# PSGS-2610GF L2+ Managed GbE PoE Switch



#### Overview

PSGS-2610GF L2+ Managed PoE+ Switch is a next-generation Ethernet Switch offering full suite of L2 features, better PoE functionality and usability, including advanced L3 features such as Static Route that delivers better cost performance and lower total cost of ownership in Enterprise networks via fiber or copper connections.

PSGS-2610GF delivers 8 (10M/100M/1G) RJ45/PoE+ (Support 802.3at/af, and total up to 130W) ports, 2 Combo GbE RJ45/SFP ports and RJ45 Console port. PSGS-2610GF provides high HW performance and environment flexibility for SMBs and Enterprises.

PSGS-2610GF is ideal to deliver management simplicity, optimum user experience, and lower total cost of ownership.

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## **Key Features**

- L2+ Managed features provide easier manageability, robust security and QoS.
- DHCP Server
- IPv4/IPv6 L3 static route
- PoE Port configuration and scheduling
- 802.3at high power PoE plus standard
- IEEE 802.3az EEE Energy Efficient Ethernet standard for green Ethernet

## **Benefits**

Feature-rich Ethernet Switch for Enterprise-class

The switch delivers advanced functionality in L2+ managed switch including Layer 3 static route, DHCP server, IPv6 support, LLDP, etc. It also has comprehensive security features such as IP source guard and ACL to guard your network from unauthorized access.

It helps users to build on the market-leading price/performance with L2+ Managed GbE PoE switch, and provide secure, reliable and ease of use for enterprise/SMB deployments.

- Lower Total Cost of Ownership (TCO) with Energy-efficient Design
   It is designed to help customers to reduce power consumption and lower the TCO by
  - Energy Efficient Ethernet (IEEE 802.3az) features. It can be used for customers to build a green Ethernet networking environment.
- Advanced Power over Ethernet Management

The model includes PoE+ options to power IP devices with power-saving features like Power scheduling and PoE configuration.

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# Specifications

## Port Configuration

Total Ports	RJ45 (10M/100M/1G)	Uplinks (100M/1G)	Console
10	8	2 RJ45/ SFP Combo	RJ45

#### Hardware Performance

Forwarding Capacity	Switching Capacity	Mac Table	Jumbo Frames
14.88 Mpps	20 Gbps	8 K	9216 Bytes

#### **Environmental Range**

Operating Temperature		Storage Temperature		Altitude	
Fahrenheit	Centigrade	Fahrenheit	Centigrade	Feet	Meters
32 to 113	0 to 5	-4 to 158	-20 to 70	< 10000.	< 3000

### Dimension, Weights, Humidity

Dimension (WxHxD)		Weight		Operating
Millimeter	Inches	Kilograms	Pounds	Humidity
220 x 44 x 242	8.7 x 1.73 x 9.53	2.3	5.1	10% to 90%
220 X 77 X 272	0.7 × 1.73 × 3.33	2.5	J. 1	non-condensing

### Voltage and Frequency

AC Input Voltage and Frequency	
Voltage	100-240 VAC
Frequency	50~60 Hz

### PoE Power Capacity

Available PoE Power	Number of Ports That Support PoE(15.4W) and PoE+(30.0W)
130W	Each of port 1 - 8 support PoE/ PoE+ within available PoE Power

#### Certification

Electromagnetic Emissions (EMC)	
CE, FCC Part 15 Class A	

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#### **Software Features**

Layer 2 Switching			
Spanning Tree Protocol (STP)	<ul> <li>Standard Spanning Tree 802.1d</li> <li>Rapid Spanning Tree (RSTP) 802.1w</li> <li>Multiple Spanning Tree (MSTP) 802.1s</li> </ul>		
Trunking	<ul> <li>Link Aggregation Control Protocol (LACP) IEEE 802.3ad</li> <li>Up to 5 groups</li> <li>Up to 2 ports per group</li> </ul>		
VLAN	Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs)  Port-based VLAN  802.1Q tag-based VLAN  MAC-based VLAN  Management VLAN  Private VLAN Edge (PVE)  Q-in-Q (double tag) VLAN  Voice VLAN  GARP VLAN Registration Protocol (GVRP)		
DHCP Relay	<ul> <li>Relay of DHCP traffic to DHCP server in different VLAN.</li> <li>Works with DHCP Option 82</li> </ul>		
IGMP v1/v2/v3 Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters. Supports 1024 multicast groups		
IGMP Querier	IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router		
IGMP Proxy	IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router		
MLD v1/v2 Snooping	Delivers IPv6 multicast packets only to the required receivers		
Layer 3 Switching			
IPv4 Static Routing	IPv4 Unicast: Static routing		
IPv6 Static Routing	IPv6 Unicast: Static routing		
Security			
Secure Shell (SSH)	SSH secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported		
Secure Sockets Layer (SSL)	SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch		
IEEE 802.1X	<ul> <li>IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions</li> <li>Supports IGMP-RADIUS based 802.1X</li> <li>Dynamic VLAN assignment</li> </ul>		
Layer 2 Isolation Private VLAN Edge	PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks		

