LINOVISION

POE-SWR612GM-Solar

User Guide

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User Guide

8GE(PoE)+2GE+2G SFP
Industrial Fast Ring Managed PoE Switch

This manual is suitable for 8GE(PoE)+2GE+2G SFP industrial Fast Ring managed PoE switches. If there is no special instructions in the article, the product diagram takes 8GE(PoE)+2GE+2G SFP as an example.

Packing List

When using the Switch for the first time, carefully open the packing box. The packing box should contain the following items:

- PoE Switch *1
- User Guide *1
- Phoenix Terminal *2
- Console Cable*1
- Accessories (Rack Mount Accessory Kit *4, Screw *4)

⚠ **Note:** Please handle this device carefully and avoid violent vibration, which may affect the performance of the device. If you find that the equipment is damaged or any parts are lost in the process of transportation, please inform us, we will give you a proper solution as soon as possible.

Chapter 1 Product Introduction

1.1 Product Overview

8GE(PoE)+2GE+2G SFP is an industrial grade ring managed PoE switch, with 10*10/100/1000Mbps RJ45 ports, 2*1000Mbps SFP fiber slot modules and 1*Console port. Among them, 1-8 RJ45 ports support PoE power supply, support IEEE802.3af/at standard, and the maximum power of the ports can reach 45W (port1-4), 30W(Port 5-8). It supports static routing function, provides perfect security policy, QoS policy and rich VLAN function, supports ring network function.

The equipment adopts no fan, low power design, with the advantages of easy to use, small and beautiful, simple installation and so on. The product is designed in line with Ethernet standard, with lightning protection, electrostatic protection mechanism, operating temperature range of -40°C ~ 75°C, stable performance, safe and reliable, can be widely used in intelligent transportation, telecommunications, security, financial securities, customs and other broadband data transmission fields.

Chapter 2 Product Appearance Description

2.1 Front Panel

The front panel of the switch, as shown below:

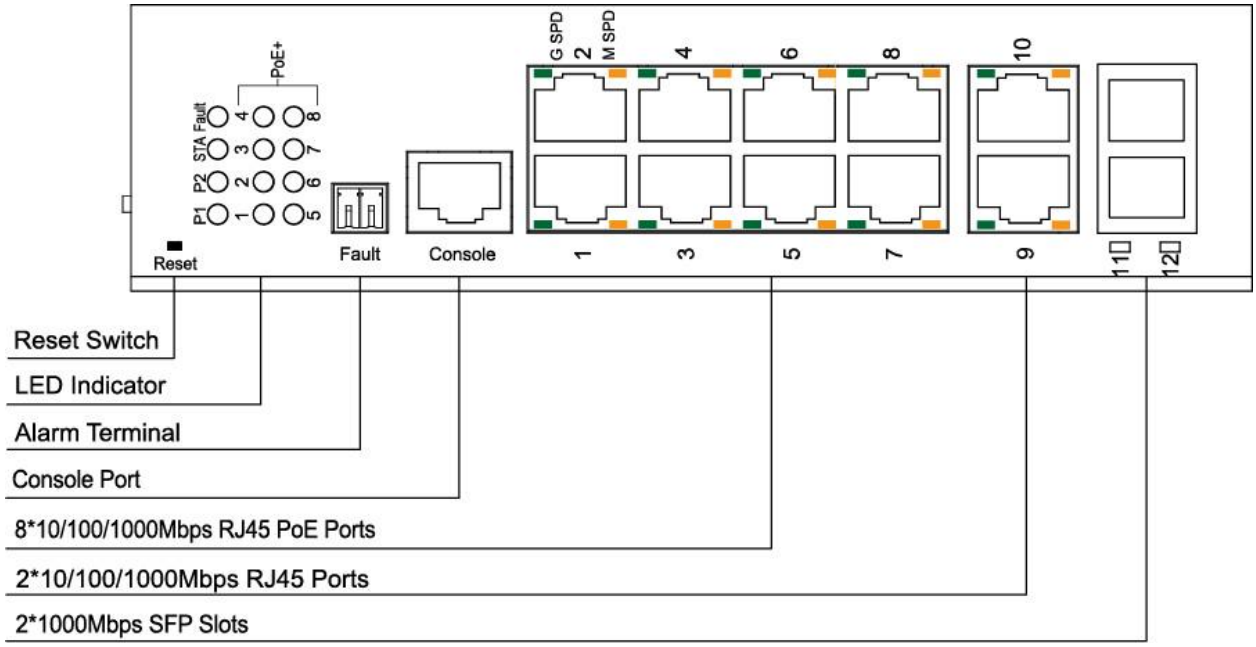

Figure 2-1 Front panel of the Switch

- **Reset Switch**

Reset switch is simply a switch that can be reset automatically. After long press for 5 seconds, release it to restore the initial state.

