GS-1500 and PSGS-1500 Series

Web Smart+ Managed GbE Switches



GS-1506

PSGS-1508NF

GS-1510

PSGS-1510F

PSGS-1518AF

GS-1526

PSGS-1518F

PSGS-1526L, PSGS-1526F

PSGS-1528F, PSGS-1528L GS-1528, GS-1528DA

Overview

The GS-1500 and PSGS-1500 series web smart+ managed GbE switches are the next-generation Ethernet switches offering powerful L2 features with better functionality and usability. That deliver the cost-effectively business and transports Ethernet services via fiber or copper connections.

The GS-1500 and PSGS-1500 series consist of 5 non-PoE models which are GS-1528DA, GS-1528, GS-1526, GS-1510 and GS-1506, and 8 PoE+ models which are PSGS-1528L, PSGS-1528F, PSGS-1526L, PSGS-1526F, PSGS-1518F,PSGS-1518AF, PSGS-1510F and PSGS-1508NF. The series offer users with various options of port combinations and PoE+ budget, in order to meet different requirements in various applications.

The embedded Device Managed System (DMS) features provides users with the benefits of easy-to-use/configure/install/troubleshoot in the video surveillance, wireless access, and other SMBs and Enterprises applications. The GS-1500 and PSGS-1500 series are ideal to deliver management simplicity, better user experience, and lowest total cost of ownership.

Key Features

* Web Smart+ features provide easier manageability, basic security and QoS
* Built in Device Management System (DMS)
* DHCP Server
* PoE Port configuration and scheduling
* IEEE 802.3af/at Power over Ethernet
* IEEE 802.3az EEE Energy Efficient Ethernet standard for green Ethernet

Benefits

* Cost-effective Ethernet Switch for Enterprise-class

 The switch delivers advanced functionality in Web Smart+ managed switch including DHCP client, IGMP, LLDP, etc. It also has basic security features such as IEEE 802.1x to protect your network from unauthorized access.

It helps users to build on the market-leading price/performance with Web Smart+ managed GbE switch, and provide ease of use for enterprise and SMB deployments.

* Easy to Install, Configure and Troubleshoot by Device Management System

The DMS provides embedded functions to facilitate devices management at anytime and anywhere. Its user-friendly interface helps users to manage devices intuitively.

It supports various IP device types (e.g. PC, IP-phone, IP-camera, WiFi-AP) for end users to enhance manageability and save time/cost during installation/maintenance stages.

* Lowing Total Cost of Ownership (TCO) with Energy-efficient Design

The switch is designed to help companies to save power needs and reduce TCO by Energy Efficient Ethernet (IEEE 802.3az). 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.

Specifications

Port Configuration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model Name | Total Ports | RJ45 (10M/100M/1G) | Uplinks (100M/1G)  | Console | Available PoE Power |
| GS-1528DA | 28 | 24 | 4 SFP | -- | -- |
| GS-1528 | 28 | 24 | 4 SFP | -- | -- |
| GS-1526 | 26 | 24 | 2 SFP | -- | -- |
| GS-1510 | 10 | 8 | 2 SFP | -- | -- |
| GS-1506 | 6 | 5 | 1 SFP | -- | -- |
| PSGS-1528L | 28 | 24 | 4 SFP  | -- | 185W |
| PSGS-1528F | 28 | 24 | 4 SFP  | -- | 370W |
| PSGS-1526L | 26 | 24 | 2 SFP  | -- | 185W |
| PSGS-1526F | 26 | 24 | 2 SFP  | -- | 370W |
| PSGS-1518F | 18 | 16 | 2 SFP | -- | 250W |
| PSGS-1518AF | 18 | 16 | 2 SFP  | -- | 185W |
| PSGS-1510F | 10 | 8 | 2 SFP | -- | 130W |
| PSGS-1508NF | 8 | 8 | -- | -- | 60W |

