

# 16-Port 10/100/1000Mbps Gigabit Ethernet Switch



### Cost-Effective Gigabit Solution for Enterprise Backbone and Data Center Networking

PLANET GSW-1601 provides 16 RJ-45 10/100/1000Mbps ports for high-speed network connectivity. It can automatically identify and determine the correct transmission speed and half / full duplex mode of the attached devices with its 16 Gigabit ports that support 9K jumbo frame feature. Therefore, the GSW-1601 can handle extremely large amounts of data transmission in a secure topology linking to a backbone or high-power servers.

#### High Performance

The GSW-1601 provides high performance architecture of switch that is capable of providing the non-blocking switch fabric and wire-speed throughput as high as 32Gbps, which greatly simplifies the tasks of upgrading the LAN for catering to increasing bandwidth demands. Besides, the Flow Control function of the GSW-1601 enables routers and servers directly connect to the Switch for fast and reliable data transfer.

All RJ-45 copper interfaces in the GSW-1601 support 10/100/1000Mbps Auto-Negotiation for optimal speed detection through RJ-45 Category 6, 5 or 5e cables. It also supports standard for Auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables.

#### **Excellent Traffic Transmission**

The GSW-1601 supports Store-and-Forward forwarding scheme to ensure low latency and high data integrity, which eliminates unnecessary traffic and relieves congestion on critical network paths. With an intelligent address recognition algorithm, the GSW-1601 could recognize up to 8K different MAC address. The high data throughput and 32Gbps internal switching fabric makes it ideal for most Gigabit environments, especially when network upgrades to a Gigabit environment.

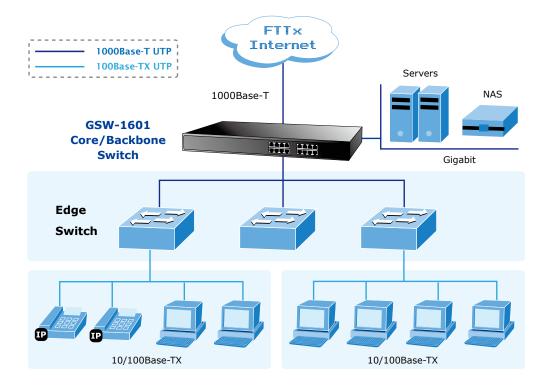
- Comply with IEEE 802.3, 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T Ethernet standard
- 16 10/100/1000Mbps Gigabit Ethernet ports
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Hardware based 10/100Mbps, half / full duplex and 1000Mbps full duplex mode, flow control and autonegotiation
- IEEE 802.3x flow control for full duplex operation and Backpressure for half duplex operation
- Integrated address look-up engine, supports 8K absolute MAC addresses
- 9K Jumbo packet support
- Automatic address learning and address aging
- · Supports Auto MDI/MDI-X function
- · Supports CSMA/CD protocol
- 100-240V AC, 0.6A, 50/60Hz universal Power input
- · FCC, CE class A compliant



### **Applications**

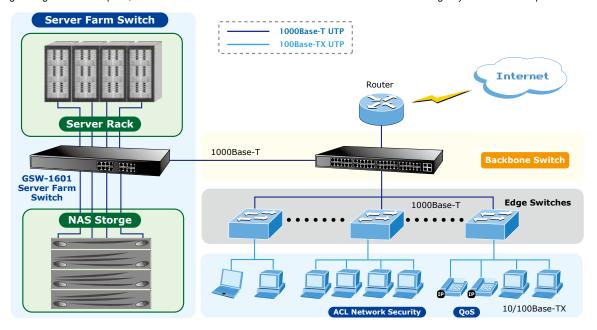
#### Backbone Switch

With up to 32 Gigabits per second of non-blocking switch fabric, the GSW-1601 can easily provide the high bandwidth required both now and future.



### Server Farm Switch

Providing 16 Gigabit Ethernet ports, the GSW-1601 is ideal to be used as a server farm Switch connecting to your servers and powerful desktops.





# **Specifications**

Model	GSW-1601	
Hardware Specifications		
Hardware Version	Version 5	
10/100/1000Base-T MDI/MDIX Ports	16	
Throughput (packet per second)	23.8Mpps	
Switch Fabric	32Gbps / non-blocking	
Weight	1.9kg	
Power Consumption / Dissipation	13 watts / 44 BTU	
Power Requirements	100-240V AC, 0.6A, 50/60Hz	
Dimensions (W x D x H)	440 x 180 x 44 mm, 1U height	
Switch Processing Scheme	Store-and-Forward	
Address Table	8K entries	
Jumbo Packet Size	9K	
Flow Control	Back pressure for half duplex, IEEE 802.3x Pause Frame for full duplex	
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 802.3x (Full-Duplex Flow Control)	
Environmental Specifications		
Temperature	Operating: 0~50 degrees C Storage: -10~70 degrees C	
Humidity	Operating: 5~95% Storage: 5~95% (Non-condensing)	

 $<sup>^{\</sup>star}$  The specification is for GSW-1601 hardware version 5 only.

## **Ordering Information**

GSW-1601	16-Port 10/100/1000Mbps Gigabit Ethernet Switch