

# 48-Port 10/100/1000Mbps with 4-Port Shared SFP Web Smart Switch



## *High-Density / Cost-effective / Telecom class Gigabit solution for Enterprise backbone and Data Center Networking*

The PLANET GSW-4804SF is a High-Density, Rack-mount; Layer 2 Web Smart Gigabit Switch. Since Gigabit network interface has become the basic equipment and requirement of Enterprise and Network Servers, with 96Gbps switching fabric, the GSW-4804SF can handle extremely large amounts of data in a secure topology linking to a backbone or high capacity servers. The powerful QoS and Network Security features makes GSW-4804SF to meet the needs of effective data traffic control for ISP and Enterprise, such as VoIP, video streaming and multicast application.

## *High Performance*

The GSW-4804SF provides 48 10/100/1000Mbps Gigabit Ethernet ports with 4 shared Gigabit SFP slots. The GSW-4804SF boasts a high performance switch architecture that is capable of providing non-blocking switch fabric and wire-speed throughput as high as 96Gbps, which greatly simplifies the tasks of upgrading the LAN for catering to increase bandwidth demands.

The Gigabit port with 9K Jumbo frame supported, can handle extremely large amounts of data transmission in a secure topology linking to a backbone or high-power servers.

## *Robust Layer 2 Features*

The GSW-4804SF can be programmed for basic switch management functions such as Port speed configuration, bandwidth control, Link aggregation, Access Control List (ACL), VLAN, MAC address binding / filtering / learning / aging time setting. QoS, IGMP Snooping and Port Mirror.

The GSW-4804SF provides port-based VLAN and IEEE 802.1Q Tagged VLAN. The port-based VLAN and IEEE 802.1Q VLAN groups allowed on the GSW-4804SF will be maximally up to 49 and 512 groups. Via supporting link aggregation, the GSW-4804SF allows the operation of a high-speed link aggregation combining multiple ports, up to twelve groups of maximum 8-ports for link aggregation and it supports fail-over as well.

## *Excellent Ethernet traffic Control*

PLANET GSW-4804SF loaded with powerful QoS features to enhance services offered by telecoms. The functionality includes QoS features such as bandwidth restricting that are particularly useful for multi-tenant unit, multi business unit, Telco, or Network Service Provider applications. It also empowers the enterprises to take full advantages of the limited network resources and guarantees the best performance at VoIP and Video conferencing transmission.

## *Efficient Management*

For efficient management, the GSW-4804SF Web Smart Switch is equipped with console and Web interfaces. With its built-in Web-based management, the PLANET GSW-4804SF offers an easy-to-use, platform-independent management and configuration facility.

## *Powerful Security*

PLANET GSW-4804SF offers comprehensive Access Control List (ACL) policy for enforcing security to the edge, such as MAC / IP/ TCP / UDP / ICMP. Equipped with security defense policy selectable function to increase the self-defense ability when operation in a real Ethernet environment, such as worm, RPC Leak, Shake wave, TFTP, Shock wave and Phatbot, also the ARP attack defense time setting function.

The port-security is effective in limiting the numbers of clients passing through, so that network administrators can now construct highly secured corporate networks.

