8-Port 10/100/1000Mbps with 2 Shared SFP Web Smart Gigabit Switch

KEY FEATURE

Generic Features

- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-SX/LX Ethernet standard
- 8-Port 10/100/1000Mbps Gigabit Ethernet ports
- 2 mini-GBIC/SFP slots, shared with Port-7 and Port-8
- Each Switching port supports auto-negotiation-10/20, 100/200 and 1000/2000Mbps supported
- Auto-MDI/MDI-X detection on each RJ-45 port supports CSMA/CD protocol
- Prevents packet loss with back pressure (Half-Duplex) and 802.3x PAUSE frame flow control (Full-Duplex)
- 8K MAC address table, automatic source address learning and ageing
- 16Gbps switch fabric, non-blocking switch architecture
- 9K Jumbo Frame supports at all speed (10/100/1000Mbps)

Layer 2 Switching

- Supports Port-Based and 802.1Q VLAN function, up to 64 VLAN groups
- IEEE 802.1w Rapid-Spanning Tree protocol supported
- Link Aggregation supports static mode and LACP (IEEE 802.3ad) - up to 4 Trunk groups. Each trunk is maximum up to 8 ports

Multicast

- IGMP Snooping for multicast filtering, supports v1 and v2
- IGMP Query Mode supports for multimedia application

Quality of Service

- 4 QoS classes per port
- Traffic class assignment based on 802.1p tag, or DSCP field
- Multicast and Broadcast Storm Control as well as Flooding Control
- Ingress Rate Limit and Egress Shaping for bandwidth control in steps of 128kbps

Security

- Port Mirroring support for dedicated port monitoring
- 802.1X Port-Base access control, RADIUS Server Authentication
- Static MAC Address assigns destination MAC address at specifc port

Management

- Remote Web management interface
- Firmware upgrade through Web interface
- Cable Diagnostics technology
- Supports SNMPv1 with RFC-1213/1573-Interface group and RMON Group 1 (Statistics)
- SNMP Trap
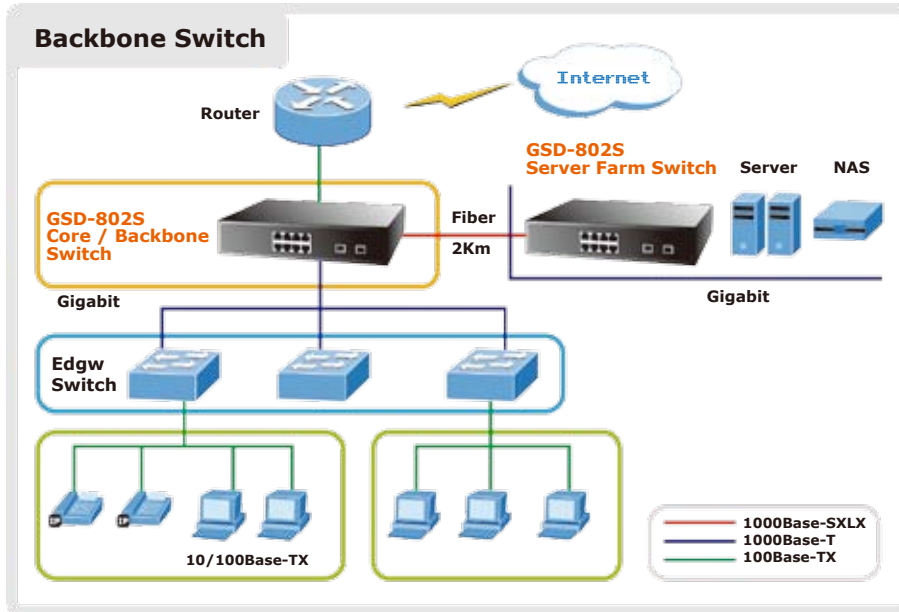- Supports PLANET Smart-DISCOVERY Utility for deploy management

