

POE Industrial Switch

USR-ISF1005P

Specification



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1. Product Introduction

The Platinum POE series is an industrial - grade POE switch. There are three specifications in this series for optional selection: 5 - port 100M/1000M and 8 - port 1000M. The product adopts a fanless heat dissipation design, can work in a temperature range of - 40°C to + 85°C, has a compact size, an aluminum alloy shell, an IP40 protection level, and 6KV lightning protection and other excellent industrial qualities. It enhances the reliability and safety of industrial networks, meets the deployment requirements in rail transit, safe cities, intelligent transportation, security monitoring and other harsh environments, and provides a reliable and convenient solution for the networking of users' Ethernet devices.

2. Product Features

- Adopts an aluminum alloy shell design with better heat dissipation.
- Power supply voltage range: DC 48 - 57V;
There are two power supply methods: DC round head power supply / power terminal power supply.
(Among them, the power terminal is for dual - power redundant backup, supports built - in over - current 4.0A protection, and supports reverse connection protection.)
- Network port lightning protection level: 6KV; Power supply level: 3 - level B, common mode 2KV, differential mode 1KV.
- All ports support wire - speed forwarding and automatic flipping, and can support long - distance transmission of less than 100 meters.
- The size is that of a cigarette case, small and easy to install, plug - and - play without configuration.
- Supports standard DIN rail installation; IP40 level protection.
- Overall fanless design, quiet operation in a wide temperature range of - 40°C to + 85°C.

3. Specification Parameters

Specification Parameters	
Product Description	USR-ISF1005P: 100Mbps, 1*Uplink Port + 4*POE Ports; USR-ISG1005P: 1000Mbps, 1*Uplink Port + 4*POE Ports; USR-ISG1008P: 1000Mbps, 8*POE/Uplink Ports;
Port Description	5*RJ45 Ports; IEEE802.310BASE-T/IEEE802.3i; 10Base-T; IEEE802.3u; 100Base-TX/FX;
Power Parameters	
Power Supply Range	DC 48-57V
Power Interface	DC Power Supply; 4 - PIN Terminal Dual - Power Input Redundant Backup
Power Consumption	< 3W
Overload Current Protection	Supports Built - in Over - current 4.0A Protection
Reverse Polarity Protection	Supported
PoE Characteristics	
PoE Standard	IEEE802.3af/ IEEE802.3at

PoE Power	5 - port 100M/1000M version: Single - port PoE power 30W, maximum power 60W; 8 - port 1000M version: Maximum single - port PoE power 30W, maximum power 120W;
Switching Performance	
Backplane Bandwidth	5 - port 100M: 1Gbps; 5 - port 1000M: 20Gbps; 8 - port 1000M: 26Gbps;
Switching Technology	Parallel store-and-forward
MAC Address Table	1K
Packet Buffer	512kbit
Packet Forwarding Rate	11.9Mpps
Physical Characteristics	
Installation Method	DIN rail mounting
Shell	All - aluminum shell
IP Protection Class	IP40
Hardware Protection	EMC 3B
Product Dimensions	105×69×29.5mm (L×W×H)
Weight	191.5g
Mean Time Between Failures	300,000 hours
Temperature Characteristics	
Operating Temperature	-40°C ~ +85°C
Storage Temperature	-40°C~+125°C
Humidity	5% ~ 95% (No condensation)
Electromagnetic Characteristics	
Electrostatic Discharge	IEC(EN)61000-4-2 , Class 3B
Electrical Fast Transient/Burst	IEC(EN)61000-4-4 , Class 3B
Surge	IEC(EN)61000-4-5 , Class 3B

Indicator Lights		
PWR Indicator	PWR red light is always on	Power on normally
	PWR red light is off	Not powered on/Power on abnormal
Port Indicator	LINK/ACT yellow light is on (left light)	Port is connected
	LINK/ACT yellow light flashes (left light)	Port is transmitting data
	POE green light is on (right light)	Normally supplies POE power to other devices;
	POE green light is off (right light)	Not supplying POE power to other devices/POE power supply

		abnormal
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4. Product Selection

