

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



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

PLANET GSD-802S is a Web Smart Gigabit Switch with 8 10/100/1000Mbps copper ports and 2 SFP slots, utilizing a compact form factor which can be mounted in a 10/19-inch rack with optional rack-mounting kits, and placed on desktop. The enhanced management features are shown 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 switch or servers.

Friendly / Simple Web Management Interface

For efficient management and 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 Centralized Management Installation

To meet the growing network, 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.

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 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 all speeds (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 support
- Link Aggregation supports static mode and LACP (IEEE 802.3ad) - up to 4 Trunk groups, each trunk comes with 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
- Security
- Port Mirroring support for dedicated port monitoring
- IEEE 802.1X Port-based access control, RADIUS Server Authentication
- Static MAC address assigns destination MAC address at specified port

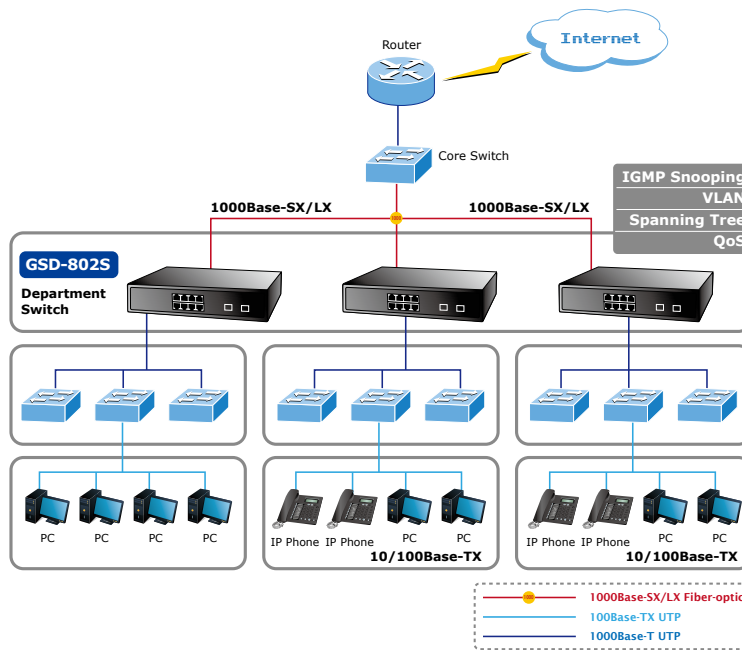
Management

- 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

Product Application

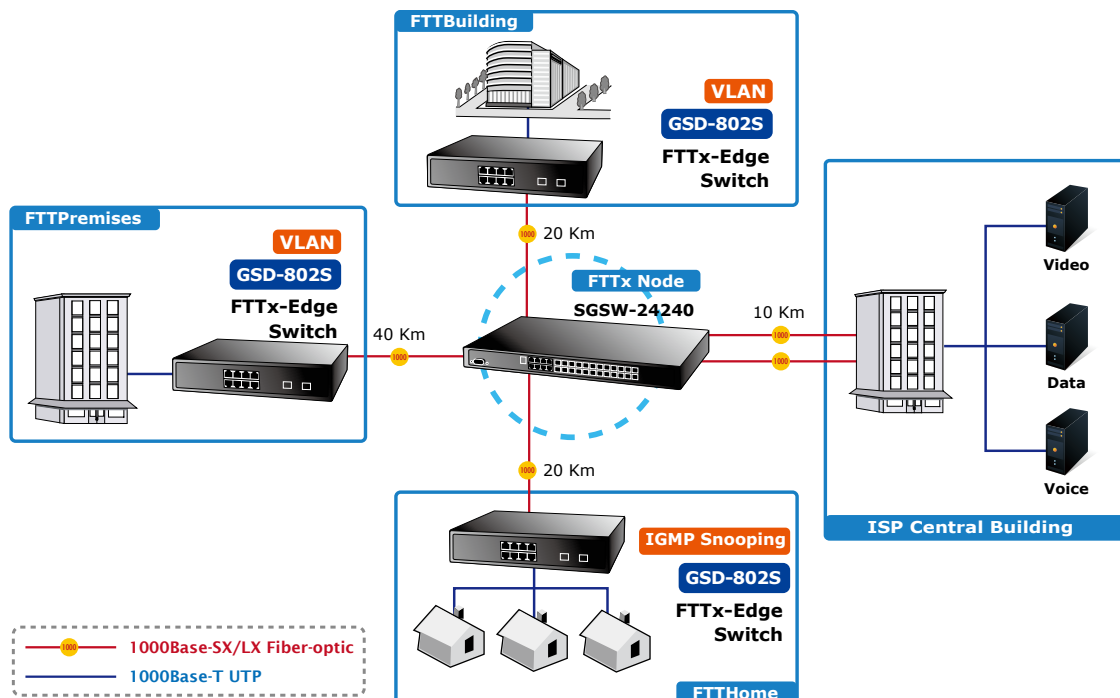
Workgroup/Department Switch

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 occurrence.