Cost-effective Desktop Size / High-Speed / Fiber Capability WEB Smart Switch

The GSD-800S is an 8-Port 10/100/1000Mbps Web Smart Gigabit Ethernet Switch, utilizing a compact form factor which can be mounted in a 10/19-inch rack with optional rack-mounting kits, or placed on desktop. Compared with previous version, the enhanced software features as below:

- 802.1Q VLAN
- Rapid Spanning Tree
- IGMP Snooping
- 802.1X Authentication / RADIUS
- SNMP monitor and SNMP Trap

High Gigabit Performance / Wire-Speed Switching

With 16Gbps non-blocking switch fabric, 8k MAC Address table and 802.3x Full-Duplex flow control, the GSD-802S offers wire-speed packet transfer performance without risk of packet loss. The two Gigabit SFP (Small Factor Pluggable) slots can be installed with 1000Base-SX/LX mini-GBIC modules which offer incredible extensibility, flexibility and connectivity to the Core switches or Servers.

Friendly / Simple Web Management Interface

For efficient management, with its built-in Web-based management, the GSD-802S offers an easy-to-use and configuration facility. Via the WEB interface, the GSD-802S can be programmed for basic Switch management functions such as per port speed duplex settings, Port Trunking, VLAN, Port Mirroring, Rapid Spanning Tree, 802.1X network security authentication and Misc Configuration. Additionally, the firmware includes advanced features such as IGMP snooping, QoS (Quality of Service), broadcast storm and bandwidth control, to enhance bandwidth utilization.

Remote and Centralize Management installation

Affording the current network to grow and expand, the GSD-802S supports standard Simple Network Management Protocol (SNMP) and can be monitored via any standard-based management software. These features provide a cost-effective way to manage the device from the Internet whenever you are working or at home.

Easy Cabling installation

All eight RJ-45 copper interfaces support 10/100/1000Mbps auto-negotiation for optimal speed detection through RJ-45 Category 6, 5 or 5e cables. The MDI/MDI-X auto-detection supports wired connection to any Ethernet device without requiring cross-over cables. Auto-negotiation for optimal speed detection through RJ-45 Category 6, 5 or 5e cables. The MDI/MDI-X auto detection supports wired connection to any Ethernet device without requiring cross-over cables.

