NEW

Fanless

GSW-3208MPE

8x 10/100/1000Base-T + 2x 100/1000Base-X SFP with 8x PoE+ Ethernet Switch

GSW-3412MPE

12x10/100/1000Base-T + 4x100/1000Base-X SFP with 12x PoE+ Ethernet Switch

The GSW-3208MPE/ GSW-3412MPE are managed Gigabit Ethernet switches that support power over Ethernet and comes with 8/12 ports of IEEE 802.3at standard 30Watts power injection per port. They provide 2/4 dual rate 100M/1000M SFP slots for stable and reliable long-distance Ethernet transmission. The 1U 19" rack- mountable metal housing features a fanless design, for high MTBF. Designed for use in an indoor environment, these devices operate from -10 to 60C degree and have built-in 110-230VAC power supply with 300Watts budget. These switches are a perfect choice for heavy duty and harsh environment applications, such as Factory Automation, Data Center Networking, Intelligent Transportation Systems (ITS) and are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications. These managed switches support a wide variety of Layer 2 Ethernet features and include advanced PoE management functions such as weekly PoE power scheduling as well as device auto-check and auto-reset. Additionally, these switches can also be managed by CTC Union's SmartView™ Element Management System, which offers a user-friendly and centralized device management platform that provides administrators the ability to monitor and configure these connected switches remotely.

Features

- 8x 10/100/1000Base-T RJ-45+ 2x 100/1000Base-X SFP with 8x PoE+, total 120W power budget (GSW-3208MPE)
- 12x 10/100/1000Base-T RJ-45+ 4x100/1000Base-X SFP with 12x PoE+, total 150W power budget (GSW-3412MPE)
- 110/220/230VAC (90~264VAC) input power
- 300W Power Supply included inside
- Provides 8/12 port IEEE 802.3af /at PoE output (30W per Port)
- Advanced PoE Management, PoE PD Failure Auto Checking and auto reset when PD fail, PoE port on/off weekly scheduling, PoE configuration for power planning
- Rugged metal, IP30 protection & Fanless design
- CE, FCC, certified
- Cable diagnostics, Measuring UTP cable OK or broken point distance
- Supports Green Ethernet IEEE 802.3az EEE (Energy Efficient Ethernet) management to optimize power consumption
- STP, RSTP, MSTP for redundant cabling
- DHCP Server/Client/Relay/Snooping/Snooping option 82/Relay option 82
- QoS, Traffic classification QoS, CoS, bandwidth control for Ingress and Egress, Storm Control, DiffServ
- IEEE 802.1q VLAN, MAC based VLAN, IP subnet based VLAN, Protocol based VLAN, VLAN translation, GVRP, MVR
- Dynamic IEEE 802.3ad LACP Link Aggregation, Static Link Aggregation
- IGMP snooping V1/V2/V3, IGMP Filtering/ Throttling, IGMP query, IGMP proxy reporting, MLD snooping V1/V2
- Flexibility security: Port based and MAC based IEEE 802.1X, RADIUS, ACL, TACACS+, HTTP/HTTPS, SSL/SSH v2
- Software upgrade via TFTP and HTTP, redundant firmware to avoid upgrade failure
- RMON, MIB II, Port mirroring, Event syslog, DNS, NTP, SNTP, IEEE 802.1ab LLDP
- Supports IPv6 Telnet server /ICMP v6
- CLI, Web based management, SNMP v1/v2c/v3, Telnet server for management

Specifications

Standard	IEEE 802.3	10Base-T 10Mbit/s Ethernet
	IEEE 802.3u	100Base-TX, 100Base-FX, Fast Ethernet
	IEEE 802.3ab	1000Base-T Gbit/s Ethernet over twisted pair
	IEEE 802.3z	1000Base-X Gbit/s Ethernet over Fiber-Optic
	IEEE 802.1d	STP (Spanning Tree Protocol)
	IEEE 802.1w	RSTP (Rapid Spanning Tree Protocol)
	IEEE 802.1s	MSTP (Multiple Spanning Tree Protocol)
	IEEE 802.1Q	Virtual LANs (VLAN)
	IEEE 802.1X	Port based and MAC based Network Access Control, Authentication
	IEEE 802.3ac	Max frame size extended to 1522Bytes
	IEEE 802.3ad	Link aggregation for parallel links with LACP(Link Aggregation Control Protocol)
	IEEE 802.3x	Flow control for Full Duplex
	IEEE 802.1ad	Stacked VLANs, Q-in-Q
	IEEE 802.1p	LAN Layer 2 QoS/CoS Protocol for Traffic Prioritization
	IEEE 802.1ab	Link Layer Discovery Protocol (LLDP)
	IEEE 802.3az	EEE (Energy Efficient Ethernet)

