

# 5-/8-Port 10/100/1000BASE-T Gigabit Ethernet Switch



#### Slimmer, Smarter, and More Efficient Than Ever

PLANET's new GSD-Series Gigabit Switch takes a significant leap in efficiency and performance with its upgraded design. Its compact size, lighter weight, reduced power consumption, and improved jumbo frame features make it ideal for modern networking needs.

The upgraded GSD-Series features a more compact and lightweight design, significantly smaller and lighter than the previous version. With reduced power consumption, the new GSD-Series is more energy-efficient, making it an ecofriendly choice for users. The upgraded GSD-Series supports jumbo frames up to 15k, allowing for more efficient data transfers, a substantial improvement over the previous model.

# Optimal Solution for Energy Savings and Gigabit High Performance

PLANET GSD-Series Green Networking Switch is specially designed to meet the current trend for energy savings worldwide. The GSD-Series, a 5-/8-port Gigabit Ethernet Switch, brings both benefits of energy savings and Gigabit wire speed performance to home networking, SOHOs and enterprises.

### **Energy Savings**

The GSD-Series incorporates two advanced Green Networking technologies and is able to provide power savings of up to 40% but maintains high performance efficiently.

## (1) Hibernation Link Down power savings

The Hibernation Link Down power savings goes beyond IEEE specifications to automatically lower power for a given port when it is not linked. With the Hibernation Link Down power savings technology, the GSD-Series will automatically adjust power usage of the ports that are shut down or not connected to network devices.

#### **RJ45 Interface**

- 5/8 10/100/1000Mbps Gigabit Ethernet ports
- Complies with IEEE 802.3, 10BASE-T, IEEE 802.3u
  100BASE-TX, IEEE 802.3ab 1000BASE-T
- · Supports auto MDI/MDI-X function

#### Switching

- Hardware-based 10/100Mbps, half/full duplex and 1000Mbps full duplex mode, flow control and autonegotiation
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- IEEE 802.3x flow control for full duplex operation and backpressure for half duplex operation
- Integrated address look-up engine, supporting 2K/8K absolute MAC addresses
- 15K jumbo packet size
- · Power savings ability for Green networking
- Automatic address learning and address aging
- · Supports CSMA/CD protocol

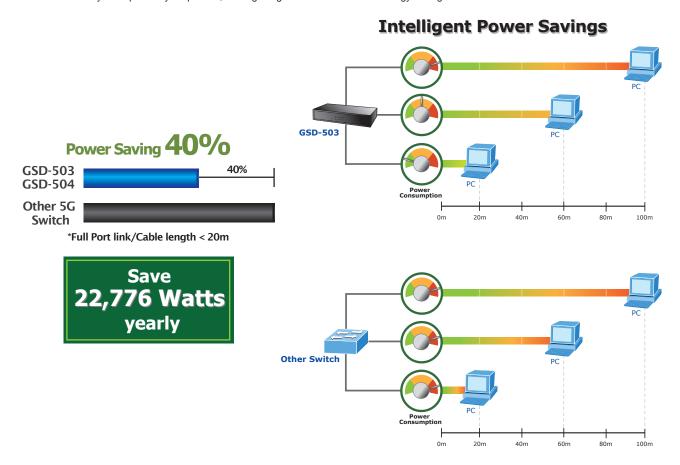
#### Hardware

- · Metal housing, compact size and wall mounting
- LED indicators for system power, per port 1000 & Link /
  Act
- 5V DC, 1A external power adapter
- FCC, CE Class B compliant



#### (2) Intelligent use of power based on cable length

The intelligent power management uses an advanced algorithm that actively determines the appropriate power level based on cable length. When the GSD-Series is connected with an Ethernet cable shorter than 20m, it automatically detects the Ethernet cable length and reduce power usage. The connected device can substantially save power by 40 percent, making a significant contribution to energy savings.