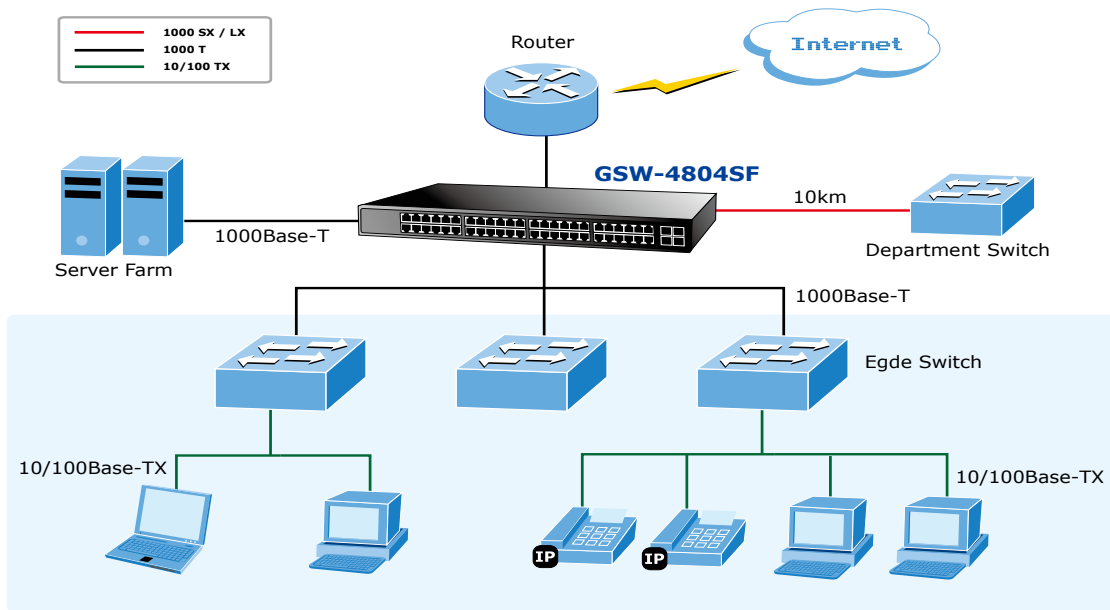
## *Flexibility and Extension solution*

The four mini-GBIC slots are compatible with 1000Base-SX/LX and WDM SFP (Small Form-factor Pluggable) fiber-optic modules. The distance can be extended from 550 meters (Multi-Mode fiber) up to above 10/20/30/40/50/70/120 kilometers (Single-Mode fiber or WDM fiber). They are well suited for using within the enterprise data centers and distributions.

