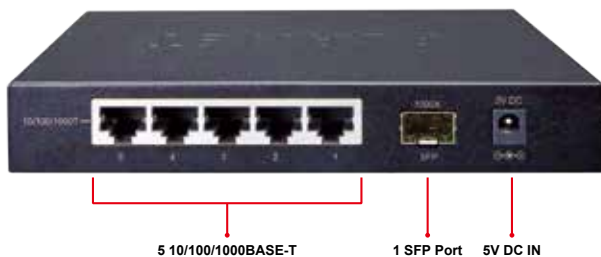


# 5-Port 10/100/1000T + 1-Port 1000X SFP Gigabit Ethernet Switch



PLANET GSD-603F Gigabit Ethernet Switch, featuring 5 Gigabit Ethernet ports and 1 SFP port, provides Gigabit fiber uplink capability and non-blocking wire-speed performance for various applications that need long-distance data transmission. This metal switch is easily deployed on the desktop or in the cabinet to make the network placement as convenient as possible.



The GSD-603F acts as a high-performance edge device for FTTH solutions. With one mini-GBIC 1000BASE-SX/LX SFP (Small-Form Factor Pluggable) interface support, the deployed distance of the GSD-603F can be extended from 550 meters (via multi-mode fiber) to 10/20/30/40/50/70/120 kilometers (via single-mode fiber). Thus, building a network solution of FTTH (Fiber to the Home), FTTC (Fiber to the Curb) for ISPs or FTTB (Fiber to the Building) for enterprises becomes so easy to users when long-distance deployment is employed. The GSD-603F can handle extremely large amounts of data in a secure topology linking to a metro switch, backbone or high-capacity server.

## Key Features

- External power adapter 5V DC, 1.0A
- Dual Energy-saving technology
  - Link down power saving
  - Intelligent scales power based on cable length
- Complies with IEEE 802.3i 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T and IEEE 802.3z 1000BASE-X
- IEEE 802.3x, full-duplex flow control compliant; back-pressure, half-duplex flow control
- Five 10/100/1000Mbps Gigabit Ethernet ports
- One SFP port
- Per port auto-MDI, MDI-X detection
- 2K MAC address table auto-aging
- 9K jumbo packet size support
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Non-blocking, Store and Forward switching architecture
- Automatic source address learning and aging
- Power saving ability for Green networking
- Compact size, wall-mountable design
- Metal case, good for heat sinking
- Easy installation; ideal solution for space-limited locations



