

# **User Guide**

**4GE(PoE)+2G SFP industrial PoE Switch**

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# Chapter 1 : Product Introduction

Congratulations on your purchasing of the 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 Package Contents

Check the following contents of your package:

- PoE Switch (Tape terminal) x 1
- User Guide x 1
- Accessories(Guide rail clip\*1 , screw\*4)

The built-in precision device, please pay attention gently to avoid severe vibration, so as not to affect the performance of the equipment. If any part is lost and damaged, please contact your local agent immediately, we will give you a proper solution as soon as possible.

## 1.2 Introduction

4GE (PoE) +2G SFP is optimal at independent research and development of industrial non-management PoE switches. The PoE ports (Port1~4) can automatically detect and supply power with those IEEE 802.3af/at compliant Powered Devices (PD). The electrical power is transmitted along with data in one single cable allowing you to expand your network where there are no power lines or outlets, where you wish to fix devices such as AP, IP Cameras or IP Phones, etc.

This product is designed for severe bad industrial environment design, can support rail installation; Port surge protection can be up to 6KV; Working temperature range -40°C ~ 75 °C, can satisfy the special demand of industrial automation control. It is an ideal choice for expanding your home or office network.

## 1.3 Product Features

- Industrial lightning protection is up to 6KV;
- Electrostatic standard Contact 8KV,air 10KV;
- Operating Temperature -40 °C ~ 75 °C;
- Low Power fanless, high energy metal Heat conduction trough case;
- DIN guide rail type installation;
- Industrial-scale components;
- MTBF: >100000hour;
- Support IEEE802.3at standard compatibility IEEE802.3af(PD);
- Stand-up output power up to 32 W;
- Support IEEE802.3 x full duplex flow control and Backpressure half duplex flow control;
- Panel LED monitor work and help Failure analysis;

- Perfect security mechanism ;
- Support IEEE 802.3az;
- Support flow control;

## 1.4 Hardware Description

### 1.4.1 Front Panel

The Front Panel of Consists of 4-Port 10/100/1000Mbps Ethernet RJ45 Ports and 2 gigabit SFP slot. The LED indicators are also located on the panel.

Figure:



LED indicator

LED	Color	Function
PWR	Green	Off: No Power supply. Light: Indicates the switch has power.
LNK/ACT	Green	Off: No device is connected to the corresponding port. Light: Indicates the link through that port is successfully established at 1000Mbps. Blink: Indicates that the Switch is actively sending or receiving data over that port.
	Orange	Off: No device is connected to the corresponding port. Light: Indicates the link through that port is successfully established at 10/100Mbps. Blink: Indicates that the Switch is actively sending or receiving data over that port.
PoE	Orange	Off: No PoE powered device (PD) connected. Light: There is a PoE PD connected to be port, which supply power successfully. Blink: Indicates port abnormal PoE supply.

### 1.4.2 Upper Panel

The upper panel have an connection terminal and accepts input DC power, standard double redundant power backup 5 pinhole terminals.

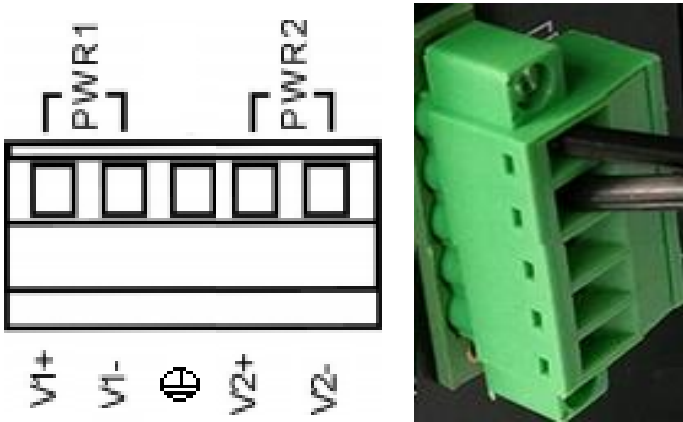
Figure:



### 1.4.3 Power input

The upper panel provides 5 industrial power input terminal, the DC 48-57V or (24-55V booster module) optional, where in the terminal labeled V1-, V1+, V2-, V2+; 2 DC power input, V- V, the input voltage is 48-57V or (24-55V booster module) optional DC, the switch power supply DC input with redundant functions, and provide PWR1、PWR2 two power input, can be used alone, can also be connected to two independent DC power supply system, the use of a pair of terminal at the same time into the device. a power system failure, equipment can uninterrupted normal operation, and improves the network's reliability.