**APPLICATIONS**

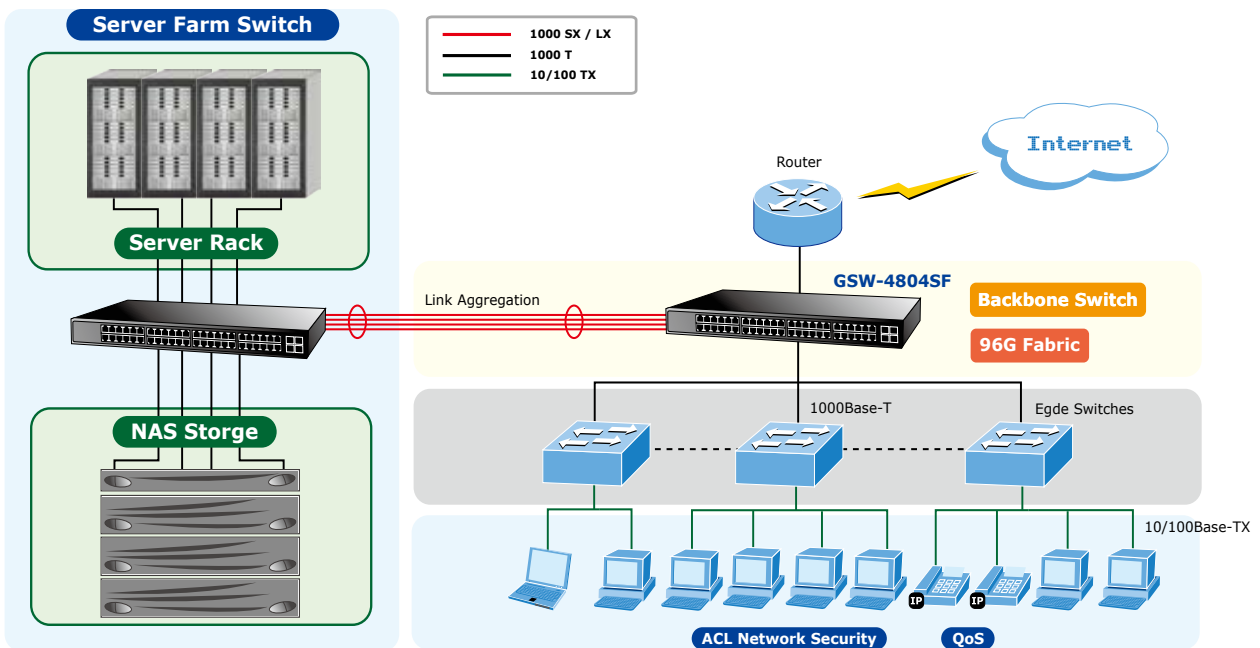
*Backbone Switch*

With up to 96Gigabits per second of non-blocking switch fabric and 48-Port high density design, the GSW-4804SF can easily provide the high bandwidth required both now and future. It can easily provide a local, high bandwidth, and Gigabit Ethernet network for backbone of enterprises or Telecoms. With the four SFP ports, the GSW-4804SF provides the uplink to the edge network through Gigabit Ethernet LX/SX SFP modules



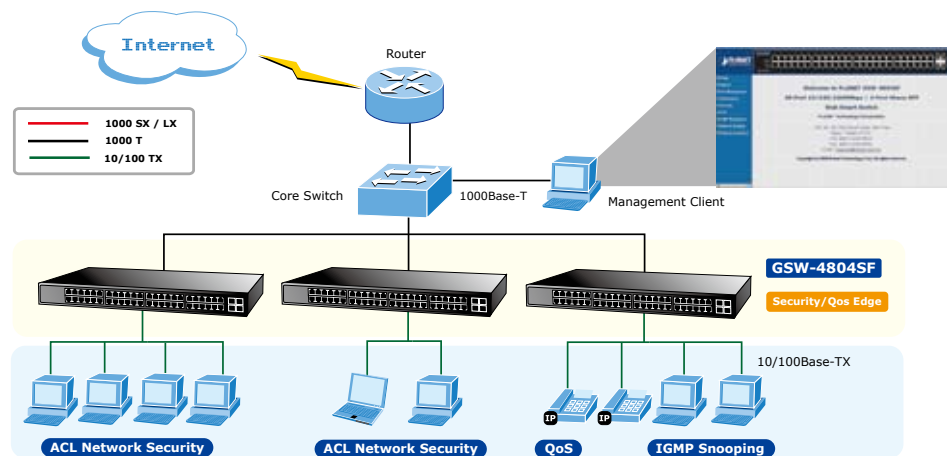
*Server Farm Switch*

Gigabit Ethernet supported had become a basic equipment of Enterprises and Network servers. The GSW-4804SF provides up to 48 Gigabit Ethernet ports. It is ideal to be used as a server farm switch connecting servers. With its port link aggregation function, 16Gbps fat pipe is provided for connecting to the backbone if required.



### Department Security and QoS Switch

With the security and QoS features, it improves the network to be efficiency and protects the network clients. With the four SFP ports, the GSW-4804SF provides the uplink to the backbone network through Gigabit Ethernet LX / SX SFP modules. With the security, Multicast IGMP Snooping and QoS features, it improves the network's efficiency and protects the network clients.



## KEY FEATURES

### PHYSICAL PORT

- 48-Port 10/100/1000Base-T RJ-45
- 4 SFP slots, shared with Port-45, Port-46, Port-47 and Port-48
- RS232 Console interface for reset system to factory default mode

