

# GSW-4448CM

## L2+ CSFP Ethernet Switch

**24 × CSFP (48 × GbE) with 4 × GbE Combo +  
4 × 1G/10G SFP+ Managed Ethernet Switch**



CTC Union technologies unveils the special BX optics (cSFP) based Ethernet switch, GSW-4448CM, which is designed for FTTx deployment. The compact SFP can double the fiber port density compared with the general SFP transceiver. It is suitable for the FTTx deployment scenario where increased user links are required in the limited construction space.

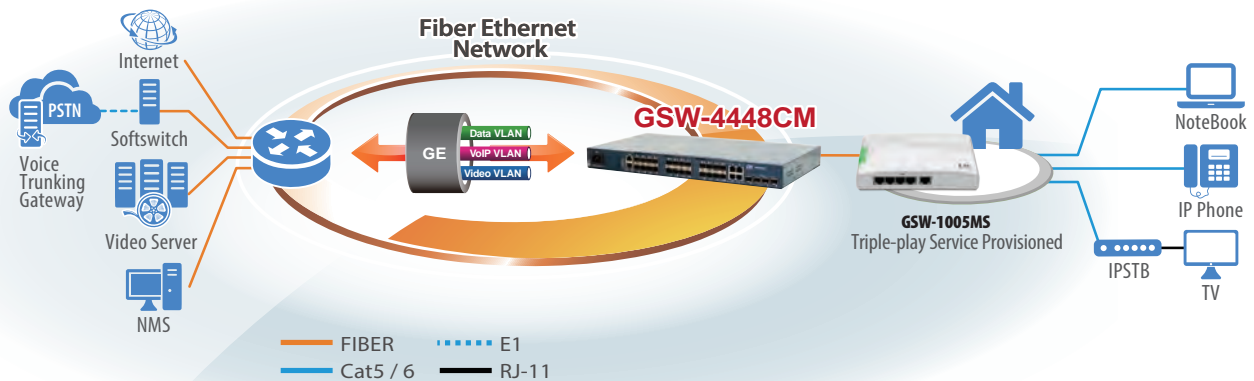
The GSW-4448CM is equipped with 48 1000Base-X CSFP ports included 4 Gigabit combo ports (RJ45 or CSFP slot) and 4 1G/10Gbps dual rate SFP+ slots. This switch is targeted at multi-service operators (MSO) with a desire to deploy provisioned multiple play services via active Ethernet FTTx network infrastructures. The GSW-4448CM Ethernet access switch provides VLAN, QoS and IGMP L2 feature sets as well as robust security management to facilitate service provider's build out of a manageable and secure FTTx access network.

### Specifications

<b>Interface</b>	Access port: 22x 1000Base-X CSFP slots + 4x GbE combo (CSFP or RJ45) Uplink port: 4x 1000Base-X/10GBase-X SFP+ slots Management port: 1x 10/100/1000Base-T RJ45 Console port: 1x RS-232 in RJ45	
<b>Packet Forwarding Rate</b>	14880pps	@10Mbps
	148800pps	@100Mbps
	1488000pps	@1000Mbps
	14880000pps	@10Gbps
<b>Switching Fabric Capacity</b>	176Gbps	
<b>Transmission Method</b>	Store and Forward Switching	
<b>Packet Buffer</b>	32M bits	
<b>MAC Table Size</b>	32K	
<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	
<b>Link Aggregation</b>	Static trunk (SA, DA, IP, TCP/UDP port), IEEE 802.1AX	
	IEEE 802.3ad LACP, 26 LACP trunk groups Max; 8 port Max. per LACP trunk group	
<b>L2 Switching Protection</b>	IEEE 802.1D STP/IEEE 802.1w RSTP/IEEE 802.1s MSTP, Loop Protection	
<b>QoS Feature</b>	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/queue based ingress/egress rate limit in steps of 100kbps	
	IEEE 802.3x flow control, IEEE 802.1Qbb priority based full-duplex flow control	
<b>Security</b>	Multicast/Broadcast/Unicast storm control with flooding controls	
	Static port security (MAC based), Per port limited MAC learning	
	Port based/MAC base/single/multiple IEEE 802.1x access control	
	512 ACL rules based on L2~L4 information, RADIUS/TACACS+ AAA, HTTPs & SSH v2	
<b>IP Multicasting</b>	IP/MAC binding, IP source guard & ARP inspection	
	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, SNMP v1/v2c/v3, RMON I (1,2,3,9 groups) & RFC1213 MIB II DHCP client/snooping/relay option 82, TFTP/HTTP based firmware and configuration upgrade Port mirroring, RSPAN, Event syslog server, DNS client/proxy, NTP client, UPnP, IPv4/IPv6 management SFF-8472 DDMI, IEEE 802.1ab LLDP, Text based CLI configuration download and upload
<b>Power Input</b>	AC 100~240V, 50/60Hz or 36~60VDC
<b>Power Consumption</b>	56.5 Watts Max.
<b>Operating Temperature</b>	0~50 °C
<b>Storage Temperature</b>	-25~70 °C
<b>Humidity</b>	10 - 90% non-condensing
<b>Dimension</b>	440 × 220 × 43.5 mm (W×D×H)
<b>Certification</b>	RoHS, CE, FCC class A

## Application



## Ordering Information

Model Name	Description
GSW-4448CM-AC	24 × CSFP (48 × GbE) with 4 × GbE Combo (RJ45 or CSFP) + 4 × 1G/10G SFP+ Slots Uplink with Single AC Power Supply
GSW-4448CM-DC	24 × CSFP (48 × GbE) with 4 × GbE Combo (RJ45 or CSFP) + 4 × 1G/10G SFP+ Slots Uplink with Single DC Power Supply (-48V)

## Optional Accessory

### • 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