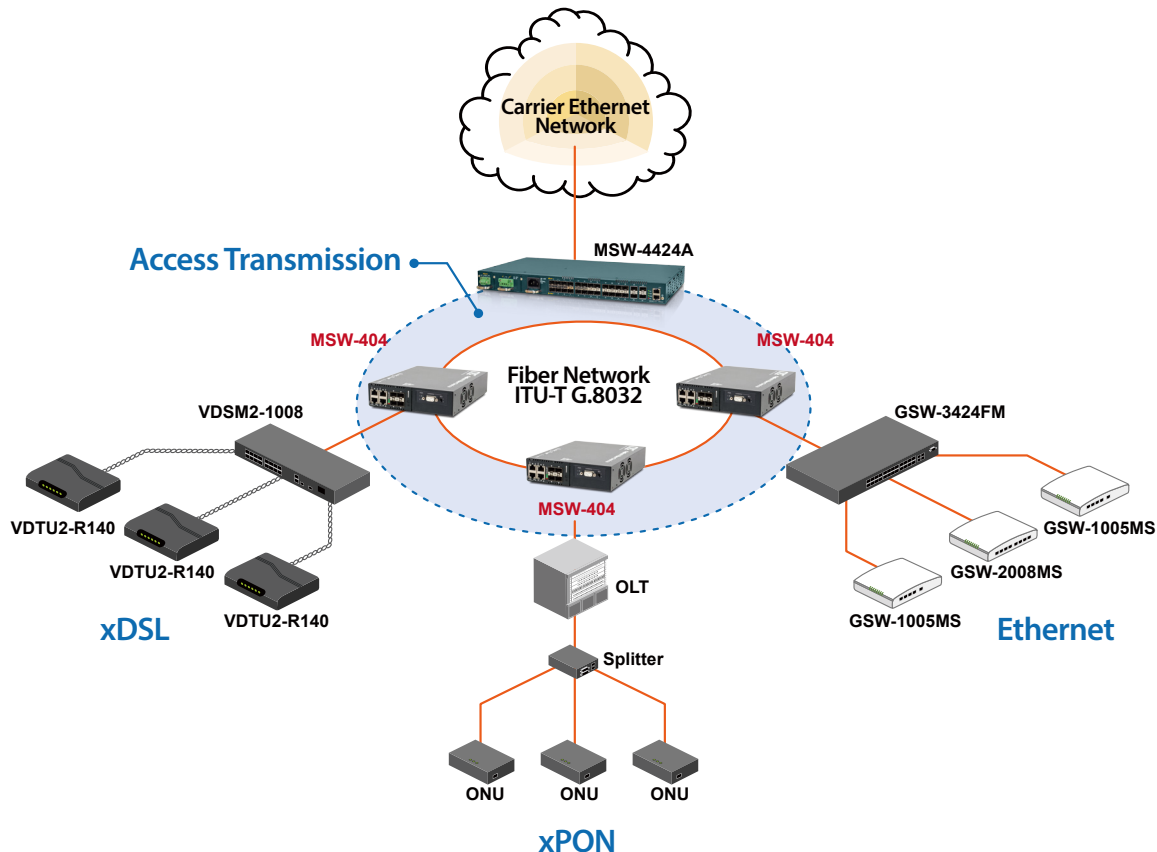
Ordering Information

Model Name	Description
MSW-404-AC	4 × SFP Slots in Dual Rate 100/1000Base-X and 4 × 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with single AC power supply
MSW-404-DC	4 × SFP Slots in Dual Rate 100/1000Base-X and 4 × 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with single DC power supply
MSW-404-AD	4 × SFP Slots in Dual Rate 100/1000Base-X and 4 × 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with AC & DC power supply