

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



## Enhancing Power over Ethernet Device to High-Speed Generation of Gigabit Ethernet

For cost saving, flexibility and high-speed data transmission using PoE power provision, all of the 10/100/1000Mbps copper ports of PLANET GSD-802PS provide PoE power injector function which is able to drive 8 IEEE 802.3af compliant powered devices with maximum up to 15.4 watts of power per port.

With data and PoE, the GSD-802PS can reduce cables and eliminate the need for electrical outlets on the wall, ceiling or any unreachable place. A wire carries both data and power, thus lowering the installation costs, simplifying the installation effort and eliminating the need for electricians or extension cords. The key feature of the GSD-802PS is energy saving. With more efficient switching power supply, the efficiency of the GSD-802PS would be much better than four linear power adapters in the long run.

Furthermore, it is the ideal device for bridging among Ethernet, Fast Ethernet and Gigabit Ethernet workgroups and networks. With Gigabit throughput supported, the Gigabit PoE switch won't be the bottleneck of a PoE networking environment anymore.

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

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

- 802.3af Power over Ethernet
- 802.1Q VLAN
- IGMP Snooping
- 802.1X Authentication / RADIUS
- SNMP Monitor and SNMP Trap
- Rapid Spanning Tree

## Generic Features

- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z Gigabit SX / LX
- 8 10/100/1000Mbps Gigabit Ethernet ports
- 2 mini-GBIC / SFP slots, shared with Port-7 and Port-8
- Each Switching ports support auto-negotiation-10/20, 100/200 and 1000/2000Mbps
- Auto-MDI / MDI-X detection on each RJ-45 port supports CSMA / CD protocol
- Prevents packet loss with back pressure (half-duplex) and IEEE 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)

## Power Over Ethernet

- Complies with IEEE 802.3af Power over Ethernet standard
- All copper ports with IEEE 802.3af injector built-in
- Supports 48V DC, 15.4-watt PoE power output to 8 IEEE 802.3af compliant Powered Devices
- Power feeding On / Off and priority configuration
- Power Limit function for PoE power management
- Powered Device Auto Detection
- LED PoE Status Monitoring

## Layer-2 Switching

- Supports Port-based and IEEE 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 with up to a maximum of 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 IEEE 802.1p tag, or DSCP field
- Multicast and Broadcast Storm Control as well as Flooding Control

**High Gigabit Performance / Wire-Speed Switching**

With 16Gbps non-blocking switch fabric, 8K MAC address table and IEEE 802.3x full-duplex flow control, the GSD-802PS offers wire-speed packet transfer performance without risking 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-802PS offers an easy-to-use and configuration facility. The smart functions make it easy to survey and control the PoE power provision via the web interface. The GSD-802PS 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 PoE control, IGMP snooping, QoS (Quality of Service), broadcast storm and bandwidth control to enhance bandwidth utilization.

**Security**

- Port Mirroring supports dedicated port monitoring
- IEEE 802.1X Port-base access control, RADIUS Server Authentication
- Static MAC Address assigns destination MAC address at specific port

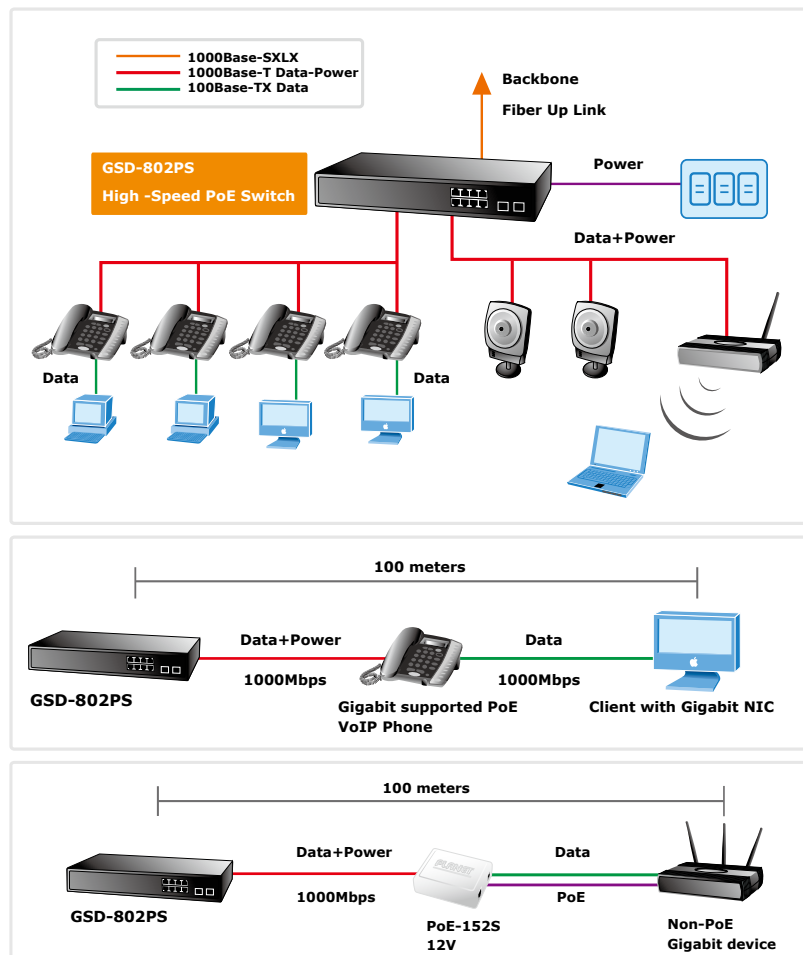
**Management**

- 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

**Applications**

**Department/ Workgroup PoE Switch:**

Providing up to 8 PoE, in-line power interface, the GSD-802PS can easily build a power centrally-controlled IP phone system, IP Camera system and AP group for the enterprises. For instance, 8 cameras / APs can be easily installed around the corner in the company for surveillance demands or build a wireless roaming environment in the office. Without the power-socket limitation, the GSD-802PS makes the installation of cameras or WLAN AP easier and more efficient.



## Product Specifications

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
PoE Power Output	48V DC, 15.4W, 350mA (Pin 1, 2, 3, 6)
PoE Power Budget	123.2 watts
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	Built-in 176K bytes chip buffer
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, 10/100 Link / Act per port
Dimensions (W x D x H)	330 x 155 x 43.5 mm
Weight	1.8 kg
Power Requirements	100 - 240VAC, 50 - 60Hz, Auto-sensing
Power Consumption	140 watts / 477.4 BTU
Temperature	Operating: 0~50 degrees C Storage: -10~70 degrees C
Humidity	Operating:10~90%, Storage: 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"> <li>▪ Port disable / enable.</li> <li>▪ Flow Control disable / enable</li> <li>▪ Auto-negotiation 10/100/1000Mbps full and half duplex mode selection</li> </ul>
VLAN	Port-Based / IEEE 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 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 IEEE 802.3af Power over Ethernet
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/LX <ul style="list-style-type: none"> <li>• 62.5 / 125µm multi-mode fiber optic cable, up to 220m</li> <li>• 50 / 125µm multi-mode fiber optic cable, up to 550m 1000Base-LX</li> <li>• 9 / 125µm single-mode fiber optic cable, up to 120km (Vary on SFP Module)</li> </ul>

## Ordering Information

GSD-802PS 8-Port 10/100/1000Mbps Web Smart PoE Switch

## 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)

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