- **Alarm Terminal**

Fault: Alarm port, support machine abnormal alarm function. This interface needs to be connected to the external alarm device, when the machine experience abnormal power event, the internal relay will be disconnected, output alarm signal, in the circuit has automatic alarm, safety protection, isolation conversion and other functions.

- **Console Port**

Console port is used to connect with the serial port of computer or other terminal equipment and to manage or configure switches.

- **10/100/1000Mbps RJ45 Ports**

Support 10Mbps, 100Mbps or 1000Mbps self-adapt, support auto-flip (Auto-MDI/MDIX) function. Ports 1-10 all have corresponding indicator lights as shown on the left and right sides of the RJ45 port. The 1-8 ports have PoE power supply function (support IEEE802.3af/at, single port of 1-4 maximum output up to 45W, 5-8 up to 30W).

- **1000Mbps SFP Port**

SFP ports are located on the right side of the panel. They are independent SFP ports, and each port has a corresponding indicator light, which is the port 11~12 indicator light shown in the panel above.

- **LED Indicator**

The LED indicator light of the switch is shown in the following table. Users can easily and quickly monitor the work and operation status of the switch through the following indicator light:

LED	Color	Function
P1	Green	Off: The switch is not powered by P1 power supply. Light: The switch is powered by P1 power supply.
P2	Green	Off: The switch is not powered by P2 power supply. Light: The switch is powered by P2 power supply.
STA	Green	Blinking: The system is working properly. Light: the system is starting or the system is running abnormally.
Fault	Green	Off: No alarm signal output. Light: There is an alarm signal output.
LNK/ACT	Green/Yellow	Off: No connected device. Light: Connect to a network device. Blinking: Data is being transferred.
PoE	Green	Off: The port does not supply power to the opposing device. Light: there are electric equipment connected to it, and normal power supply.

2.2 Side Plate

Switch side panel, as shown below:

