

# 16-Port 10/100/1000BASE-T Gigabit Ethernet Switch



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

PLANET GSW-1601 Gigabit Ethernet Switch provides 16 RJ45 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 10K 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 a high-performance switch architecture 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 to directly connect to the Switch for fast and reliable data transfer.

All the RJ45 copper interfaces of the GSW-1601 support 10/100/1000Mbps auto-negotiation for optimal speed detection through RJ45 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 recognizes up to 8K different MAC addresses. The high data throughput and 32Gbps internal switching fabric make it ideal for most Gigabit environments, especially when network is upgraded to a Gigabit environment.

## *Fanless Design*

With its good ventilation design, the GSW-1601 is able to operate all along without a fan, thus reducing substantial power consumption and creating a noiseless environment. The GSW-1601 is definitely the best choice for any working environment without affecting its performance.



## Physical Port

- 16 10/100/1000BASE-T Gigabit Ethernet ports
- Supports auto MDI/MDI-X function

## Layer 2 Features

- Complies with IEEE 802.3, 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T Ethernet standards
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Integrated address look-up engine, supporting 8K absolute MAC addresses
- 10K jumbo packet support
- Power Saving ability for Green networking
- IEEE 802.1Q VLAN packet transparency support
- IEEE 802.3x flow control for full duplex operation and backpressure for half duplex operation
- Hardware based 10/100BASE-TX, half/full duplex and 1000BASE-T full duplex mode, flow control, and auto-negotiation
- Automatic address learning and address aging
- Supports CSMA/CD protocol

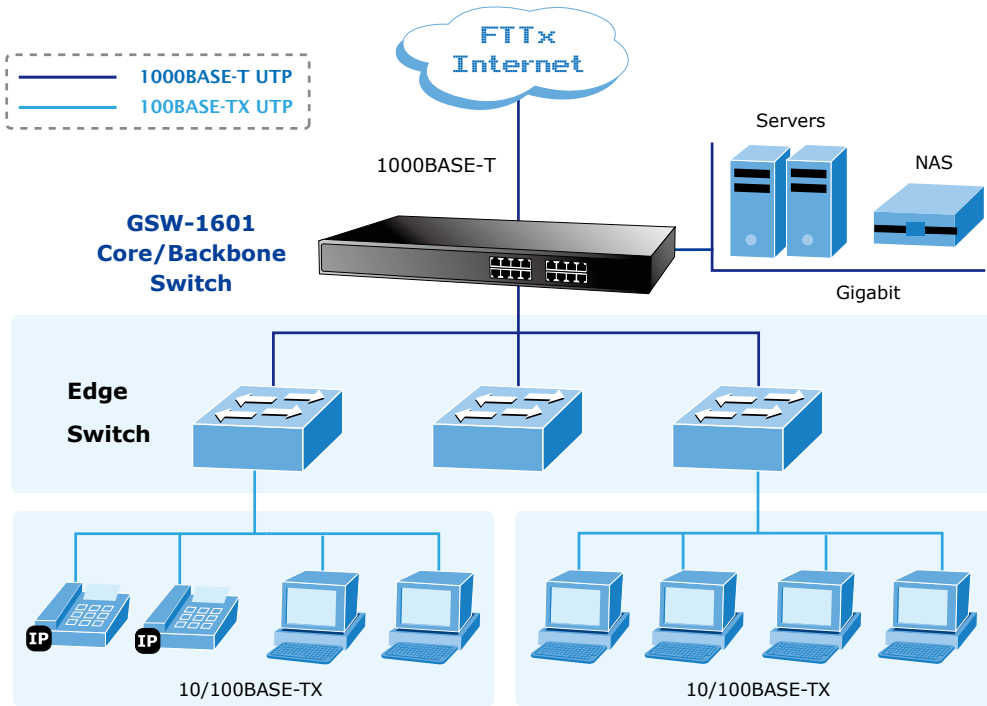
## Hardware Features

- 100~240V AC, 0.3A, 50~60Hz universal power input
- FCC, CE Class A compliant

## Applications

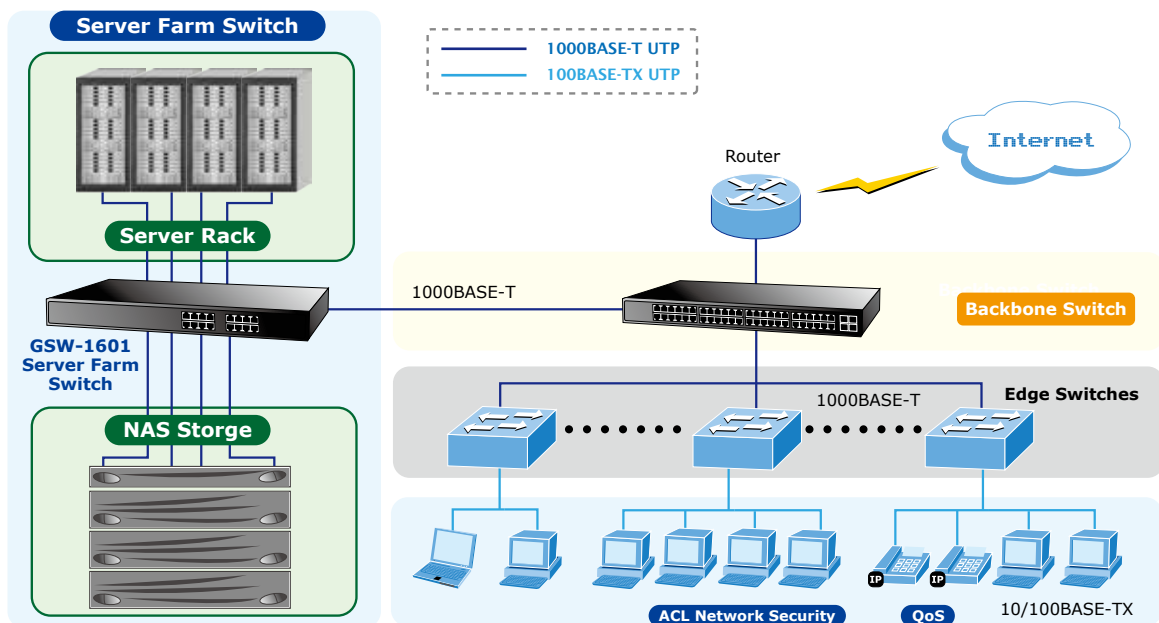
### Backbone Switch

With up to 32 Gigabits per second of non-blocking switch fabric, the GSW-1601 can easily provide high bandwidth for both today's and future requirements.



### 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

Product	GSW-1601
<b>Hardware Specifications</b>	
Hardware Version	Version 7
10/100/1000BASE-T MDI/MDIX Ports	16
Throughput (packet per second)	23.8Mpps
Switch Fabric	32Gbps/non-blocking
Weight	1.8kg
Power Consumption/Dissipation	8.9 watts/30 BTU
Power Requirements	100-240V AC, 0.3A, 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	10K
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex
<b>Standards Conformance</b>	
Regulatory Compliance	FCC Part 15 Class A, CE
Standard Compliance	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.3ab (Gigabit Ethernet) IEEE 802.3x (Full-duplex flow control)
<b>Environmental Specifications</b>	
Temperature	Operating: 0~50 degrees C Storage: -10~70 degrees C
Humidity	Operating: 5~95 degrees C Storage: 5~95 degrees C (non-condensing)

\* The specification is for GSW-1601 hardware version 7 only.

## Ordering Information

GSW-1601	16-port 10/100/1000BASE-T Gigabit Ethernet Switch
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