

# 16-Port 10/100Mbps + 2 Gigabit TP / SFP Combo Web Smart PoE Switch



For cost saving and outlet saving purpose, PLANET releases the new Layer 2 Web Smart Switch with built-in PoE injector function, FGSW-1828PS. Except the Switch architecture designed, the FGSW-1828PS also comply with IEEE 802.3af Power over Ethernet standard and provide PoE power provision feature, the FGSW-1828PS can provide PoE power to 8 IEEE 802.3af compliant devices.

The FGSW-1828PS provide 16 10/100Mbps Fast Ethernet ports with 8 PoE interfaces, the FGSW-1828PS supports MDI / MDI-X convertible on 16-10/100Mbps ports and also provide PoE inject function on port #1 to port #8 which is able to drive 8 IEEE 802.3af compliant powered devices, the FGSW-1828PS also provide two Gigabit Ethernet ports, either TP or SFP per port. The two Gigabit ports either can be 1000Base-T for 10/100/1000Mbps or 1000Base-SX/LX through SFP (Small Factor Pluggable) interfaces. The distance can be extended from 100 meters (TP), 550 meters (Multi-mode fiber), up to above 10/20/30/40/50/70/120 kilometers (Single-mode fiber).

With its Auto-Negotiation capability, all the RJ-45/STP ports of FGSW-1828PS Switch can be configured to speeds of 10/20Mbps / 100/200Mbps (Fast Ethernet) or1000/2000Mbps (Gigabit Ethernet) automatically. In addition, the product are equipped with the MDI/MDI-X auto detection for easily plug and play connection, regardless of cabling types-straight through or crossover, the FGSW-1828PS also provides a simple, costeffective, and highly reliable network connection for data as well as power. Furthermore, it is the ideal device for bridging among Ethernet, Fast Ethernet workgroups and networks, this device is ideal for all kind of the Ethernet installation, such as campus / workgroup / department / enterprise / telecom / industrial application.

The FGSW-1828PS equipped with non-blocking 7.2Gbps backplane, greatly simplifies the tasks of upgrading your LAN for catering to increase bandwidth demands. For efficient management, the FGSW-1828PS Switch is equipped with remote Web interface and can be programmed for advanced switch management functions such as SNMP Alert Trap, port configuration, port-based / IEEE 802.1Q / MTU VLAN, port mirroring, port trunk, QoS, bandwidth control, broadcast storm control, MAC address / TCP & UDP filter and IGMP Snooping v1/v2. Also the PoE Setting, such as PoE power Disable/Enable and PoE power consumption monitoring.

# **KEY FEATURES**

- Complies with the IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z Gigabit Ethernet standard
- 16-Port 10/100Mbps + 2 Gigabit TP / SFP Combo Web Smart PoE Switch
- 8-Port support 48VDC power to PoE Powered Device (Port 1 to port 8)
- Each Switching ports support auto-negotiation-10/20, 100/200Mbps (Fast Ethernet) , 1000/2000Mbps (Gigabit Ethernet) supported
- 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
- 4K MAC address table, automatic source address learning and ageing
- 2.75Mb embedded memory for packet buffers
- Remote Web interface for Switch management and setup
- SNMP Trap for alarm notification of events
- Broadcast Storm Control support
- Supports up to 18 port-based VLAN groups / 32 IEEE 802.1Q VLAN groups / MTU VLAN
- Supports up to 2 Trunk groups, each trunk for up to maximum 4 port with 800Mbps bandwidth
- Supports QoS , bandwidth control and MAC address filter / TCP & UDP filter on each port
- Supports port mirroring function and IGMP Snooping v1 / v2
- PoE power Disable/Enable and PoE power consumption monitoring by management interface
- · Firmware upgrade through Web interface
- Password setting, IP setting and device description setting through Planet Smart discovery utility
- 19-inch rack mount size
- Internal full-range power supply suitable for worldwide use
- EMI standards complies with FCC, CE class A



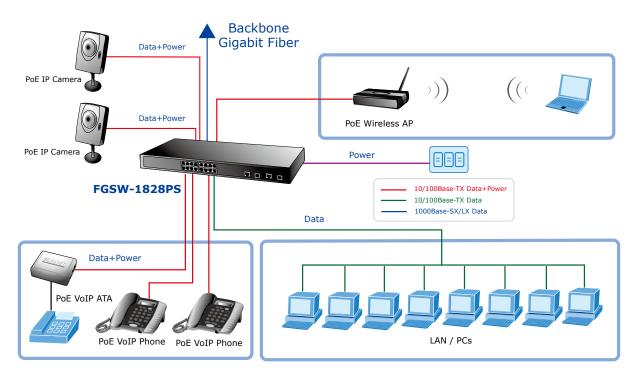
### **APPLICATIONS**

# Department/ Workgroup PoE Switch:

With its 7.2 Gigabits per second, non-blocking switch fabric, the FGSW-1828PS can easily provide a local, high bandwidth, Fast Ethernet network for backbone of users' departments. With two SFP ports, the FGSW-1828PS provide the uplink to the backbone network through Gigabit Ethernet LX / SX SFP modules.