Switch Architecture	Back-plane (Switching Fabric): 20Gbps (GSW-3208MPE) 32Gbps (GSW-3412MPE) Full wire-speed
Data Processing	Store and Forward
Flow Control	IEEE 802.3x for full duplex mode Back pressure for half duplex mode
Network Connector	8x 10/100/1000Base-T RJ-45 + 2x 100/1000Base-X SFP connector (GSW-3208MPE) 12x 10/100/1000Base-T RJ-45 + 4x 100/1000Base-X SFP connector (GSW-3412MPE) RJ-45 UTP port support Auto negotiation speed, Auto MDI/MDI-X function, SFP port support 100/1000 dual speed with DDMI
PoE standard & RJ-45 pin assignment	8x IEEE 802.3af/at PoE+ (GSW-3208MPE) 12x IEEE 802.3af/at PoE+ (GSW-3412MPE) End-Span, Alternative A mode. Positive (V+) : RJ-45 pin 1, 2. Negative (V-) : RJ-45 pin 3, 6. Data (1,2,3,6,4,5,7,8)

2019 v1.0

www.ctcu.com / sales@ctcu.com

Console	RS-232 (RJ-45)
Network Cable	UTP/STP above Cat. 5e cable EIA/TIA-568 100-ohm (100m)
Protocols	CSMA/CD
Overload Current Protection	Supported
CPU Watch Dog	Supported
Power Supply	110/220/230VAC (90~264VAC) input power 300W Power Supply included inside
Power Consumption	GSW-3208MPE Power consumption

Input Voltage	"Total Power Consumption"	"Device Power Consumption"	PoE Budget
110VAC	151W	16.6W	120W
220VAC	146W	16.2W	120W

GSW-3412MPE Power consumption

Input Voltage	"Total Power Consumption"	"Device Power Consumption"	PoE Budget
110VAC	188W	20.8W	150W
220VAC	180W	20.2W	150W

PoE Power Budget	Maximum PoE Output power budget 30W / Per Port 120W (GSW-3208MPE) 150W (GSW-3412MPE)
LED	Per unit: Power (Green), CPU Act (Green)
	Per RJ-45 port: 10/100 Link/Active (Green) 1000 Link/Active (Amber)
	SFP Fiber Per port: Link/Active (Green
	PoE Port LED 1 LED /per Port : • PoE Output Power On : ON (Green) • PoE Output Power Off : Off

Jumbo Frame	9.6K Byte
IEEE 802.3ac	Max frame size extended to 1522Bytes (allow Q-tag in packet)
MAC Address Table	8K
Memory Buffer	512K Bytes for packet buffer
Operating Temperature	-10 ~ 60°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged Metal, IP30 Protection, Fanless
Dimensions	250 x 438 x 43 mm(Dx W x H)
Weight	2.84kg (GSW-3208MPE) 2.775kg (GSW-3412MPE)
Installation Mounting	Rack mount
MTBF	121,730 Hours (GSW-3208MPE) 119,708 Hours (GSW-3412MPE)
Warranty	1 years
Certification	
EMC	CE (EN55024, EN55032)
EMI (Electromagnetic Interference)	FCC Part 15 Subpart B Class A,CE

