MSW-404

Ethernet Demarcation Device

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.
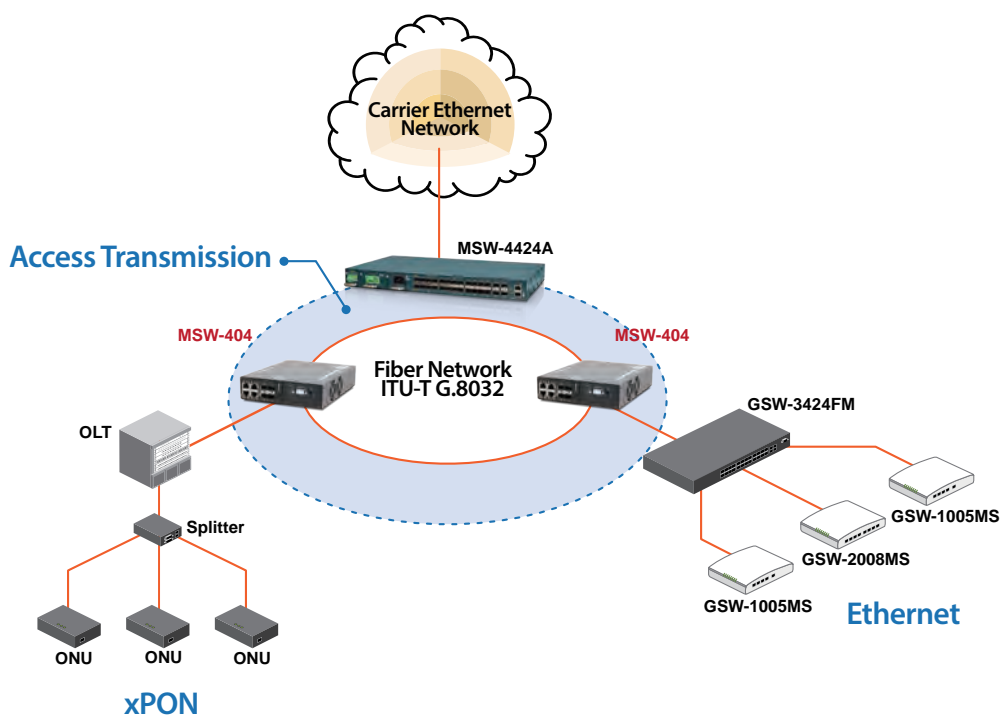
Specifications

Interface	Copper port: 4x 10/100/1000Base-T RJ45
	Uplink port: 4x 1000Base-X SFP slots
	Console port: 1x RS-232 in RJ45
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+ Authentication
	HTTPs & SSH v2, IP/MAC binding, IP source guard & ARP inspection
IP Multicasting	IGMP snooping v1/v2/v3, IGMP proxy, 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	100~240VAC ; 18~72VDC
Power Consumption	6.72 Watts Max.
Operating Temperature	0~50℃
Storage Temperature	-25~70℃
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	4x SFP Slots in Dual Rate 100/1000Base-X and 4x 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with Single AC Power Supply
MSW-404-DC	4x SFP Slots in Dual Rate 100/1000Base-X and 4x 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with Single DC Power Supply
MSW-404-AD	4x SFP Slots in Dual Rate 100/1000Base-X and 4x 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with AC & DC Power Supply