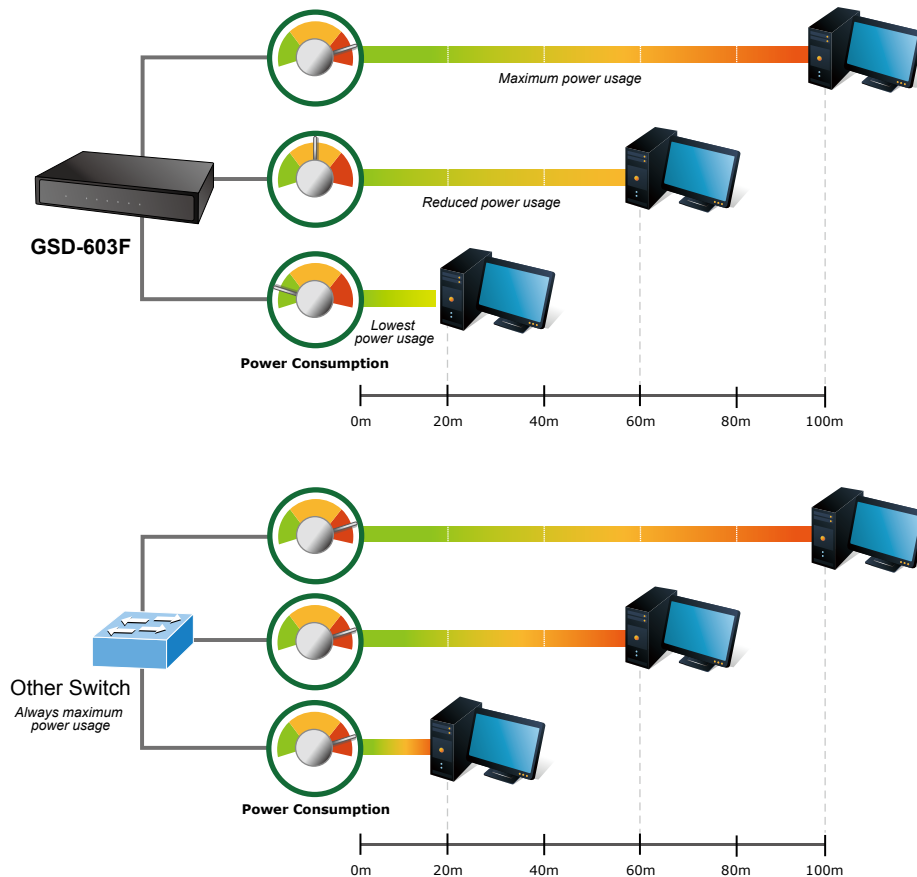
*Energy Saving*

The GSD-603F features the technologies that can save energy up to 40% when compared with a normal switch without compromising its performance. The GSD-603F incorporates two advanced Green Networking technologies:

- Low Power Idle Mode for power saving
- Intelligent Scales Power based on cable length

With the Low Power Idle Mode feature, the GSD-603F implements the link-down power saving that complies with IEEE 802.3az Energy Efficient Ethernet (EEE) standard to automatically lower power for a given port when it is not linked. The GSD-603F will automatically adjust power usage of the ports that are shut down or not connected to the network device. The other green technology, Intelligent Scales Power, adopted is an intelligent algorithm that actively determines the appropriate power level based on cable length. When connecting to the GSD-603F with Ethernet cable shorter than 20m, a device can obtain maximum power saving because the GSD-603F would automatically detect the Ethernet cable length and reduce power usage. The connected device can substantially reduce the overall power consumption, which makes a significant contribution to energy saving.

### Intelligent Power Savings



*Leading Home, SOHO and Workgroup Users into High-speed Networking Generation*

As the increasing popularity of Desktop and Laptop with built-in Gigabit Network Interface, and wide applications of Shared Database Device and Multimedia Center day by day, super high-speed Ethernet Switch is expected to become the mainstream in the market. PLANET GSD-603F Gigabit Ethernet Fiber Switch is especially designed in a compact metal housing to offer easy deployment of Gigabit networking for homes, SOHOs or enterprises.

**High Performance**

Providing 12Gbps internal switching fabric and 9k jumbo frame ability, the GSD-603F can handle extremely large amounts of data in a secure topology linking to a backbone or high-capacity server. The GSD-603F provides 2K MAC address table and 1.5Mbits buffer memory. It offers wire-speed packet transfer performance without risk of packet loss. The high data throughput of the device makes it ideal for most Gigabit environments, especially for the network upgrading to a Gigabit environment.