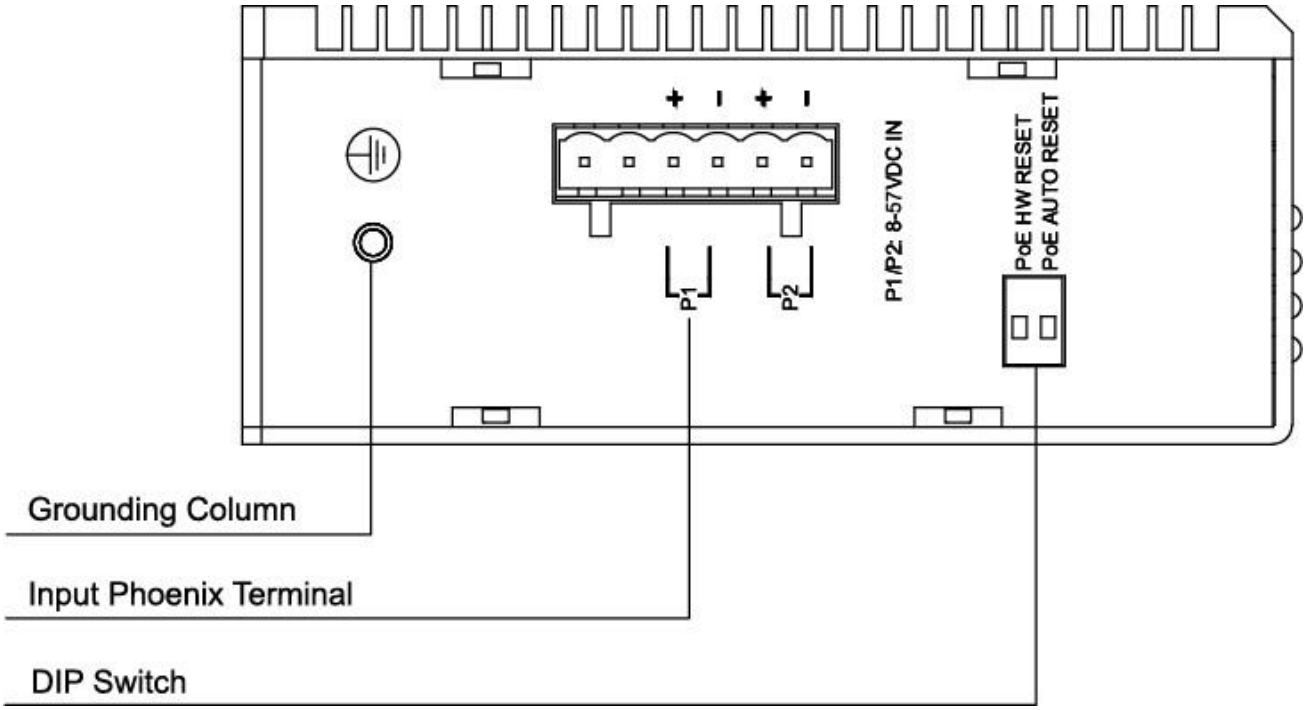

Figure 2-2 Schematic diagram of the side panel of the switch

- **Grounding Column**

Located on the left side of the power interface, please use a wire to ground in case of lightning.

- **Input Phoenix terminal**

The side panel of the switch provides 6 pin industrial terminal, P1 and P2 input voltage: 8-57V, the switch power supply DC input has redundant function, P1 and P2 two power input can be used individually, they can also be connected to two sets of independent DC power supply system, use a pair of terminals at the same time to introduce equipment, in any set of power system failure, the equipment can be uninterrupted normal operation, improve the reliability of the network operation.

- **DIP Switch**

PoE AUTO RESET: MCU reset, when PoE is not working properly, use this switch to control PoE system reset. The MCU re-initializes the PoE system and makes the PoE system return to normal work.

PoE HW RESET: PD-Alive, namely dropped self-connection, is designed to ensure the reliability and stability of PoE power supply equipment in network and industrial applications, avoiding manual maintenance and restart of equipment, improving safety and saving costs.

Chapter 3 Installation Guide

This chapter helps users correctly install and safely use Switches.

3.1 Installation Precautions

⚠ **Precautions:** To avoid equipment damage and personal injury, observe the following precautions:

- The Switch room should be dry and ventilated, free from corrosive gases and strong electromagnetic interference.
- The humidity of the switch room should be 5% to 95%.
- The grounding of the Switch shall comply with the grounding requirements described in this manual, and shall be separately and well grounded.
- Keep a proper distance between the Switch and other devices. Do not stack other devices with the Switch.
- The connection cable between the Switch and the distribution frame should be standardized and reasonable, and the distribution frame (box) jumper wire should be concise and clear to prevent the phenomenon of parallel lines and wires;
- To avoid the danger of electric shock, do not open the chassis without authorization; If any fault occurs, contact professional maintenance personnel.

⚠ **Safety Tips:**

- Ensure that the PGND cable of the power socket is properly grounded;
- Ensure sufficient space for heat dissipation and ventilation of the Switch. Do not place heavy objects on the Switch.

3.2 Installation Environment

Before installation, make sure that the proper working environment is available, including power requirements, adequate space, proximity to other equipment to be connected, and other equipment in place. Please confirm the following installation requirements:

- Ensure the stability of the workbench and good grounding;
- Check whether cables and connectors required for installation are in place (less than 100m);
- The product does not provide installation components. Prepare components of the selected installation type, such as screws, nuts, and tools, to ensure reliable installation;
- Power requirements: P1, P2 Input voltage: DC 8 - 57V
- Environment: operating temperature: -40°C - 75°C relative humidity: 5% - 95%.

3.3 Installation

DIN-Rail installation

The 35mm standard DIN-Rail installation is very convenient for most industrial applications. The installation steps are as follows:

- Check whether the installation accessories of DIN-Rail guide tools are available (installation accessories are provided for this product);
- Check whether DIN-Rail is firmly fixed, whether there is a suitable place to install the product;
- Clamp the lower part of the DIN-Rail connecting seat of the product accessories into the DIN-Rail (lower part with spring support), and then clamp the upper part of the connecting seat into the DIN-Rail (lower part clamp a little, slightly force to keep the balance of the equipment stuck into the upper part).

