

# 8-Port Gigabit Ethernet PoE PD Switch



## Optimal Solution for Energy Saving and Gigabit High Performance

In line with the energy-saving trend worldwide, PLANET delivers the new-generation Green Networking PoE PD Switch – GSD-803PD Gigabit Ethernet PoE PD Switch. The GSD-803PD incorporates the following advanced concepts:

- 802.3af / at 48~56V DC in-line power input
- Easy to install and use
- Up to 200 meters of Ethernet extension
- Compact-sized design
- Simple troubleshooting

PLANET GSD-803PD is an 8-Port Gigabit Ethernet PoE PD Switch equipped with a convenient and cost-effective 802.3af / at PoE power inject solution. It is quite different from the earlier version of PLANET SOHO Switch family that needs to obtain power from DC power adapter. It is specially designed for home networking, SOHO and SMB, and also bringing both benefits of energy saving and Gigabit performance.



## RJ-45 Interface

- Eight 10/100/1000Mbps Gigabit Ethernet ports
- 1-Port supports 802.3af / at PoE DC 48~56V in-line power at Port 8
- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T Ethernet standard

## Switching

- Hardware based 10/100Mbps, half / full duplex, and 1000Mbps full duplex mode, flow control and auto-negotiation
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- IEEE 802.3x flow control for full duplex operation and back-pressure for half duplex operation
- Integrated address look-up engine, supports 8K absolute MAC addresses
- 9K Jumbo Frame supports at all speeds (10/100/1000Mbps)
- Supports auto MDI/MDI-X function
- Automatic address learning and address aging
- Supports CSMA/CD protocol
- FCC, CE class A compliant

## Hardware

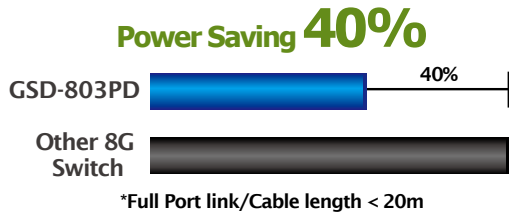
- Metal case, desktop palm size, wall mountable
- LED indicators for system Power, per port speed, Link / Act
- One power on/off button for energy saving
- Easy installation, ideal solution for space-limited locations
- Energy-saving technology
  - Link Down Power Saving
  - Intelligent Scales Power based on Cable Length

**Energy-saving Design**

The GSD-803PD incorporates two advanced green networking technologies:

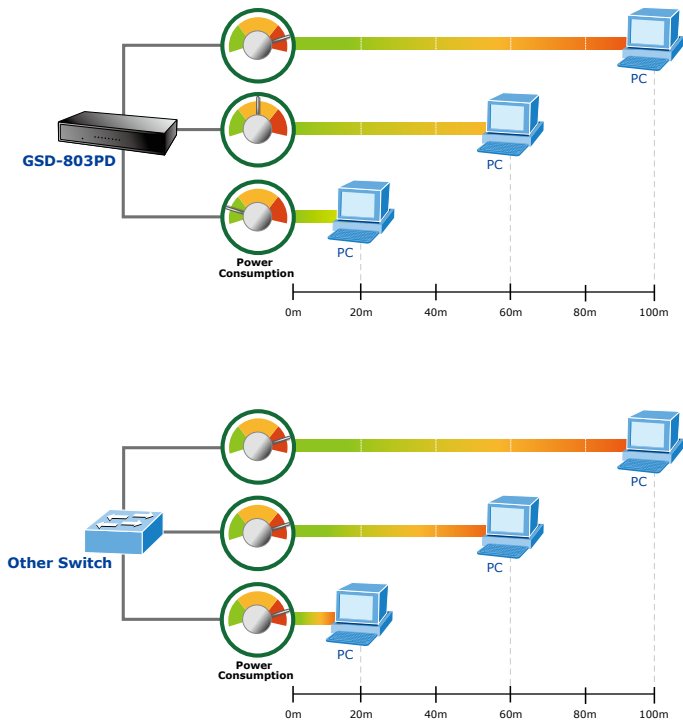
- Idle Mode Link Down Power Saving
- Intelligent Scales Power based on Cable Length

The Idle mode Link Down Power Saving of the GSD-803PD complies with IEEE 802.3az Energy Efficient Ethernet (EEE) standard to automatically lower power for a given port when it is not linked. With the Idle Mode Link Down Power Saving technology, the GSD-803PD will automatically adjust power usage of the ports that are shut down or not connected to network device. The other technology adopted, Intelligent Scales Power, is an intelligent algorithm that actively determines the appropriate power level based on cable length. When the GSD-803PD is connected with Ethernet cable shorter than 20m, a device can obtain maximum power saving because the GSD-803PD 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. Overall, the GSD-803PD offers benefit of energy saving up to 40% less energy but does not reduce the performance.



**Save 26,280 Watts yearly**

**Intelligent Power Savings**



**EuP Compliant Power Control**

To comply with European Union's Energy-using Products (EuP) Directive for further reducing the energy consumption, the GSD-803PD is built with a power switch offering off mode and standby mode selections on its rear panel. PLANET Green Networking Switch greatly helps to eliminate the power consumption at home, lower the business operating cost and fulfill the responsibility of a corporate citizen.



*EuP Power Switch Button on Rear Panel*

*Leading Home, SOHO and Workgroup Users to High-Speed Networking Generation*

With the increasing popularity of Desktops and Laptops with built-in Gigabit Network Interface, and wide application of shared Database Device and Multi-Media Center day by day, super high speed Ethernet Switch is expected to become the main stream on the market. PLANET GSD-803PD 8-port Gigabit Ethernet PoE PD Switch is especially designed with metal compact housing to bring an easy deployment of Gigabit networking for homes, SOHOs or enterprises.