FTTx Edge Switch

With two mini-GBIC 1000Base-SX / LX SFP (Small-Form Factor Pluggable) interfaces, the deployed distance of the 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 Pluggable) 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.



Product Specifications

Product	GSD-802S 8-Port 10/100/1000Mbps Web Smart Switch with 2 Shared SFP Ports
Hardware Specifications	
Hardware Version	Version 2
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	9K Bytes
LED	Power, 1000 Link/Act, 100/10 Link/Act per port
Dimensions (W x D x H)	217 x 135 x 43.5mm
Weight	1.1kg
Power Requirements	100 - 240V AC, 50 / 60Hz, auto-sensing
Power Consumption	8.7 watts / 27.31 BTU
Operating Temperature	0~50 degrees C
Operating Humidity	5~95%(non-condensing)
Layer 2 Function	
Management Interface	Web Browser, SNMPv1, v2c monitor and SNMP Trap
Port Configuration	<ul style="list-style-type: none"> ▪ Port disable/enable. ▪ Auto-negotiation 10/100/1000Mbps full and half duplex mode selection. ▪ Flow control disable / enable.
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 1000Base-T IEEE 802.3z Gigabit 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)

The specifications is for GSD-802S hardware version 2 only.

Ordering Information

GSD-802S	8-Port 10/100/1000Mbps Web Smart Gigabit Switch with 2 shared SFP Ports
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Accessories

RKE-10A	Rack Mount Kits for 10" cabinet
RKE-10B	Rack Mount Kits for 19" cabinet

Available Modules for GSD-802PS mini-GBIC SFP Slots

MGB-GT	SFP-Port 1000Base-T Module
MGB-SX	SFP-Port 1000Base-SX mini-GBIC module – 550m
MGB-SX2	SFP-Port 1000Base-SX mini-GBIC module – 2km
MGB-LX	SFP-Port 1000Base-LX mini-GBIC module – 10km
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-TSX	SFP-Port 1000Base-SX mini-GBIC module – 550m (-40 to 75 degrees C)
MGB-TLX	SFP-Port 1000Base-LX mini-GBIC module – 10km (-40 to 75 degrees C)
MGB-TL30	SFP-Port 1000Base-LX mini-GBIC module – 30km (-40 to 75 degrees C)
MGB-TL50	SFP-Port 1000Base-LX mini-GBIC module – 50km (-40 to 75 degrees C)
MGB-LA10	SFP-Port 1000Base-LX (WDM, TX :1310nm) mini-GBIC module – 10km
MGB-LB10	SFP-Port 1000Base-LX (WDM, TX :1550nm) mini-GBIC module – 10km
MGB-LA20	SFP-Port 1000Base-LX (WDM, TX :1310nm) mini-GBIC module – 20km
MGB-LB20	SFP-Port 1000Base-LX (WDM, TX :1550nm) mini-GBIC module – 20km
MGB-LA40	SFP-Port 1000Base-LX (WDM, TX :1310nm) mini-GBIC module – 40km
MGB-LB40	SFP-Port 1000Base-LX (WDM, TX :1550nm) mini-GBIC module – 40km
MGB-LA60	SFP-Port 1000Base-LX (WDM, TX :1310nm) mini-GBIC module – 60km
MGB-LB60	SFP-Port 1000Base-LX (WDM, TX :1550nm) mini-GBIC module – 60km
MGB-TLA10	SFP-Port 1000Base-LX (WDM, TX :1310nm) mini-GBIC module – 10km (-40 to 75 degrees C)
MGB-TLB10	SFP-Port 1000Base-LX (WDM, TX :1550nm) mini-GBIC module – 10km (-40 to 75 degrees C)
MGB-TLA20	SFP-Port 1000Base-LX (WDM, TX :1310nm) mini-GBIC module – 20km (-40 to 75 degrees C)
MGB-TLB20	SFP-Port 1000Base-LX (WDM, TX :1550nm) mini-GBIC module – 20km (-40 to 75 degrees C)
MGB-TLA40	SFP-Port 1000Base-LX (WDM, TX :1310nm) mini-GBIC module – 40km (-40 to 75 degrees C)
MGB-TLB40	SFP-Port 1000Base-LX (WDM, TX :1550nm) mini-GBIC module – 40km (-40 to 75 degrees C)
MGB-TLA60	SFP-Port 1000Base-LX (WDM, TX :1310nm) mini-GBIC module – 60km (-40 to 75 degrees C)
MGB-TLB60	SFP-Port 1000Base-LX (WDM, TX :1550nm) mini-GBIC module – 60km (-40 to 75 degrees C)