Providing up to 8 PoE, in-line power interface, the FGSW-1828PS can easily build a power central-controlled IP phone system, IP Camera system, AP group for the enterprise. For instance, 8 camera / AP 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 Switch makes the installation of cameras or WLAN AP more easily and efficiently.





#### SPECIFICATION

Product	16-Port 10/100Mbps + 2 Gigabit TP / SFP Combo Web Smart PoE Switch
Model	FGSW-1828PS
Hardware Specification	
Fast Ethernet Ports	16 10/ 100Base-TX RJ-45 Auto-MDI/MDI-X ports
Gigabit ports	2 Gigabit TP / SFP combo interfaces
Power over Ethernet ports	8-Port with PoE injector function (Port 1 to port 8)
Switch Processing Scheme	Store-and-Forward
Throughput (packet per second)	5.35Mpps
Switch fabric	7.2Gbps
Address Table	4K entries
Share data Buffer	2.75Mb embedded memory for packet buffers
Flow Control	Back pressure for half duplex, IEEE 802.3x Pause Frame for full duplex
Dimensions	440 x 120 x 44 mm (1U height)
Weight	2.02 kg
Power Requirement	100-240V AC, 50-60 Hz, 1A
System operation Power Consumption / Dissipation (Full load)	21 watts / 71BTU
	Operating: 0~50 degree C
Temperature	Storage: -40~70 degree C
Humidity Operating:	5% to 90%, Storage: 5% to 90% (Non-condensing)
Power over Ethernet	
PoE Standard	IEEE 802.3af Power over Ethernet / PSE
PoE Power Supply Type	End-Span
PoE Power Output	Per Port 48V DC, 350mA. Max. 15.4 watts
Power Pin Assignment	1/2(+), 3/6(-)
Power Budget	110 watts
Smart function	
System Configuration	Web interface
Alert Trap	SNMP Trap for alarm notification of events
Alert hap	Port speed duplex mode selection. Flow control disable / enable. Port disable / enable. Port
Port configuration	description on each port
Bandwidth Control	Yes, 1Mbps / 2Mbps / 4Mbps / 8Mbps / 16Mbps / 32Mbps / 64Mbps
Broadcast Storm Control	Yes, 5% / 10% / 25% / 50% / Disable
Port Statistics	Display each port's detail Ethernet traffic counter information
VLAN	16 / 18 port-based VLAN groups / 32 IEEE 802.1Q VLAN groups / MTU VLAN
Port trunking	Support 2 groups of 4-Port trunk support, up to 800Mbps bandwidth per trunk
Port Mirroring	Port mirroring allows monitoring of the traffic across any port in real time
QoS	Allow to assign low / high priority on each port First-In-First-Out, All-High-before-Low, Weight-Round-Robin QoS policy
MAC address / TCP & UDP filter	Yes
IGMP Snooping v1 / v2	Allow to disable or enable.
PoE power control	Allow to disable or enable power provision and assign priority on each PoE port
Standards Conformance	
Regulation Compliance	FCC Part 15 Class A, CE
	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3u Gigabit Ethernet IEEE 802.3z Gigabit Ethernet
Standards Compliance	IEEE 802.3x Full-duplex Flow control IEEE 802.3af Power over Ethernet IEEE 802.1Q VLAN IEEE 802.1p QoS

# ORDERING INFORMATION

FGSW-1828PS

16-Port 10/100Mbps + 2 Gigabit TP / SFP Combo Web Smart PoE Switch

# **Data Sheet**

3



## AVAILABLE MODULES

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

**Data Sheet** 

 PLANET Technology Corporation

 11F, No. 96, Min Chuan Road, Hsin Tien, Taipei, Taiwan, R.O.C.

 Tel: 886-2-2219-9518
 Fax: 886-2-2219-9528

 Email: sales@planet.com.tw
 www.planet.com.tw

 VoIP Gateway: vip.planet.com.tw



PLANET reserves the right to change specifications without prior notice. All brand names and trademarks are property of their respective owners. Copyright © 2008 PLANET Technology Corp. All rights reserved.