SPECIFICATION

Product	8-Port 10/100/1000Mbps Web Smart Gigabit Switch

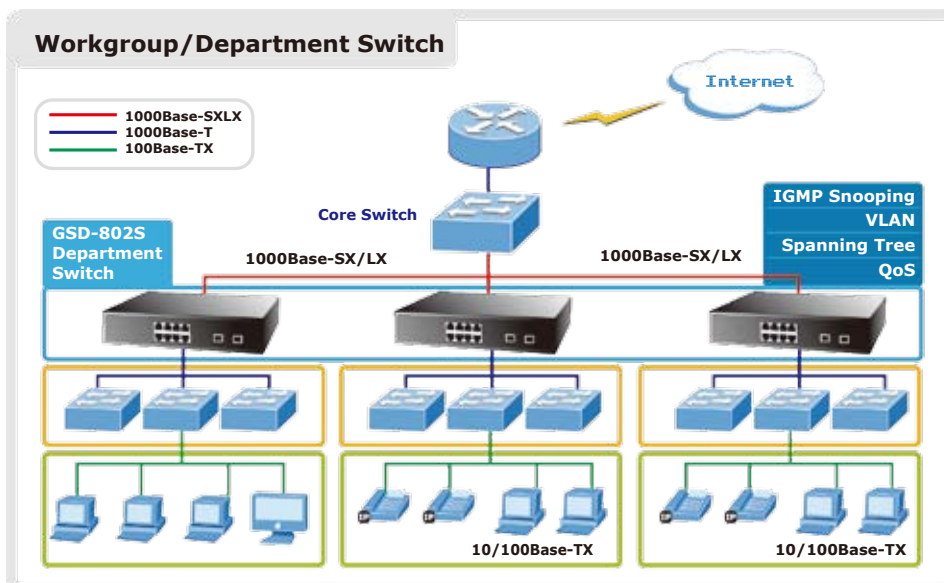|	
Model	GSD-802S
Hardware Specification	
Copper Ports	8 10/ 100/1000Base-T RJ-45 Auto-MDI/MDI-X ports
SFP/mini-GBIC Slots	2 SFP interfaces, shared with Port-7 and Port-8
Switch Architecture	Store-and-Forward
Switch Fabric	16Gbps / non-blocking
Switch Throughput	11.9Mpps
Address Table	8K MAC address table with Auto learning function
Share Data Buffer	176K bytes on chip
Flow Control	Back pressure for Half-Duplex
	IEEE 802.3x Pause Frame for Full-Duplex
Jumbo Frame	Up to 9K Bytes (Disable, 4K, 9K)
LED	Power, 1000 Link/Act, 100/10 Link/Act per port
Dimensions	217mm x 135mm x 43.5mm (W x D x H)
Weight	1.1kg
Power Requirement	100 - 240VAC, 50 – 60Hz, Auto-sensing
Power Consumption	8.7 watts / 27.31 BTU
Temperature	0~50 degree C
Humidity Operating	5~95%(non-condensing)
Layer 2 Function	
Management Interface	Web Browser, SNMPv1, v2c monitor and SNMP Trap
Port Configuration	Port disable/enable. Auto-negotiation 10/100/1000Mbps full and half duplex mode selection.
	Flow Control disable / enable.
	Bandwidth control on each port.
VLAN	Port-Based / 802.1Q Tagged Based VLAN, Up to 64 VLAN groups
Link Aggregation	Supports 4 groups of 8-Port trunk, IEEE 802.3ad LACP
QoS	Traffic classification based on 802.1p priority, DSCP field in IP Packet
IGMP Snooping	IGMP (v1/v2) Snooping, up to 64 multicast groups
SNMP MIBs	RFC-1213 MIB-2
	RFC-1573-Interface MIB
	RFC-2819 RMON MIB (Group 1)
Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10BASE-T
	IEEE 802.3u 100BASE-TX
	IEEE 802.3ab Gigabit 1000Base-T
	IEEE 802.3z Gigabit 1000Base-SX/LX
	IEEE 802.3x Flow Control
	IEEE 802.3ad Port trunk with LACP
	IEEE 802.1d Spanning tree protocol
	IEEE 802.1w Rapid spanning tree protocol
	IEEE 802.1p Class of service
	IEEE 802.1Q VLAN Tagging
	IEEE 802.1x Port Authentication Network Control
Network Media	10Base-T – UTP/STP category 3, 4 or 5 cable
	100Base-TX – UTP/STP category 5 cable
	1000Base-T – UTP/STP category 5e/6 cable
	1000Base-SX
	- 62.5/125µm multi-mode fiber optic cable, up to 220m
	- 50/125µm multi-mode fiber optic cable, up to 550m
	1000Base-LX
	- 9/125µm single-mode fiber optic cable, up to 120km
	(Vary on SFP Module)