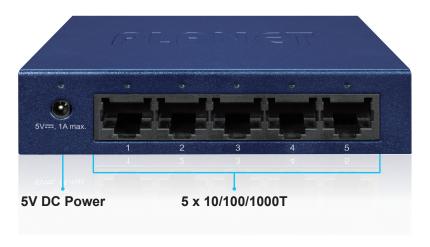


### Leading Home, SOHO and Workgroup Users to High-speed Networking

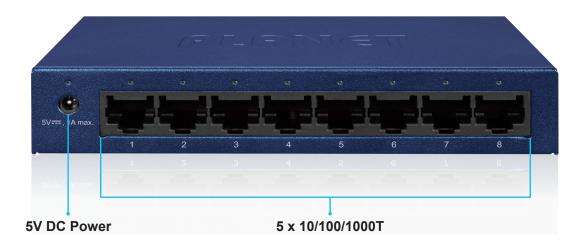
The GSD-Series is designed with a modern, metal compact housing for easy deployment of high-speed Gigabit networking in home or SOHO environments. Providing 10/16Gbps internal switching fabric, the GSD-Series can handle an extremely large amount of data in a secure topology linking to a backbone or high capacity servers. The GSD-Series provides 2K/8K MAC address table, and 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 to be upgraded to a Gigabit environment.

#### Plug & Play

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







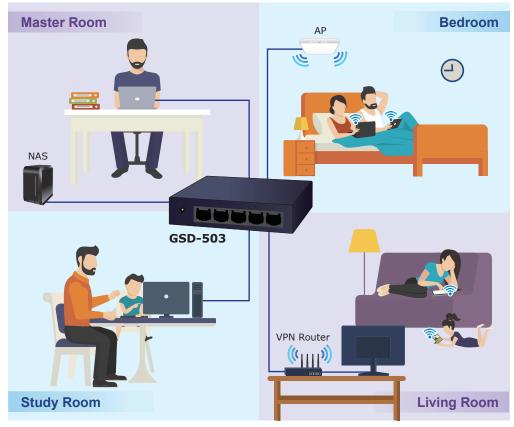
# **Applications**

### Backbone Switch

The GSD-Series can directly connect to departmental switches or backbone servers. With up to 10/16Gbps of non-blocking switching fabric, the GSD-Series can be used to build a Gigabit high-bandwidth switched network quickly and easily.

# Home/SOHO High-speed Network Center

The GSD-Series Gigabit Ethernet Switch provides the best solution of high-speed Internet environment demanded by SOHO / Home and power users. The GSD-Series accelerates the speed of data transmission between devices without worrying about the delay of high-quality multimedia display. As for home use, the GSD-Series supports speeds of 10, 100 and 1000Mbps, meeting your demands for transmitting high-quality multimedia, gaming and other high-speed Internet applications.



1000BASE-T UTP



# **Specifications**

Product	GSD-503	GSD-803	
Hardware Specifications			
10/100/1000BASE-T Ports	5 Auto MDI/MDIX ports	8 Auto MDI/MDIX ports	
LED Display	One for Power, one for Link / Act per port		
Enclosure	Metal		
Dimensions (W x D x H)	100 x 64 x 24 mm	140 x 67 x 26 mm	
Weight (g)	145g	221g	
Power Requirements (External power adapter)	5V DC, 1A		
Power Consumption/Dissipation	2.2 watts/7.5 BTU	4.2 watts/14.3 BTU	
Switch Specifications			
Switch Processing Scheme	Store-and-Forward		
Address Table	2K	8K	
Flow Control	Back pressure half duplex, IEEE 802.3x pause frame full duplex		
Switch Fabric	10Gbps	16Gbps	
Throughput (packet per second)	7.44Mpps	11.9Mpps	
Jumbo Packet Size	15K		
Standards Conformance			
Standards Compliance	IEEE 802.3 (Ethernet)		
	IEEE 802.3u (Fast Ethernet)		
	IEEE 802.3ab(Gigabit Ethernet)		
	IEEE 802.3x (Full-duplex Flow Control)		
	IEEE 802.3az Energy Efficient Ethernet (EEE)		
Regulatory Compliance	FCC Part 15 Class B, CE		
Environments			
Temperature	Operating: 0~50 degrees C		
	Storage: -10~70 degrees C		
Humidity	Operating: 5% to 95%, Storage: 5% to 95% (non-conder	nsing)	

# **Ordering Information**

GSD-503	5-Port 10/100/1000BASE-T Gigabit Ethernet Switch (Metal case)
GSD-803	8-Port 10/100/1000 BASE-T Gigabit Ethernet Switch (Metal case)

# **Related Products**

GSD-504	5-Port 10/100/1000BASE-T Gigabit Ethernet Switch (Plastic case)
GSD-804	8-Port 10/100/1000 BASE-T Gigabit Ethernet Switch (Plastic case)

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