Hardware Performance

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model Name | Forwarding Capacity (Mpps) | Switching Capacity (Gbps) | Mac Table(K) | Jumbo Frames(Bytes) |
| GS-1528DA | 41.7 | 56 | 8 | 9216 |
| GS-1528 | 41.7 | 56 | 8 | 9216 |
| GS-1526 | 38.688 | 52 | 8 | 9216 |
| GS-1510 | 14.88 | 20 | 8 | 9216 |
| GS-1506 | 8.928 | 12 | 8 | 9216 |
| PSGS-1528L | 41.7 | 56 | 8 | 9216 |
| PSGS-1528F | 41.7 | 56 | 8 | 9216 |
| PSGS-1526L | 38.688 | 52 | 8 | 9216 |
| PSGS-1526F | 38.688 | 52 | 8 | 9216 |
| PSGS-1518F | 26.784 | 36 | 8 | 9216 |
| PSGS-1518AF | 26.784 | 36 | 8 | 9216 |
| PSGS-1510F | 14.88 | 20 | 8 | 9216 |
| PSGS-1508NF | 11.904 | 16 | 8 | 9216 |

Environmental Range (except PSGS-1518AF)

|  |  |  |  |
| --- | --- | --- | --- |
| Operating Temperature | Storage Temperature | Operating Humidity | Altitude |
| Fahrenheit | Centigrade | Fahrenheit | Centigrade | 10% to 90% non-condensing | Feet | Meters |
| 32 to 122  | 0 to 50  | -4 to 158 | -20 to 70 | < 10000 | <3000  |

Environmental Range (PSGS-1518AF only)

|  |  |  |  |
| --- | --- | --- | --- |
| Operating Temperature | Storage Temperature | Operating Humidity | Altitude |
| Fahrenheit | Centigrade | Fahrenheit | Centigrade | 10% to 90% non-condensing | Feet | Meters |
| 32 to 113 | 0 to 45  | -4 to 158 | -20 to 70 | < 10000 | <3000  |

Dimension, Weights, Mounting

|  |  |  |  |
| --- | --- | --- | --- |
| Model Name | Dimension (WxHxD) | Weight | Mounting Type |
| Millimeter | Inches | Kilograms | Pounds |
| GS-1528DA | 442x44x211 | 17.4x1.7x8.3 | <2.5 | <5.5 | Desktop, Rack |
| GS-1528 | 442x44x211 | 17.4x1.7x8.3 | <2.5 | <5.5 | Desktop, Rack |
| GS-1526 | 280x44x166 | 11x1.7x6.5 | <2.5 | <5.5 | Desktop, Wall |
| GS-1510 | 220x44x134 | 8.6x1.7x5.3 | <1.5  | <3.3  | Desktop, Wall |
| GS-1506 | 139x27x102 | 5.5x1.1x4.0 | <1 | <2.2 | Desktop, Wall |
| PSGS-1528L | 442x44x211 | 17.4x1.7x8.3 | <3 | <6.6 | Desktop, Rack |
| PSGS-1528F | 442x44x211 | 17.4x1.7x8.3 | <3 | <6.6 | Desktop, Rack |
| PSGS-1526L | 442x44x211 | 17.4x1.7x8.3 | <3 | <6.6 | Desktop, Rack |
| PSGS-1526F | 442x44x211 | 17.4x1.7x8.3 | <3 | <6.6 | Desktop, Rack |
| PSGS-1518F | 442x44x211 | 17.4x1.7x8.3 | <3 | <6.6 | Desktop, Rack |
| PSGS-1518AF | 280x44x166 | 11x1.7x6.5 | <2.5 | <5.5 | Desktop, Wall |
| PSGS-1510F | 220x44x242 | 8.6x1.7x9.5 | <2 | <4.4 | Desktop, Wall |
| PSGS-1508NF | 220x44x134 | 8.6x1.7x5.3 | <2 | <4.4 | Desktop, Wall |

Voltage and Frequency

|  |
| --- |
| AC Input Voltage and Frequency |
| Voltage  | 100-240 VAC (GS-1528DA: dual AC inputs) |
| Frequency | 50~60 Hz |