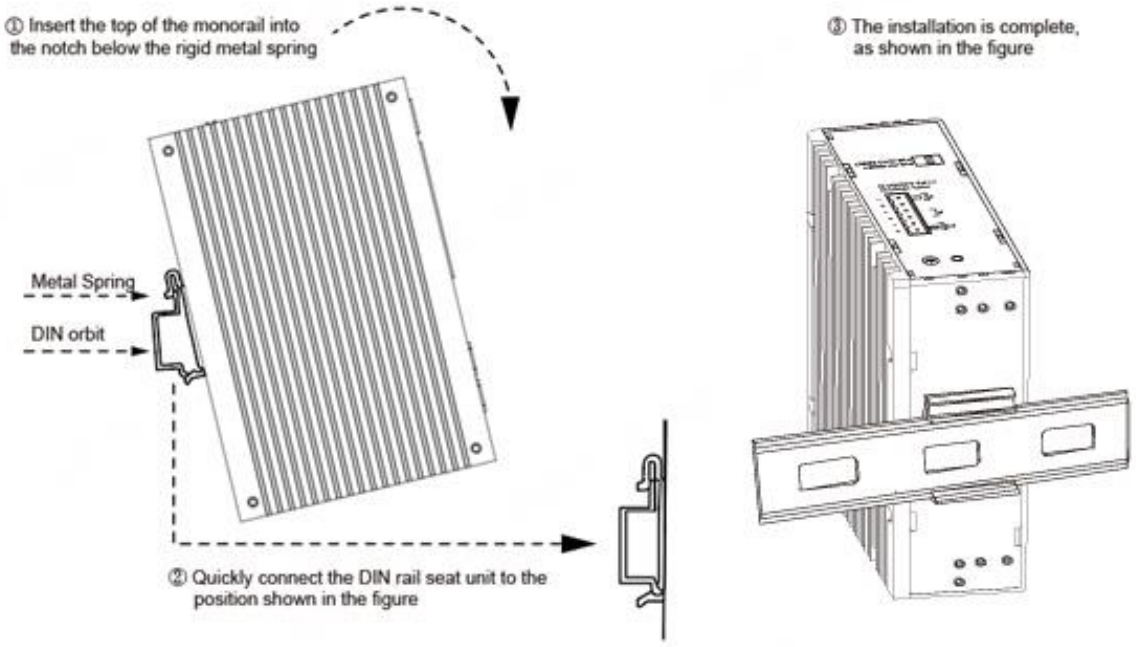

Figure 3-1 Schematic diagram of industrial machine guide rail installation1

Note: Aluminum alloy DIN-Rail hooks have been fixed to the rear panel of the Switch.

⚠ Power on

- Power on: First insert the power terminal of the power cable into the power port of the device, then plug in the power plug and power on. After the Switch is started, the Switch automatically initializes. If all port indicators are on and then off, the system is successfully reset, the power LED indicator will always stay on.
- Power off operation: Unplug the power plug first, and then remove the wiring part of the terminal. Please pay attention to the above operation sequence.

Appendix: Technical Specifications

Model	8GE(PoE)+2GE+2G SFP Industrial Fast Ring Managed PoE Switch
Standard	IEEE802.3, IEEE802.3a, IEEE802.3ab, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x, IEEE802.1q, IEEE802.1p, IEEE802.1x, IEEE802.1s, IEEE802.1d, IEEE802.3w, IEEE802.3ad, IEEE802.3af, IEEE802.3at
Interface	10*10/100/1000Mbps RJ45 Ports 2*1000Mbps SFP Slot 1*Console Port
Network Media	10BASE-T: UTP category 3, 4, 5 cable (≤100m) 100BASE-TX: UTP category 5, 5e cable (≤100m) 1000BASE-T: UTP category 5e, 5 cable (≤100m) 1000BASE-X:MMF, SMF
Indicator	P1(Green), P2(Green), STA(Green), Fault(Green), LNK/ACT(Green/Yellow), PoE(Green)
MAC Address Table	8K, Auto-learning, Auto-update
Jumbo Frame	10000Bytes
Packet Buffer	4.1Mbit
Transfer Mode	Store-and-Forward
Packet Forward Speed	17.86Mpps
Switching Capacity	24Gbps
Dimensions (W*H*D)	50*171*120mm
PoE Power Budget	240W
PoE Port	Port1~8
PoE Power On RJ45	1/2 (+), 3/6 (-)
PoE Power Output	30W (Max)
Input Power Supply	P1, P2 Input Voltage: DC 8-57V
Operating Temperature	-40°C ~ 75°C
Storage Temperature	-40°C ~ 80°C
Operating Humidity	5% ~ 95% non-condensing
Storage Humidity	0% ~ 95% non-condensing
Surge Protection	Differential mode ±2KV , Common mode ±4KV
Electrostatic Standard	Contact ±6KV, Air ±8KV