Model	
USR-ISF1005P (Platinum)	Industrial - grade 5 - port 100M (4PoE ports + 1uplink port), non - network management, single - port PoE power 30W, total PoE power 60W
USR-ISG1005P (Platinum)	Industrial - grade 5 - port 1000M (4PoE ports + 1uplink port), non - network management, single - port PoE power 30W, total PoE power 60W
USR-ISG1008P (Platinum)	Industrial - grade 8 - port 1000M (8*PoE ports/uplink port), non - network management, single - port PoE power 30W, total PoE power 120W
USR-ISF005P (Black Gold)	Industrial-grade 5-port Fast Ethernet (4*POE ports + 1*uplink port), non-network management, single-port POE power 30W, total POE power 120W
USR-ISG005P (Black Gold)	Industrial-grade 5-port Gigabit Ethernet (4*POE ports + 1*uplink port), non-network management, single-port POE power 30W, total POE power 120W;
USR-ISG008P (Black Gold)	Industrial-grade 8-port Gigabit POE ports, non-network management, single-port POE power 30W, total POE power 240W;
USR-ISF016P (Black Gold)	Industrial-grade 16-port Fast Ethernet POE ports, non-network management, single-port POE power 30W, total POE power 240W;
USR-ISG016P (Black Gold)	Industrial-grade 16-port Gigabit POE ports, non-network management, single-port POE power 30W, total POE power 240W;
USR-ISG1208P-SFP (Platinum)	Industrial-grade 8*Gigabit POE + 2*Gigabit fiber ports, non-network management, single-port POE power 30W, total POE power 240W;
USR-ISG108P-SFP (Black Gold)	Industrial-grade 8*Gigabit POE + 1*Gigabit fiber port, non-network management, single-port POE power 30W, total POE power 240W;
USR-ISG208P-SFP (Black Gold)	Industrial-grade 8*Gigabit POE + 2*Gigabit fiber ports, WEB network management, single-port POE power 30W, total POE power 240W;
USR-ISG216P-SFP (Black Gold)	Industrial-grade 16*Gigabit POE + 2*Gigabit fiber ports, Layer 2 network management, single-port POE power 30W, total POE power 240W;
USR-ISG224P-SFP-1U (Black Gold) Rack - Mount	Industrial-grade 24*Gigabit POE ports + 2*Gigabit fiber ports, Layer 2 network management, single-port POE power 30W, total POE power 360W;

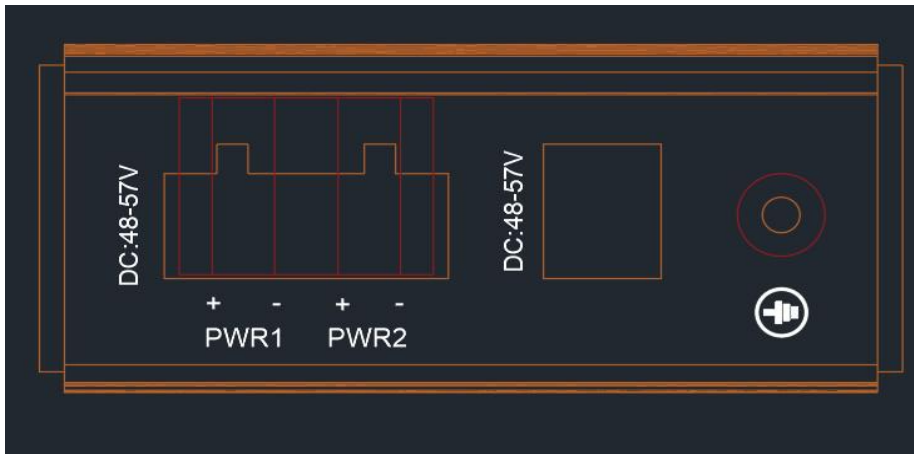
5. Interface Description

This series of switches covers 100M and 1000M models. The 100M models support 10/100Base Ethernet interfaces, while the 1000M models support 10/100/1000Base Ethernet interfaces. All ports have MDI/MDI - X self - identification function. With this function, the Ethernet port of the switch can directly connect to terminal devices through ordinary network cables without distinguishing between straight - through or crossover cables. It is recommended to select cables as needed: in strong electromagnetic interference scenarios (such as industrial cabinets), ultra - five - category shielded twisted - pair cables should be preferred.

➤ Panel Description:

PWR1 and PWR2 are power terminals and grounding screws, used for equipment grounding.

When transmitting data, the network port indicator flashes, and the power indicator is always on, indicating that the current equipment is powered normally.



➤ Power Supply Mode:

① The DC method can directly supply power through a power adapter;

② The power terminal method supports dual - power redundancy. When both power supplies are connected, only one power supply works;

*If one power supply fails, it will automatically switch to the other power supply to ensure the stable operation of the switch in industrial scenarios.

