

PS1005G-1GT-4PoE Unmanaged Full Gigabit Industrial Ethernet PoE Switch

User Manual



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Chapter 1 Product Introduction

Congratulations on your purchasing of the Gigabit PoE Ethernet switch. Before you install and use this product, please read this manual carefully for full exploiting the functions of this product.

1.1 Product Overview

The product which is fully compliance with IEEE802.3at standard, is a PoE Ethernet Switch with five Gigabit Ethernet ports can be used for any 10/100/1000Mbps link. There are 4 Power Sourcing Equipment (PSE) on the Switch, which can give power to IEEE802.3at Compliant Powered Devices(PD).

The Switch designed with the characteristics such as: high integration level, exquisite, easy to operate and portable, is suitable for the household and office network environment with small or middle scale. It is an ideal choice to promote the performance of the department and working group, can provide you a high-performance network applicable solution in simple, economical and standard ways. The Switch provides several easy-understood LED indicators on the front panel, so that you can judge the working state of the Switch and diagnose the network failure in a really efficient way.

1.2 Features

- Supports 5 x10/100/1000Mbps Auto-negotiation Ethernet RJ45 ports with 4 port PoE function (port2~port5).
- Supports PoE power supply up to 30W for each PoE port and 60W for all PoE ports.
- Comply with IEEE802.3i, IEEE802.3u, IEEE802.3x, IEEE802.3ab and IEEE802.3az.
- Supports PoE IEEE802.3af and IEEE802.3at compliant Powered Device (PD).
- Supports IEEE802.3x flow control for Full-duplex Mode and backpressure for Half-Duplex Mode.
- 2K entry MAC address table with auto-learning and auto-aging.
- LED indicators for monitoring power, link, activity, PoE and max power for PSE.
- External power adapter supply.
- Power interface and communication interface both have anti lightning protection function.

1.3 Package Contents

Before installing the Switch, make sure that the following “packing list” is OK. If any port is lost or damaged, please contact your local agent immediately. In addition, make sure that you have the tools to install switches and cables by your hands.

- One Switch
- One External power supply
- One User Manual

Chapter 2 External Component Description

2.1 Front Panel

The front panel of the Switch consists of series of LED indicators, shown as below:



Figure 1 – Front Panel

LED indicators:

The LED indicators will allow you to monitor, diagnose and troubleshoot any potential program with the Switch, connection and attached devices.

The following chart shows the definition of each LED indicators.

LED	COLOR	STATUS	STATUS DESCRIPTION
PWR	Green	ON	Power On
		OFF	Power Off
Link/Act	Green	ON	A valid link is established
		OFF	No link is established
		Blink	Data packets received or transmitted
PoE	Yellow	ON	There is a PoE PD connected to the port, which supply power successfully.
		OFF	No Powered Device connected to the port, or no power is supplied according to the power limits of the port.
		Blink	PoE overload.
MAX	Yellow	ON	Total power consumption is above Power Guard Band but below total budget
		OFF	Total power consumption is below Power Guard Band determined by the user.
		Blink	Total power consumption is above total budget, or Power Integral is still positive

2.2 Rear Panel

The rear panel of the Switch consists of 5 10/100/1000Mbps RJ-45 ports and a DC power connector shown as below.



Figure 3 - Rear Panel

5 10/100/1000Mbps RJ-45 ports (1-5):

Designed to connect to the device with a bandwidth of 10Mbps, 100Mbps or 1000Mbps. Each of them has a corresponding Link/Act LED. Port2 to Port5 support PoE function, and each of them has a corresponding PoE LED.

DC Power Connector:

Power is supplied via an external power adapter which supports DC 51V/1.25A.

Note: The grounding terminal is located on the left side of the Switch, please ground it with a wire to prevent electric shock.

Chapter 3 Installing and Connecting the Switch

This part describes how to install your Ethernet Switch and make connections to it. Please read the following topics and perform the procedures in the order being presented.

3.1 Installation

Please follow the following instructions in avoid of device damage and security threat because of the incorrect installation.

- Put the Switch on stable place or desktop in case of falling damage.
- Make sure the Switch works in the proper DC input range and matches the voltage labeled on the Switch.
- Please keep the Switch away from electric spark, do not open the Switch's shell even in case of power failure.
- To ensure that there is enough space for heat exchange ventilation for the Switch.
- Make sure the cabinet is strong enough to support the weight of the Switch and its accessories.

3.1.1 Desktop Installation

User can put the Switch on the stable desktop, close to the power adapter. Make sure there is enough space for heat exchange ventilation for the Switch.

3.1.2 Rack-mountable Installation

Two slots are provided at the bottom of the Switch, which can be used to fasten the Switch on the wall. Please ensure that the Switch's front panel is on top, for easy checking the LED indicators. Please follow the steps below:

- a. Before installing, attach the two screws to the wall for installation.
- b. Then hang the Switch at the two screws.

3.1.3 Power on the Switch

The Switch is powered on by an external power supply. Please follow the tips to connect.

DC Electrical Outlet: Receptacle with neutral outlet or multifunctional computer professional receptacle is strongly recommended. Please confirm that the ground connector is in good condition and can work properly on the outlet.

DC Power Cord Connection: Connect the DC power connector in the back panel of the Switch to external receptacle with the included power cord, and check the power indicator is ON or OFF. When it is ON, it indicates the power connection is OK.

3.2 Connect Computer (NIC) to the Switch

Please insert the NIC into the computer, after installing network card driver, please connect one end of the twisted pair to RJ-45 jack of your computer, the other end will be connected to any RJ-45 port of the Switch, the maximum distance between Switch and computer is around 100 meters. Once the connection is OK and the devices are power on normally, the Link/Act/Speed status indicator lights corresponding ports of the Switch.

3.3 Switch connection to the PD

2~5 ports of the Switch have PoE power supply function, the maximum output power up to 30W each port, it can make PD devices, such as internet phone, network camera, wireless access point device. You only need to connect the Switch PoE port to the PD port by network cable directly.

Appendix: Technical Specifications

SPEC	
Standards	IEEE802.3i, IEEE802.3u, IEEE802.3ab, IEEE802.3x, IEEE802.3az, IEEE802.3at
Network Media (Cable)	10BASE-T: UTP category 5 cable (maximum 100m) 100BASE-TX: UTP category 5,5e cable (maximum 100m) 1000BASE-T: UTP 5,5e,6 cable (maximum 100m)
Interface	5 x 10/100/1000Mbps RJ-45 ports (Auto Negotiation/ Auto MDI/MDIX)
Transfer Method	Store-and-Forward
Switching Capacity	10Gbps
MAC Address Table	2K
Packet Forwarding Rate	7.44Mpps
Packet Buffer	1.5Mbit
Jumbo Frame	9KByte
Dimensions (L x W x H)	140*76*27.7mm
PoE Ports (RJ-45)	4*PoE ports compliant with 802.3at/af
Power Pin Assignment	1/2(+),3/6(-)
Power Supply	DC 51V, 1.25A External power supply
Power Consumption	Maximum (PoE ON): 69W (220V/50Hz)
Environment	Operating: 0°C~40°C Storage Temperature: -40°C ~70°C Operating Humidity: 10%~90% RH non-condensing Storage Humidity: 5%~90% non-condensing