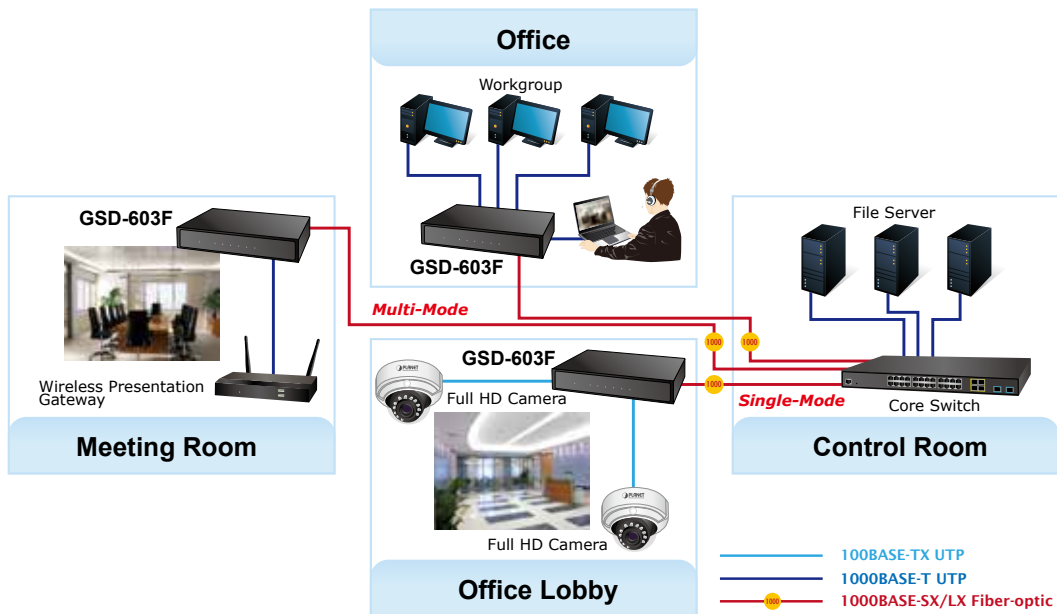
**Plug & Play**

All RJ45 copper interfaces in the GSD-603F support 10/100/1000Mbps auto-negotiation for optimal speed detection through RJ45 Category 6, 5 or 5e cabling. It supports standard auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight-through or crossover cables.

## Applications

**Ideal Switch for Home/SOHO and Space-limited Locations**

With five 10/100/1000Mbps Gigabit Ethernet ports and one SFP interface, the GSD-603F provides a cost-effective and high-performance network solution for Home and SOHO applications. In multiple applications, the advanced functions of the GSD-603F eliminate traditional issues associated with the current Ethernet environment. Normally, the TP port transmit distance can be increased to a maximum of 100m, but the fiber optical uplink capability support in the GSD-603F guarantees the throughput to all nodes hooked into the network and the Gigabit Ethernet distance can be extended from 550 meters (via multi-mode fiber cable) to 10/20/30/40/50/70/120 kilometers (via single-mode fiber).



## Specifications

Model	GSD-603F	
<b>Hardware Specifications</b>		
Ports	5 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports	
SFP/mini-GBIC Slot	1 1000BASE-X	
Dimension (W x D x H)	162 x 102 x 28 mm	
Weight	398g	
Power Requirement	DC 5V, 1A external power	
Power Consumption	System on	Max. 0.6 watts/2.04 BTU @ DC 5V
	Ethernet Full Loading	Max. 4.1 watts/13.99 BTU @ DC 5V
Enclosure	Metal	
<b>Switch Specifications</b>		
Switch Processing Scheme	Store-and-Forward	
Address Table	2K entries	
Shared Data Buffer	1.5Mbits	
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex	
Switch Fabric	12Gbps	
Throughput (packet per second)	8.9Mpps	
Jumbo Packet Size	9K	
<b>Standards Conformance</b>		
Standards Compliance	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3z Gigabit Fiber Ethernet IEEE 802.3x Full-duplex flow control IEEE 802.3az Energy Efficient Ethernet (EEE)	
<b>Environment</b>		
Temperature	Operating: 0~50 degrees C Storage: -40~70 degrees C	
Humidity	Operating: 10~90% (non-condensing) Storage: 5~90% (non-condensing)	

## Ordering Information

GSD-603F	5-Port 10/100/1000BASE-T + 1-Port 1000BASE-X SFP Gigabit Ethernet Switch
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## Related Products

GSD-805	8-Port 10/100/1000Mbps Gigabit Ethernet Switch
GSD-803	8-Port 10/100/1000Mbps Gigabit Ethernet Switch
GSD-503	5-Port 10/100/1000Mbps Gigabit Ethernet Switch