Figure:



# Chapter 2:Installing

## 2.1 Installation facility

This part describes how to install your Ethernet Switch and make connections to it. Please follow the following instructions in avoid of incorrect installation causing device damage and security threat.

### 2.1.1 Notice

- Before cleaning the switch, unplug the power plug of the switch first. Do not clean the switch with wet cloth or liquid;
- Do not place the switch near water or any damp area. Prevent water or moisture from entering the switch chassis;
- Do not place the switch on an unstable case or desk. The switch might be damaged severely in case of a fall;
- Ensure proper ventilation of the equipment room and keep the ventilation vents of the switch free of obstruction;
- Make sure that the operating voltage is the same one labeled on the switch;
- Do not open the chassis while the switch is operating or when electrical hazards are present to avoid electrical shocks.

### 2.1.2 Installation environment

Before the installation, should first confirm that there is a suitable working environment.

Installation requirements

- Avoid direct sunlight, away from the heat source or strong electromagnetic interference
- Check cable and connector according to reasonable configuration requirements, the cable (<100m)
- The product does not provide installation component: screws, nuts and other installation tools
- Power requirements: DC power supply 48-57V or (24-55V booster module) optional
- Working temperature of -40°C ~ 75 °C; relative humidity is 5% ~ 95%

## 2.2 Installation

This section describes how to install the industrial Gigabit PoE switch and make connections to it ,please read the following topics and perform the procedures in the order being presented

### 2.2.1 DIN-rail mounting

Adopt the 45mm standard DIN card rail type installation, Check whether the DIN-rail rail mounting tool accessories (this product has supplied installation fittings) check whether the DIN rail is firm .

Figure:



The DIN card into the DIN rail rail connector, check and confirm the product reliable installation to DIN rail



## 2.3 Power on

Note:

- Power on operation: power supply terminal of the power line into the power supply interface device, plug the power plug, the switch will automatically be initialized at this time in addition, system reset successfully.
- power off operation: first unplug the power plug, and then remove the terminal wiring section, please note that the above order of operation.

## Chapter 3: Technical Specifications

### 3.1 Specifications

Model	4GE (PoE) +2G SFP
Standard	IEEE802.3, IEEE802.3u, IEEE802.3az, IEEE802.3x, IEEE802.3af, IEEE802.3at 、 IEEE 802.3ab 、 IEEE 802.3z
Network Media(Cable)	10BASE-T: UTP category 3,4,5 cable (≤100m) 100BASE-TX: UTP category 5 cable (≤100m) 1000BASE-T: UTP category 5e, 5 cable (≤100m) 1000BASE-TX : Turn gigabit SFP optical RJ45 electrical module 1000BASE-SX : Gigabit SFP multimode (850nm, LC, DDM) 1000BASE-LX : Gigabit SFP mode (1310nm, LC, DDM) 1000BASE-ZX: Gigabit SFP single mode (1550nm, LC, DDM)
MAC Address Table	4K, Auto-learning, Auto-aging
Transfer mode	Store-and-Forward
Jumbo frame	9216 Byte
Packet buffer	1.5M bit
Switching Capacity	12Gbps
Packet Forward Speed	8.9Mpps
Input power supply	DC:48-57V or (24-55V booster module) optional
Dimensions (L*W*H)	165*147*54mm
Fan	Fanless
PoE Port	Port1~4
PoE Power on RJ45	Mode A 1/2(+),3/6(-)
PoE Output	32W(Max)
EEE	IEEE 802.3az
Temperature	Operating Temperature: -40°C ~ 75 °C (-40 °F ~167°F ) Storage Temperature: -40 °C ~ 80°C (-40 °F ~176°F )
Humidity	Operating Humidity: 10% ~ 90% non-condensing Storage Humidity: 5% ~ 90% non-condensing
Surge Protection	Differential mode ±4KV Common mode ±6KV
MTBF	>100000 hours
Electrostatic standard	Contact 8KV,air 10KV



