

# 24-Port Web Smart Gigabit Ethernet Switch with 16 Shared SFP



The PLANET GSW-2416SF is a 24-Port 10/100/1000Mbps Web Smart non-blocking wire-speed performance Ethernet Switch. With a 48Gbps internal switching fabric, the Switch can handle extremely large amounts of data in a secure topology linking to a backbone or high capacity servers. The GSW-2416SF could recognize up to 8K MAC Address table and provides 500KB on-chip frame buffer. They offer wire-speed packet transfer performance without risk of packet loss. With high data throughput, the GSW-2416SF provides the most convenient for user to upgrade their network to Gigabit environment.

All RJ-45 copper interfaces support 10/100/1000Mbps Auto-Negotiation for optimal speed detection through RJ-45 Category 6, 5 or 5e cables. Also, all the ports support Auto-MDI/MDI-X that can automatically detect the type of connection to any Ethernet device without requiring special straight or crossover cables. 24-Port TP by default and together with 16 shared SFP (Small Form-factor Pluggable), shared with Port-1 to Port-8 and Port-17 to Port-24, make the switch be a 16-Port Gigabit Fiber Switch with mini-GBIC fiber-optic module installed that shall provide long distance fiber connectivity in a flexibility way.

The GSW-2416SF provides Smart management functions through the Web management interface. Functions such as per port speed, duplex, IEEE 802.3x flow-control settings and QoS settings, Trunking and VLAN, Port mirroring, IGMP Snooping and IEEE 802.1x. All can be found in the friendly user interface of your web browser. These features provide a cost-effective way to manage the devices from Internet whenever you are at work or at home.

## **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
- 24-Port 10/100/1000Mbps Gigabit Ethernet ports
- 16-Port SFP (Small Form-factor Pluggable) for 3.3V mini-GBIC module
- Auto-MDI/MDI-X detection on each RJ-45 port, support 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
- 48Gbps switch fabric, non-blocking switch architecture
- 9K Jumbo Frame support at all speed (10/100/1000Mbps)

#### Layer 2 Switching

- Support port-based and 802.1Q VLAN function, up to 64 VLAN groups
- 802.1w Rapid-Spanning Tree protocol support
- Link Aggregation support static mode and LACP (802.3ad) up to 8
  Trunk groups, each trunk for up to maximum 12 ports
- IGMP Snooping multicast filtering

# Quality of Service

- 4 QoS classes per port
- Traffic class assignment based on 802.1p tag
- 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
- Source IP filter per port to block unwanted access
- $\bullet\,$  Static MAC Address assign destination MAC address at specifies port

## Management

- Remote Web management interface
- Firmware upgrade through web interface
- Cable Diagnostics technology

**Data Sheet** 



# SPECIFICATION

Product 24-Port Web Smart Gigabit Ethernet Switch with 16 Shared SFP

Model	GSW-2416SF
Hardware Specification	
10/100/1000Base-T Ports	24 Port RJ-45
	10/100/1000Mbps, Auto Negotiation, Auto-MDI/MDI-X
SFP Ports	16 Port 3.3VC mini-GBIC SFP
	1000Mbps Full-Duplex; shared with Port-1 to Port-8, Port-17 to Port-24
Switch Processing Scheme	Store-and-Forward
Switch Fabric	48Gbps
Throughput (packet per second)	35.7Mbps
Share Data Buffer	500KB
Address Table	8K entries
Flow Control	Back pressure for Half-Duplex,
	IEEE 802.3x Pause Frame for Full-Duplex
Dimensions	440 x 220 x 44 mm (1U height)
Weight	2.6 kg
Power Requirement	100~240 VAC, 50-60 Hz
Power Consumption / Dissipation	Max. 60 Watts, 190 BTU/hr
Temperature	Operating: 0~50 Degree C, Storage: -40~70 Degree
Humidity Operating	10% to 90%, Storage: 5% to 95% (Non-condensing)
Switch Specification	
Management	Web remote control
VLAN	Up to 64 Port-Based VLAN, 802.1Q VLAN Tagged
Port Mirror	RX
Port Trunk	8-Trunk Group / 12-port
Rate Control	0~99%; 0 for wire-speed
Jumbo Frame	Disable, 4K, 9K
Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 (Ethernet),
	IEEE 802.3u (Fast Ethernet)
	IEEE 802.3ab (Gigabit Ethernet)
	IEEE 802.3z (Gigabit Ethernet, 1000Base-SX/LX)
	IEEE 802.1Q (Tagged VLAN)
	IEEE 802.1w (Rapid Spanning Tree)
	IEEE 802.1x (Port-Based Authentication)
	IEEE 802.3ad (Link Aggregation Control Protocol)
	IEEE 802.3x (Full-Duplex Flow Control)



## APPLICATIONS

## Backbone Switch

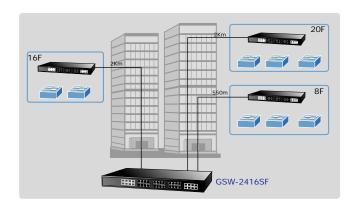
With up to 48 Gigabits per second of non-blocking switch fabric, the switch can easily provide the high bandwidth required both now and in the future. Max. 16 SFP interfaces can distribute the network to a long distance as soon as mini-GBIC fiber-optic module installed.

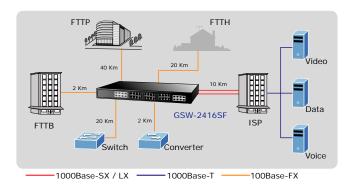
### Server Farm Switch

Providing either 24 TP or up to 16 SFP Gigabit Ethernet ports, the Switch are ideal for use as a server farm switch connecting your servers and powerful desktops local or remote over fiber-optic. Port Trunk support also increases the bandwidth capacity between switches.

## FTTx Node Switch

With 16 1000Base-SX/LX SFP mini-GBIC interfaces, the switch provides a cost-effective, high-performance 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 enterprise, the various distances of SFP (small-form factor) and Bidi (WDM) transceivers are optional for customers. Comparing with traditional fiber switch that equipped fixed distance (550m) and connection mode (SC only), the 16 SFP ports provides flexible solution for ISPs and enterprises. They can be used as uplink port which connects to the data centers and backbones.





# **ORDERING INFORMATION**

GSW-2416SF 24-Port Web Smart Gigabit Ethernet Switch with16-SFP

# **AVAILABLE MODULES**

MGB-GT	SFP-Port 1000Base-T 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 (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