PoE Power Capacity

|  |  |  |
| --- | --- | --- |
| Model Name | Available PoE Power | Number of Ports That Support PoE(15.4W) and PoE+(30.0W) |
| PSGS-1528L | 185W | Each of port 1 - 24 support PoE/ PoE+ within available PoE Power |
| PSGS-1528F | 370W | Each of port 1 - 24 support PoE/ PoE+ within available PoE Power |
| PSGS-1526L | 185W | Each of port 1 - 24 support PoE/ PoE+ within available PoE Power |
| PSGS-1526F | 370W | Each of port 1 - 24 support PoE/ PoE+ within available PoE Power |
| PSGS-1518AF | 185W | Each of port 1 - 16 support PoE/ PoE+ within available PoE Power |
| PSGS-1518F | 250W | Each of port 1 - 16 support PoE/ PoE+ within available PoE Power |
| PSGS-1510F | 130W | Each of port 1 - 8 support PoE/ PoE+ within available PoE Power |
| PSGS-1508NF | 60W | Each of port 1 - 4 support PoE/ PoE+ within available PoE Power |

Certifications

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

Software Features

|  |
| --- |
| Layer 2 Switching  |
| Spanning Tree Protocol (STP) | * Standard Spanning Tree 802.1d
* Rapid Spanning Tree (RSTP) 802.1w
* Multiple Spanning Tree (MSTP) 802.1s
 |
| Trunking | * Link Aggregation Control Protocol (LACP) IEEE 802.3ad
* Static aggregation
 |
| VLAN | Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs)* Port-based VLAN
* 802.1Q tag-based VLAN
* Protocol based VLAN
* IP subnet-based VLAN
* Private VLAN Edge (PVE)
* MAC-based VLAN
* Q-in-Q (double tag) VLAN
* Voice VLAN
 |
| DHCP Relay  | * Relay of DHCP traffic to DHCP server in different VLAN.
* Works with DHCP Option 82
 |
| IGMP Snooping | IGMP limits bandwidth-intensive multicast traffic to only the requesters. Supports 512 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 |
| Multicast VLAN Registration (MVR) | It uses a dedicated manually configured VLAN, called the multicast VLAN, to forward multicast traffic over Layer 2 network in conjunction with IGMP snooping. |
| 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 | * IEEE802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions
* Supports IGMP-RADIUS based 802.1X
* Dynamic VLAN assignment
 |
| Layer 2 Isolation Private VLAN Edge  | PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks |
| Port Security | Locks MAC addresses to ports, and limits the number of learned MAC 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 |
| Storm Control | 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 |
| Loop Protection | To prevent unknown unicast, broadcast and multicast loops in Layer 2 switching configurations. |
| ACLs | Supports up to 384 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
 |
| Classification | * Port based
* 802.1p VLAN priority based
 |
| Rate Limiting | * Ingress policer
* Egress shaping and rate control
* Per port
 |
| Management |
| Port Mirroring | 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.  |
| IEEE 802.1ab (LLDP)  | * Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network
* Support LLDP-MED extensions
 |
| Web GUI Interface | Built-in switch configuration utility for browser-based device configuration  |
| Dual Image | Independent primary and secondary images for backup while upgrading  |
| UPnP | The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play  |
| DHCP Server | Support DHCP server to assign IP to DHCP clients |
| 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 |
| SNMP  | * SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
 |
| s-Flow(option) | The industry standard for monitoring high speed switched networks. It gives complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats  |
| Firmware Upgrade | * Web browser upgrade (HTTP/ HTTPs) and TFTP
 |
| NTP | Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched |
| Other Management | * HTTP/HTTPs
* DHCP Client
* Cable Diagnostics
* Syslog
* Telnet Client; SSH
* IPv6 Management
 |
| Device Management System (DMS) |
| Graphical Monitoring | * Topology view: Support intuitive way to configure and manage switches and devices with visual relations
* Floor view: It’s easy to drag and drop PoE devices and help you to build smart workforces
* Map view: Enhance efficiency to drag and drop devices and monitor surroundings on google map
 |
| Find my Switch | Search your real switches quickly and manage directly. |
| Traffic Monitoring | Display visual chart of network traffic of all devices and monitor every port at any time from switches |
| Trouble Shooting | * Network diagnostic between master switch and devices
* Support protection mechanism, such as rate-limiting to protect your devices from brute-force downloading
 |
| 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 |
| Soft-Reboot PoE Non-stop | The switch will keep providing power to the PDs while during soft-reboot. |