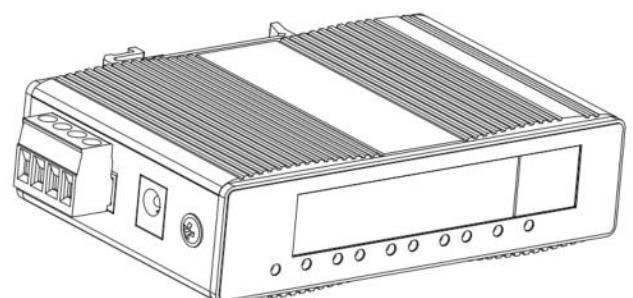
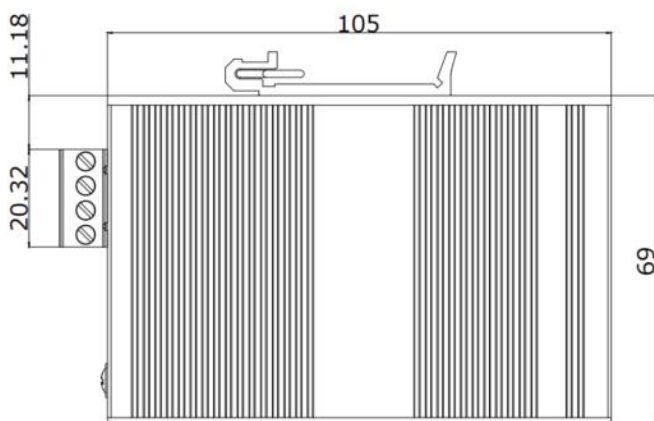
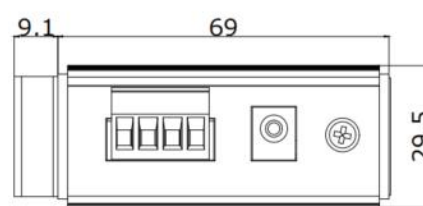
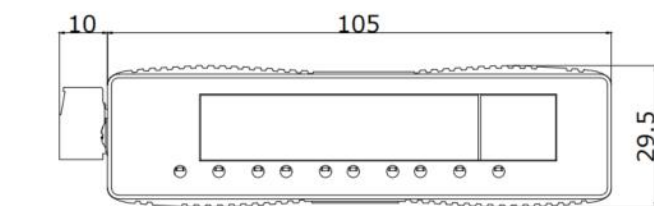
➤ Power Wiring Method:

Insert the power cord into the specified position of the 4 - core terminal block, and insert the terminal block into the standard power input port. It supports a usable power voltage standard of 48V - 57V.

(The first power supply PWR1 corresponds to P+1 and P-1 input, and the second power supply corresponds to P+2 and P-2 input of PWR2.)

Note: Please connect the positive and negative poles of the power supply according to the terminal identification, input voltage according to the voltage range (DC: 48 - 57V), and the switch can work normally with only one power supply connected.

6. Product dimensions



7. Installation Instructions

Installation Steps

1. Tilt the device:

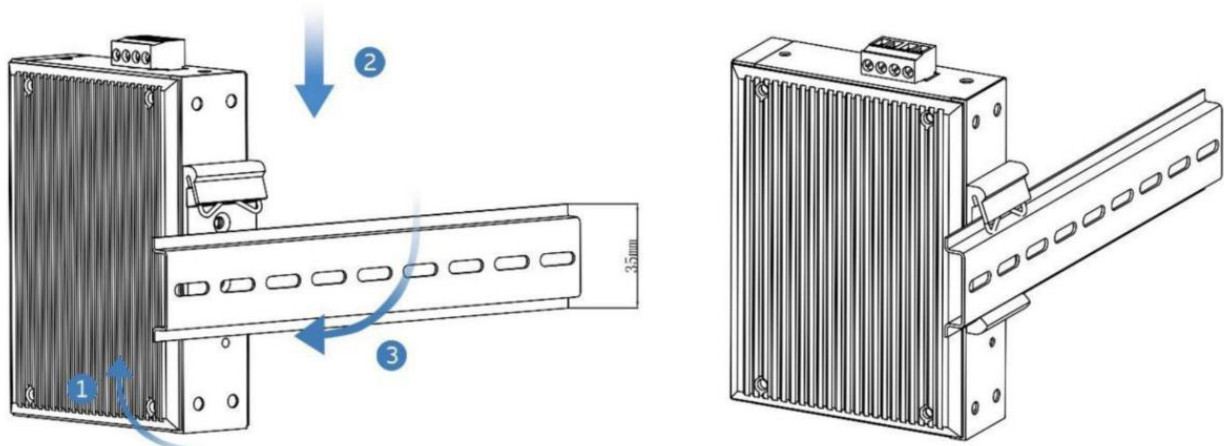
Hold the switch and tilt it backward by about 30°, align the upper buckle on the back of the device with the upper edge of the guide rail (ensure the buckle slot and the guide rail are completely fitted).

2. Press down to fix:

Keep the upper buckle locked, slowly press the switch forward and downward, so that the lower buckle automatically locks into the lower edge of the guide rail (you will hear a "click" sound, confirm that the buckle is locked).

3. Manual shaking test:

Gently push the switch left and right, forward and backward. If the device does not loosen and the buckle does not fall off, it is qualified.



Installation Precautions

To avoid equipment damage and personal injury caused by improper use, please follow the following precautions:

- To prevent equipment damage due to falling, place the equipment in a stable environment.
- When supplying power to the equipment, be sure to confirm the power supply voltage range first to avoid equipment damage caused by wrong operations.
- To reduce the risk of electric shock, ensure the equipment is well grounded in the working environment.
- Do not disassemble the equipment shell at will at any time.
- When placing the switch, avoid areas with much dust and strong electromagnetic interference.

8. Disclaimer

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9. Update History

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