Software Specifications

Topology	
VLAN	IEEE 802.1q VLAN,up to 4094 802.1Q VLAN VID
	IEEE 802.1q VLAN,up to 4094 Groups
	IEEE 802.1ad Q-in-Q
	MAC-based VLAN,up to 256 entries
	IP Subnet-based VLAN, up to 128 entries
	Protocol-based VLAN(Ethernt, SNAP, LLC), up to 128 entries
	VLAN Translation, up to 256 entries
	GVRP (GARP VLAN Registration Protocal)
	MVR (Multicast VLAN Registration)
Link Aggregation (Port Trunk)	Static (Hash with SA, DA, IP, TCP/UDP port), up to 5 trunk group
	Dynamic (IEEE 802.3ad LACP), up to 5 trunk group
Spanning Tree	IEEE 802.1d STP
	IEEE 802.1w RSTP
	IEEE 802.1s MSTP
Loop Protection	Supported
QoS Features	
Class of Service	IEEE 802.1p 8 active priorities queues for per port
Traffic Classification QoS	IEEE 802.1p based CoS
	IP Precedence based CoS
	IP DSCP based CoS
Traffic Classification QoS	QCL(QoS Control List): Frame Type, Source/ Destination MAC, VLAN ID, PCP, DEI
	QCE(QoS Control Entry): Protocol, Source IP, IP Fragment, DSCP, TCP/UDP port number
Bandwidth Control for Ingress	Rate in steps :1 kbps / Mbps / fps / kfps
	Range : 100 kbps to 1Gbps / 1fps to 3300kfps
	Rate Unit : bit or frame
Bandwidth Control for Egress	Rate in steps : 1 kbps / Mbps
	Range : 100 kbps to 1Gbps
	Rate Unit : bit
	Per queue / Per port shaper
DiffServ (RF 2474) Remarking	
Storm Control	for Unicast, Broadcast, Multicast
IP Multicasting Features	
IGMP / MLD Snooping	IGMP Snooping v1, v2, v3 / MLD Snooping v1, v2
	Port Filtering Profile
	Throttling, Fast Leave
	Maximum Multicast Group : up to 1022 entries
	Query / Static Router Port

Security Features	
IEEE 802.1X	Port-Based
	MAC-Based
ACL	Number of rules : up to 256 entries
	for L2 / L3 / L4 L2 : Mac address SA/DA/VLAN L3 : IP address SA/DA, Subnet L4 : TCP/UDP
RADIUS authentication & accounting	
TACACS+ authentication & accounting, TACACS+ 3.0	
HTTPS, HTTP	Supported
SSL / SSH v2	Supported
User Name Password Authentication	Local Authentication
	Remote Authentication (via RADIUS / TACACS+)
Management Interface Access Filtering	Web, Telnet / SSH , CLI RS-232 console
Management Features	
CLI	Cisco® like CLI
Web Based Management	
Telnet	Server
SNMP	V1, V2c, V3
Modbus/TCP	Support for management and monitoring
SW & Configuration Upgrade	TFTP, HTTP
	Redundant firmware in case of upgrade failure
RMON	RMON I (1, 2, 3, 9 group), RMON II
MIB	RFC1213 MIB II, Private MIB
UPnP	Supported
DHCP	TFTP, HTTP
	Redundant firmware in case of upgrade failure
IP Source Guard	Supported
Port Mirroring	Supported
Event Syslog	Syslog server (RFC3164) (Support 1 server)
Warning Message	System syslog, e-mail, alarm relay
DNS	Client, Proxy
NTP, SNTP	Client
LLDP (IEEE 802.1ab)	Link Layer Discovery Protocol
	LLDP-MED

IPv6 Features	
IPv6 Management	Telnet Server/ICMP v6
SNMP over IPv6	Supported
HTTP over IPv6	Supported
SSH over IPv6	Supported
IPv6 Telnet	Supported
IPv6 NTP, SNTP	Client
IPv6 TFTP	Supported
IPv6 QoS	Supported
IPv6 ACL	Number of rules: up to 256 entries
	for L2 / L3 / L4 L2 : Mac address SA/DA/VLAN L3 : IP address SA/DA, Subnet L4 : TCP/UDP

Others Features	
Green Ethernet	Supports IEEE 802.3az EEE (Energy Efficient Ethernet) Management to optimize the power consumption
	Determine the cable length and lowering the power for ports with short cables
	Lower the power for a port when there is no link
	LED Power Management : Adjustment LEDs intensity
Cable Diagnostic	Measuring UTP cable normal or broken point distance
Advanced PoE	
Advanced PoE Management	PoE PD failure auto checking ,and auto reset when PD fail PoE port on/off weekly scheduling PoE Configuration PoE Enable/Disable Power limit by classification Power limit by management Total PoE Power budge limitation (maximum 120W for GSW-3208MPE, 150W for GSW-3412MPE, Power feeding priority

Ordering Information

Model Name	Managed	Total Port	UTP Port	Fiber Port	PoE port		Input power	Certification		
			10/100/1000 Base-T	100/1000 Base-X	IEEE 802.3at	Power Budget	110/220/230VAC	Safety EN60950-1	CE	FCC
GSW-3208MPE	V	10	8	2 SFP	8	120W	V	V	V	V
GSW-3412MPE	V	16	12	4 SFP	12	150W	V	V	V	V

2019 v1.0
www.ctcu.com / sales@ctcu.com