APPLICATIONS

Backbone Switch

With a non-blocking design and desktop size, the PLANET's GSD-802S 8-Port Gigabit Ethernet Switch are as easy as installing a Fast Ethernet network, and it can be used to build up a Gigabit high-bandwidth switched network quickly and easily. With supporting for VLAN and port trunking on the GSD-802S, users can directly connect to department switches or backbone servers.
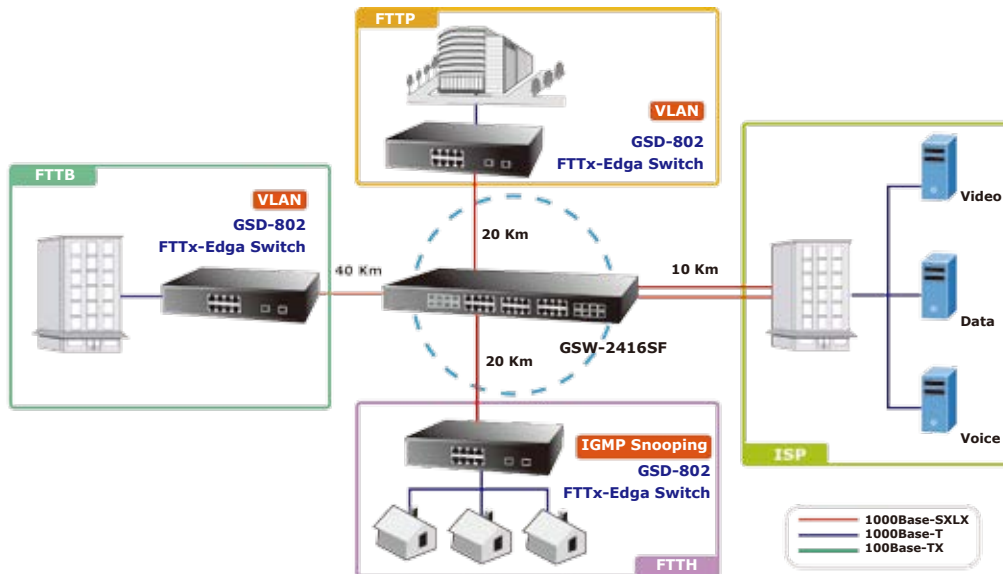

Workgroup/Department Switch

With 8 10/100/1000Mbps ports, the GSD-802S provides a cost-effective and high-performance solution for SMB Departments and workgroups. In multiple applications, the advanced functionality of the GSD-802S eliminates traditional problems associated with Ethernet. Using the built-in VLAN functionality can segregate users and the Spanning tree can reduce the loop occur.

FTTx Edge Switch

With two mini-GBIC 1000Base-SX/LX SFP (Small Factor Pluggable) interfaces, the deployed distance of GSD-802S can be extended from 550 meters (Multi-mode fiber) up to above 10/50/70/120 kilometers (Single-mode fiber) which just provides a high-performance edge device for FTTx solutions. To build a network solution of FTTH (Fiber to the Home) or FTTC (Fiber to the Curb) for ISPs and FTTB (Fiber to the Building) for enterprises, the various distances of SFP (small-form factor) and Bidi (WDM) transceivers are optional for customers. For security and applications, the 8 Gigabit ports can be configured with VLAN settings and connect to different units, offices, buildings, houses and departments.

ORDERING INFORMATION

GSD-802S	8-Port 10/100/1000Mbps Web Smart Gigabit Ethernet Switch

RELATIVE PRODUCT

RKE-10A	Rack Mount Kits for 10" cabinet
RKE-10B	Rack Mount Kits for 19" cabinet
GSD-800S	8-Port 10/100/1000Mbps Web Smart Gigabit Switch
GSD-802PS	8-Port 10/100/1000Mbps with 2 Shared SFP Web Smart PoE Switch

AVAILABLE MODULES FOR GSD-802S MINI-GBIC SFP SLOTS

MGB-GT	SFP-Port 1000Base-T mini-GBIC module
MGB-SX	SFP-Port 1000Base-SX mini-GBIC module
MGB-LX	SFP-Port 1000Base-LX mini-GBIC module
MGB-L30	SFP-Port 1000Base-LX mini-GBIC module -30km
MGB-L50	SFP-Port 1000Base-LX mini-GBIC module -50km
MGB-L70	SFP-Port 1000Base-LX mini-GBIC module -70km
MGB-L120	SFP-Port 1000Base-LX mini-GBIC module -120km
MGB-LA10	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1310nm), SM,10km
MGB-LB10	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1550nm), SM,10km
MGB-LA20	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1310nm), SM,20km
MGB-LB20	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1550nm), SM,20km
MGB-LA40	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1310nm), SM,40km
MGB-LB40	SFP-Port 1000Base-LX mini-GBIC module- LC WDM(TX:1550nm), SM,40km