*High Performance*

Providing 16Gbps internal switching fabric, the GSD-803PD can handle an extremely large amount of data in a secure topology linking to a backbone or high capacity servers. The GSD-803PD provides 8K MAC address table and provides 1Mbits 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 to be upgraded to a Gigabit environment.

The Flow Control function in the GSD-803PD allows routers and servers to directly connect to it for fast and reliable data transfer. The Gigabit ports with 9K jumbo frame feature can handle an extremely large amount of data transmission in a secure topology linking to a backbone or high-power servers.

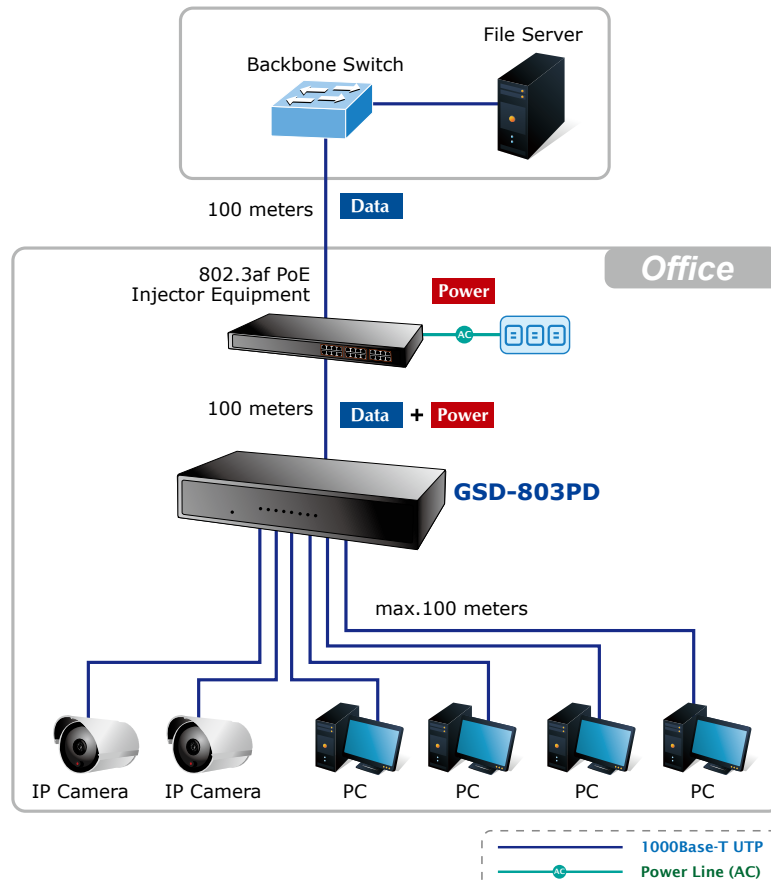
*Plug & Play*

All RJ-45 copper interfaces of the GSD-803PD support 10/100/1000Mbps auto-negotiation for optimal speed detection through RJ-45 Category 6, 5 or 5e cables. It supports standard auto-MDI/MDI-X that can detect the type of connection to any Ethernet device without requiring special straight or crossover cables.

## Applications

*Home / SOHO Department / Workgroup Network Infrastructure*

Since port 8 of the GSD-803PD provides PoE PD power in-line interface, the GSD-803PD can obtain PoE power from any 802.3af PoE PSE equipment. With non-blocking design and compact size, the GSD-803PD 8-port 10/100/1000Mbps Gigabit Ethernet PoE PD Switch helps users to deploy a Gigabit Ethernet network or to build a Gigabit high-bandwidth switched network quickly and easily.



## Specifications

Model	GSD-803PD
<b>Hardware Specification</b>	
10/100/1000Base-T Ports	8 auto MDI/MDIX ports
Enclosure	Metal
LED Indication	<b>System:</b> Power (Green) <b>Per Port:</b> 1000 LNK/ACT (Orange) 10/100 LNK/ACT (Green)
Dimensions (W x D x H)	155 x 86 x 26 mm
Weight	378g
Power Requirements	802.3af / at PoE 48V ~ 56V DC in-line power DC 5V power adapter (Not included in standard package)
Power Consumption / Dissipation	3.3 watts / 11 BTU
<b>Switch Specifications</b>	
Switch Processing Scheme	Store-and-Forward
MAC Address Table	8K entries
Flow Control	Back pressure for half duplex IEEE 802.3x pause frame for full duplex
Switch Fabric	16Gbps / non-blocking
Throughput (packet per second)	11.9Mpps@64Bytes
Network Cables	Cat. 3, 4, 5, 5e, 6 UTP cable (100 meters, max.) EIA/TIA-568 100-ohm STP (100 meters, max.)
<b>Standards Conformance</b>	
Regulation Compliance	FCC Part 15 Class A, CE
Standards Compliance	IEEE 802.3 (Ethernet), 10Base-T IEEE 802.3u (Fast Ethernet), 100Base-TX IEEE 802.3ab (Gigabit Ethernet), 1000Base-T IEEE 802.3x (Full-Duplex Flow Control) IEEE 802.3af (Power over Ethernet) IEEE 802.3at (High Power over Ethernet)
<b>Environment</b>	
Temperature	Operating: 0 ~ 50 degrees C Storage: -10 ~ 70 degrees C
Humidity	Operating: 5 ~ 95% Storage: 5 ~ 95% (non-condensing)

## Ordering Information

GSD-803PD	8-Port 10/100/1000Mbps Gigabit Ethernet PoE PD Switch
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