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Port Security  Locks MAL addresses to ports, and limits the number of learned MAL address IP Source Guard  Prevents illegal IP address from accessing to specific port in the switch  RADIUS/ TACACS+  Supports RADIUS and TACACS+ authentication. Switch as a client  Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port  DHCP Snooping  A feature acts as a firewall between untrusted hosts and trusted DHCP servers  Supports up to 256 entries. Drop or rate limitation based on:  Source and destination MAC, VLAN ID or IP address, protocol, port, Differentiated services code point (DSCP) / IP precedence  TCP/ UDP source and destination ports  Boundary of Service  Hardware Queue  Supports 8 hardware queues  Scheduling  Strict priority and weighted round-robin (WRR) Queue assignment based on DSCP and class of service  Port based Bo2.1p VLAN priority based Port pased Bo2.1p VLAN priority based Bo2				
RADIUS/ TACACS+  Supports RADIUS and TACACS+ authentication. Switch as a client  Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port  DHCP Snooping  A feature acts as a firewall between untrusted hosts and trusted DHCP servers  Supports up to 256 entries. Drop or rate limitation based on:  Source and destination MAC, VLAN ID or IP address, protocol, port,  Differentiated services code point (DSCP) / IP precedence  TCP/ UDP source and destination ports  802.1p priority  Ethernet type Internet Control Message Protocol (ICMP) packets  TCP flag  Quality of Service  Hardware Queue  Supports 8 hardware queues  Scheduling  Strict priority and weighted round-robin (WRR)  Queue assignment based on DSCP and class of service  Port based  Port based  IPv4/IPv6 precedence / DSCP based  IPv4/IPv6 precedence / DSCP based  Differentiated Services (Diffserv)  Classification and re-marking ACLs  Ingress policer  Egress shaping and rate control  Per port  Management  DHCP Server  Support DHCP server to assign IP to DHCP clients  Erro Touch Upgrade  Remote Monitoring (RMON)  Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis  Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.  The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play  The industry standard for monitoring high speed switched networks. It gives	Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address		
Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port	IP Source Guard			
Unicast storm on a port  DHCP Snooping  A feature acts as a firewall between untrusted hosts and trusted DHCP servers  Supports up to 256 entries. Drop or rate limitation based on:  Source and destination MAC, VLAN ID or IP address, protocol, port,  Differentiated services code point (DSCP) / IP precedence  TCP/ UDP source and destination ports  802.1 p priority  Ethernet type Internet Control Message Protocol (ICMP) packets TCP flag  Quality of Service  Hardware Queue  Supports 8 hardware queues  Scheduling  Strict priority and weighted round-robin (WRR) Queue assignment based on DSCP and class of service  Port based 802.1 p VLAN priority based 1 PV4/PV6 precedence / DSCP based Differentiated Services (DiffServ) Classification  Ingress policer Egress shaping and rate control Per port  Management  DHCP Server  Support DHCP server to assign IP to DHCP clients  Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis  Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.  The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play  The industry standard for monitoring high speed switched networks. It gives	RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client		
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Hardware Queue  Supports 8 hardware queues  • Strict priority and weighted round-robin (WRR) • Queue assignment based on DSCP and class of service  • Port based • 802.1p VLAN priority based • 1Pv4/IPv6 precedence / DSCP based • Differentiated Services (DiffServ) • Classification and re-marking ACLs  alongress policer • Egress shaping and rate control • Per port  Management  DHCP Server  Support DHCP server to assign IP to DHCP clients  Zero Touch Upgrade  Upgrade single switch automatically when you get notification  Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis  Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.  The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play  The industry standard for monitoring high speed switched networks. It gives	ACLs	<ul> <li>Source and destination MAC, VLAN ID or IP address, protocol, port,</li> <li>Differentiated services code point (DSCP) / IP precedence</li> <li>TCP/ UDP source and destination ports</li> <li>802.1p priority</li> <li>Ethernet type</li> <li>Internet Control Message Protocol (ICMP) packets</li> </ul>		
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Zero Touch Upgrade  Remote Monitoring (RMON)  Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis  Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.  The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play  The industry standard for monitoring high speed switched networks. It gives	Management			
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Port Mirroring  analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.  The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play  The industry standard for monitoring high speed switched networks. It gives		alarms, and events) for enhanced traffic management, monitoring and		
UPnP to enable device-to-device interoperability by promoting Universal Plug and Play  The industry standard for monitoring high speed switched networks. It gives	Port Mirroring	analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be		
s-Flow	UPnP	to enable device-to-device interoperability by promoting Universal Plug and		
	s-Flow			

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	optimization, accounting/billing for usage, and defense against security
IEEE 802.1ab (LLDP)	<ul> <li>Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network</li> <li>Support LLDP-MED extensions</li> </ul>
Web GUI Interface	Built-in switch configuration utility for browser-based device configuration
CLI	For users to configure/manage switches in command line modes
Dual Image	Independent primary and secondary images for backup while upgrading
SNMP	SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
Firmware Upgrade	<ul> <li>Web browser upgrade (HTTP/ HTTPs) and TFTP</li> <li>Upgrade through console port as well</li> </ul>
NTP	Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
Other Management	<ul> <li>HTTP/HTTPs; SSH</li> <li>DHCP Client/ DHCPv6 Client</li> <li>Cable Diagnostics</li> <li>Ping</li> <li>Syslog</li> <li>Telnet Client</li> <li>IPv6 Management</li> </ul>
Power over Ethernet (	PoE)
Port Configuration	Supports per port PoE configuration function
PoE Scheduling	Supports per port PoE scheduling to turn on/off the PoE devices (PDs).
Auto-checking	Check the link status of PDs. Reboot PDs if there is no responses.
Power Delay	The switch provides power to the PDs based on delay time when PoE switch boots up, in order to protect switch from misuse of the PDs

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