

CE^{2.0}

MSW-202A

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

CTC Union Technologies unveils the first generation of carrier grade Ethernet demarcation device, MSW-202A, which is designed for business connection service delivered by carriers. It is equipped 2 SFP slots as dual rate 100/1000Base-X and 2 ports 10/100/1000Base-T RJ45 network interfaces. It is designed to enable E-Line, E-Access services which are CE (Carrier Ethernet) 2.0 compliant for Metro Ethernet network deployments.

The MSW-202A 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. 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 × 2 Uplink port: 1000Base-X SFP slot × 2 Console port: RS-232 in RJ45 × 1
Switching Fabric Capacity	8Gbps
Packet Forwarding Rate	14880pps @10Mbps 148800pps @100Mbps 1488000pps @1000Mbps
Transmission Method	Store and Forward Switching
Packet Buffer	4M bits
MAC Table Size	8K
Jumbo Frame Size	9.6K 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, 2 LACP trunk groups Max; 4 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; 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; Event syslog server; DNS client/proxy; NTPv4 client; UPnP; 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
Power Input	AC power input (100~240V) ; -18~-72VDC
Operating Temperature	0~50°C
Storage Temperature	-25~70°C
Humidity	5%~95% (non-condensing)
Dimension	180 × 135 × 30 mm (W×D×H)
Certification	CE, FCC class A

// Application

Figure 1 : Business Connection Service

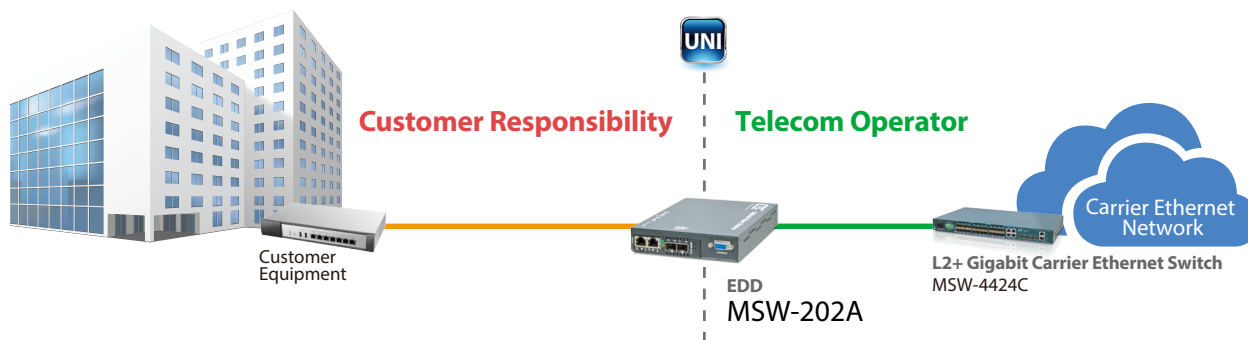
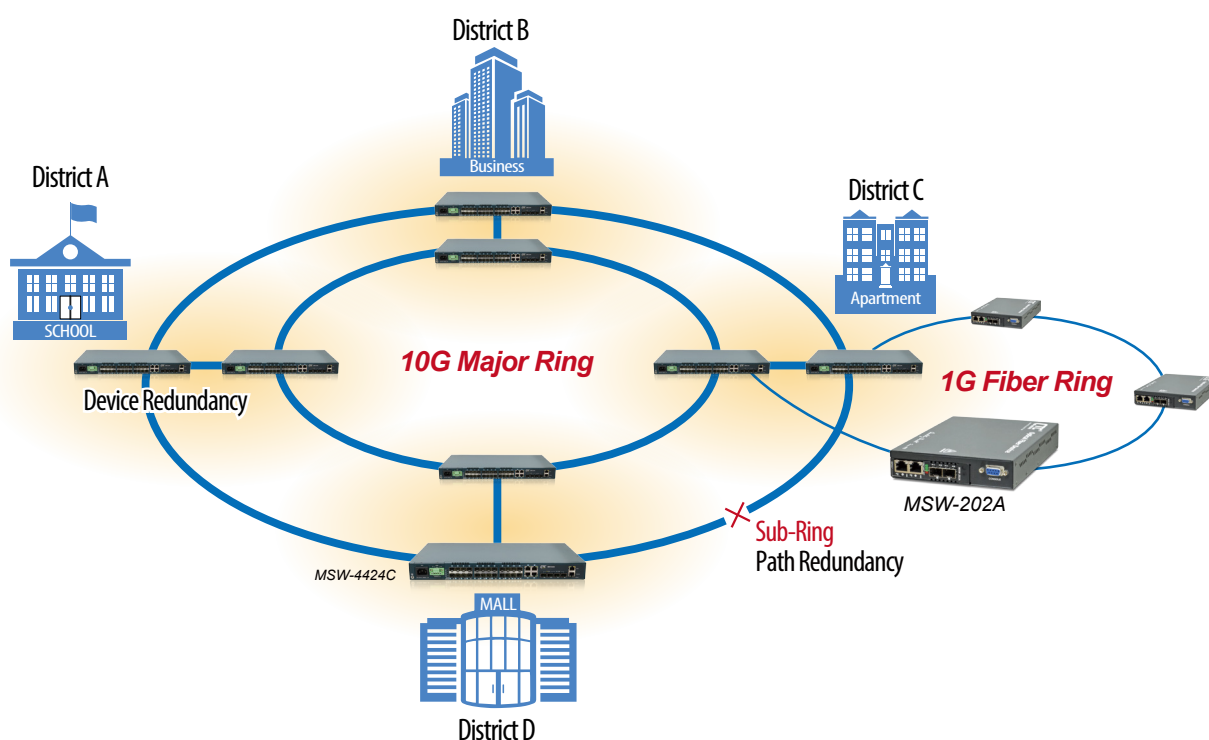


Figure 2 : μ -Ring Protected Ethernet Backbone Application



// Ordering Information

Model Name	Description
MSW-202A-AC	2 x SFP Slots in Dual Rate 100/1000Base-X and 2 x 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with single AC power supply
MSW-202A-DC	2 x SFP Slots in Dual Rate 100/1000Base-X and 2 x 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with single DC power supply
MSW-202A-AD	2 x SFP Slots in Dual Rate 100/1000Base-X and 2 x 10/100/1000Base-T RJ45 OAM Managed Carrier Ethernet Switch with AC & DC power supply