GSW-4448CM

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

GSW-4448CM is an SNMP manageable Gigabit Ethernet switch for FTTx deployment or Gigabit Ethernet fiber aggregation that 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. The GSW-4448CM supports a special BX optics (Compact SFP) which can double the fiber port density to 48 links, make it be attractive for the FTTx deployment and scenarios where increased user links are required in limited construction space. With advanced layer 2 and QoS features, this switch is targeted at multi-service operators (MSO) with a desire to deploy provisioned triple play services via active Ethernet FTTx network infrastructures. Fiber based network infrastructures offer the data rates required by triple play services such as high speed internet access, VoIP and HD IPTV. 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.

Feature and Benefits

- IPv6 management
- 8 priority queues are supported on each port for QoS application
- Port-based VLAN, 802.1Q VLAN, Voice VLAN and Q-in-Q(double tagging) function
- Protected Port and Loop Detection function
- IEEE 802.1x security function, and VLAN assignment, Guest VLAN functions
- Static MAC address access limit and Dynamic MAC address number on port
- IEEE 802.1D & 802.1w & 802.1s
- DHCP Client / DHCP Option 82 Relay / DHCP Snooping function

- ACL function for L2 ~ L4 packet control, Ingress/Egress rate control on port
- IP Multicast with IGMP snooping / query / fast leave / filtering / group limited /MVR
- Broadcast/Multicast/Unknown Unicast storm control
- ARP inspection / IP source guard
- RMON 1,2,3,9
- SFP Transceiver DDMI function
- Remote port configuration setting and statistics monitoring
- Text based CLI configuration download and upload

Specifications

System	
1G CSFP or 100M/1G SFP Slot	24
1G Combo 10/100/1000Base-T Port	4
1G/10G Uplink Port	4
Memory	Flash : 256MB / RAM: 2GB
Packet buffer	32M bits
MAC Table size	32K
Max Packet Size	10K Bytes
Filter & Forward rate	14880pps at 10Mbps 148800pps at 100Mbps 1488000pps at 1Gbps 14880000pps at 10Gbps
Switching Fabric Capacity	178Gbps
Packet Forwarding Capacity	132Mpps
FAN	3 x independent fans with speed sensors
Console port	RJ-45
SFP DDMI	Yes
Dimension (mm)	440(W) × 220(D) × 43.5(H)
Operatin Temperature	0 ~ 50°C
Storage Temperature	-25 ~ 70°C
Humidity	10% ~ 90% (non-condensing)
Power Consumption	<100W Max.
Power Input	100V ~ 240VAC or -36 ~ -60VDC

Software	
Port Control	Port speed, duplex mode, and flow control Port Auto MDI/MDI-X Port maximum frame size (10240 bytes) Port state (administrative status) Port status (link monitoring) Port statistics (MIB counters)
L2 Switching	Auto MAC address learning/aging. Per port limited MAC address learning IEEE 802.1Q static VLAN(4K VLAN groups), Voice VLAN, Port isolation, Private VLAN, MAC based VLAN protocol based VLAN, IP subnet based VLAN IEEE 802.1D STP/802.1w RSTP/802.1s MSTP IEEE 802.3ad Link Aggregation, static and LACP BPDU guard and restricted role, Error Disable Recovery DHCP client, DHCP snooping, DHCP option 82 relay ARP inspection Port mirroring, RSPAN
Layer 2 Multicast	IGMP snooping v1,v2, v3 snooping, (1024 groups) IGMP snooping Fast and Immediate leave IGMP throttling, filtering, and leave proxy MVR and MVR profile IPv6 MLD v1/v2 snooping
QoS	8 Priority Queues per Port Port Based priority Scheduler priority QoS Control List Storm control for UC, MC, and BC Per port / per queue based ingress policing and egress shaping DiffServ (RFC 2474) remarking Tag remarking

Security	Port-based 802.1X, Single 802.1X, Multiple 802.1X MAC-based authentication, VLAN assignment, QoS assignment, Guest VLAN RADIUS accounting MAC address limit TACACS+ Web and CLI authentication and authorization ACLs for filtering, policing, and port copy (1K entries Max.) IP source guard
Synchronization	NTPv4 Client
SFF-8472 DDMI	Yes

Management

HTTP server
CLI console port
Telnet CLI
Management access filtering
SSHv2 and HTTPS
IPv6 Management
Syslog
Software upload through Web and TFTP
SNMPv1/v2c/v3 Agent
RMON Group 1, 2, 3, and 9
IEEE 802.1AB-2005 Link Layer Discovery, LLDP
Text Configuration download or upload
Daylight Saving

Application
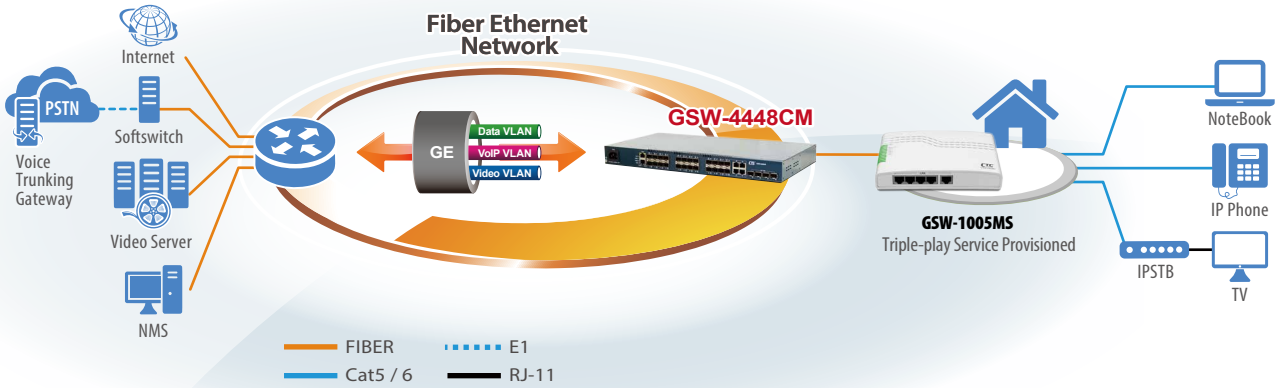
Ordering Information

Model Name	Description
GSW-4448CM-AC	48× GbE (24x CSFP), 4× GbE combo (RJ45 or CSFP) + 4× 1G/10G, SFP⁺ slots uplink with single AC power supply
GSW-4448CM-DC	48× GbE (24x CSFP), 4× GbE combo (RJ45 or CSFP) + 4× 1G/10G, SFP⁺ slots uplink with single DC power supply (-48V)

Power Type

GSW – 4448CM – ☐☐

Example: GSW – 4448CM – AC

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

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.