### LAYER 2 FEATURES

- Complies with the IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z Gigabit Ethernet standard
- Supports Auto-negotiation and Half-Duplex / Full-Duplex modes for all 10Base-T/100Base-TX and 1000Base-T ports.
- Auto-MDI/MDI-X detection on each RJ-45 port
- Prevents packet loss with back pressure (Half-Duplex) and IEEE 802.3x PAUSE frame flow control (Full-Duplex)
- High performance Store and Forward architecture, broadcast storm control, runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- 16K MAC address table, automatic source address learning and ageing
- 9K Jumbo frame size
- 49 Port based VLAN groups / 512 IEEE 802.1Q Tagged based VLAN groups support
- Support up to 12 Link Aggregation groups, each group for up to maximum 8 port with 16Gbps bandwidth( Full Duplex Mode)
- Port Mirroring to monitor the incoming or outgoing traffic on a particular port
- Per port disable / enable, speed duplex / Flow control setting
- Per port Link Status test

### QUALITY OF SERVICE

- Support for strict priority and Weighted Round Robin (WRR) CoS policies
- Support QoS and bandwidth control on each port

### MULTICAST

- Support IGMP Snooping V1/V2, up to 256 multicast Groups
- Support IGMP Route Port

### SECURITY

- MAC-Based Access Control List
- IP-Based Access Control List (ACL)
- TCP/UDP/ICMP Access Control List (ACL)
- Security Defense / ARP Defense
- Port Security for MAC address binding / filtering / learning / aging time setting

### MANAGEMENT

- Web-based management
- Management VLAN for high security access limit
- Web firmware upgradeable
- Web configuration backup / recovery
- EMI standards comply with FCC, CE class A

**SPECIFICATION**

Product	<b>48-Port 10/100/1000Mbps with 4-Port Shared SFP Web Smart Switch</b>
Model	<b>GSW-4804SF</b>
<b>Hardware Specification</b>	
Copper Ports	48-10/100/1000Base-T RJ-45 Auto-MDI/MDI-X ports
SFP/mini-GBIC Slots	4 SFP interfaces, shared with Port-45, Port-46, Port-47 and Port-48
Switch Architecture	Store-and-Forward
Switch Fabric	96Gbps / non-blocking
Switch Throughput	71.4Mpps
Address Table	16K entries
Flow Control	Back pressure for Half-Duplex mode, IEEE 802.3x Pause Frame for Full-Duplex mode
Jumbo Frame	9K
LED	System: Power, CPU Per Port: 10/100 LED (Green) and 1000 LED (Orange)
<b>Layer 2 function</b>	
Management Interface	Web Browser interface
Management VLAN	Yes
Network Interface	Yes
Configuration backup / recovery	Yes
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.
Port Statistics	Display per port's management status, link status, detail various packet receive information
Link Aggregation	Supports 12 groups of 8 member port maximum
Access Control List	MAC / IP / TCP/ UDP / ICMP Based Access Control List (ACL)
Security Defense	Yes, worm, RPC Leak, Shake wave, TFTP, Shock wave and Phatbot option
ARP Defense	Yes
VLAN	49 Port Based VLAN groups / 512 IEEE 802.1Q Tagged VLAN groups
Port Security	MAC address binding / filtering / learning / aging time setting
QoS	Quality of Service Queue Management
IGMP Snooping	V1 / V2, up to 256 multicast Groups
IGMP Route Port	Yes
Port Mirror	Monitor the incoming or outgoing traffic on a particular port
<b>Standards Conformance</b>	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3z Gigabit SX/LX IEEE 802.3ab Gigabit 1000Base-T IEEE 802.3x Flow Control and Back pressure IEEE 802.1p Class of service IEEE 802.1Q VLAN Tagging
<b>Physical Specifications</b>	
Dimensions	430 x 350 x 45mm (W x D x H), 1U height
Weight	4.94 kg
<b>Environment Specifications</b>	
Operating	Temperature: 0°C ~ 50 degree C Relative Humidity: 20% ~ 85% (non-condensing)
Storage	Temperature: -40°C ~ 70 degree C Relative Humidity: 20% ~ 90% (non-condensing)

**ORDERING INFORMATION**

<b>GSW-4804SF</b>	48-Port 10/100/1000Mbps with 4-Port Shared SFP Web Smart Switch
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**AVAILABLE MODULES**

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