PUSR®
www.pusr.com

Industrial Ethernet Switch

USR-ISG1005，USR-ISG1008,

USR-ISF1005，USR-ISF1008

User Guide

V2.0

Be Honest & Do Best

Your Trustworthy Smart Industrial IoT Partner

Content

1. Introduction

The USR-IS series are unmanaged industrial Ethernet switches launched by PUSR. The ISF series provides a 100Mbps rate while the ISG series provides a 1000Mbps rate, with options for either 5 or 8 ports.

For hardware, the switches adopt dual power, fan-less, wide temperature and voltage design, and has passed rigorous industrial standard tests, which can suit for the industrial scene environment. It can be widely used in smart city, rail transit, security surveillance, new energy, and other industrial fields.

2. Features

- Aluminum housing, effective cooling;

- Dust-proof design, IP40 protection;

- Redundant & wide power supply, DC 9.6-60V voltage input;

- Din-Rail mounting, easy to installation;

- Compact size, save your space;

- Industrial grade quality, lighting protection 6KV;

- Extreme temperature -40 ~ +85℃, designed for harsh environment;

3. Ordering Guide

Unmanaged Ethernet Switch

Model	Ethernet Port
USR-ISG1005	5 * 10/100/1000 Base-T(X) adaptive RJ45 ports
USR-ISG1008	8 * 10/100/1000 Base-T(X) adaptive RJ45 ports
USR-ISG016	16 * 10/100/1000 Base-T(X) adaptive RJ45 ports
USR-ISF1005	5 * 10/100 Base-T(X) adaptive RJ45 ports
USR-ISF1008	8 * 10/100 Base-T(X) adaptive RJ45 ports
USR-ISF016	16 * 10/100 Base-T(X) adaptive RJ45 ports

Unmanaged Ethernet Switch with PoE

Model	Ethernet Port
USR-ISF005P	5 * 10/100 RJ45 ports, 1 uplink port, 4 downlink ports IEEE802.3af/at POE+ function (port 1 to port 4)
USR-ISG005P	5 * 10/100/1000 RJ45 ports, 1 uplink port, 4 downlink ports IEEE802.3af/at POE+ function (port 1 to port 4)
USR-ISG008P	8 * 10/100/1000 RJ45 ports, IEEE802.3af/at POE+ function (port 1 to port 8)

Managed Ethernet Switch

| Model	Ethernet Port
USR-ISF216-SFP	2xGigabit SPF slot, 16x10/100M RJ45 port
USR-ISGX424-SFP	4x10Gigabit SFP slot(compatible with 1000M/2500M/10000M) 24x10/100/1000M RJ45 port

4. Specifications

Model	USR-ISF1005	USR-ISF1008	USR-ISG1005	USR-ISG1008
Switch Property				
Backplane bandwidth	1G	1.6G	10G	16G
Transmission mode	Store and forward			
MAC address	2K	2K	2K	4K
Packet Buffer Size	768 Kbits	768 Kbits	1 Mbits	1 Mbits
Ethernet Ports				
No.	5 x 10/100Mbps	8 x 10/100Mbps	5 x 10/100/1000Mbps	8 x 10/100/1000Mbps
Interface	RJ45 ports, auto MDI/MDIX, auto negotiation			
Network Media (Cable)	UTP Category 5 cable			
Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3x for flow control		IEEE 802.3 10BaseT IEEE 802.3u100BaseTX IEEE 802.3x for flow control IEEE802.3ab 1000BaseTX	
Power Supply				
Connector	1 removable 5-pin terminal blocks			
Input voltage	DC 9.6-60V			
Power consumption	<5W			
Overload Current Protection	Supported			
Anti-reverse connection protection	Supported			
Physical Characteristic				
Installation	DIN-rail mounting, desktop			
Housing	IP40 protection, aluminum			
Dimension	118*96*47.5 mm			
Weight	410g		430g	
Environmental Limit				

Operating temperature	-40~+85℃
Storage temperature	-40~+85℃
Relative humidity	5 to 95% (non-condensing)
EMC	
ESD	IEC 61000-4-2 (ESD), Level 3 Air discharge: ±8kV Contact discharge: ±6kV
EFT	IEC 61000-4-4 (EFT), Level 3
Surge	IEC 61000-4-5 (Surge), Level 3
Certification	
CE	Supported

5. Dimensions

Unit: mm
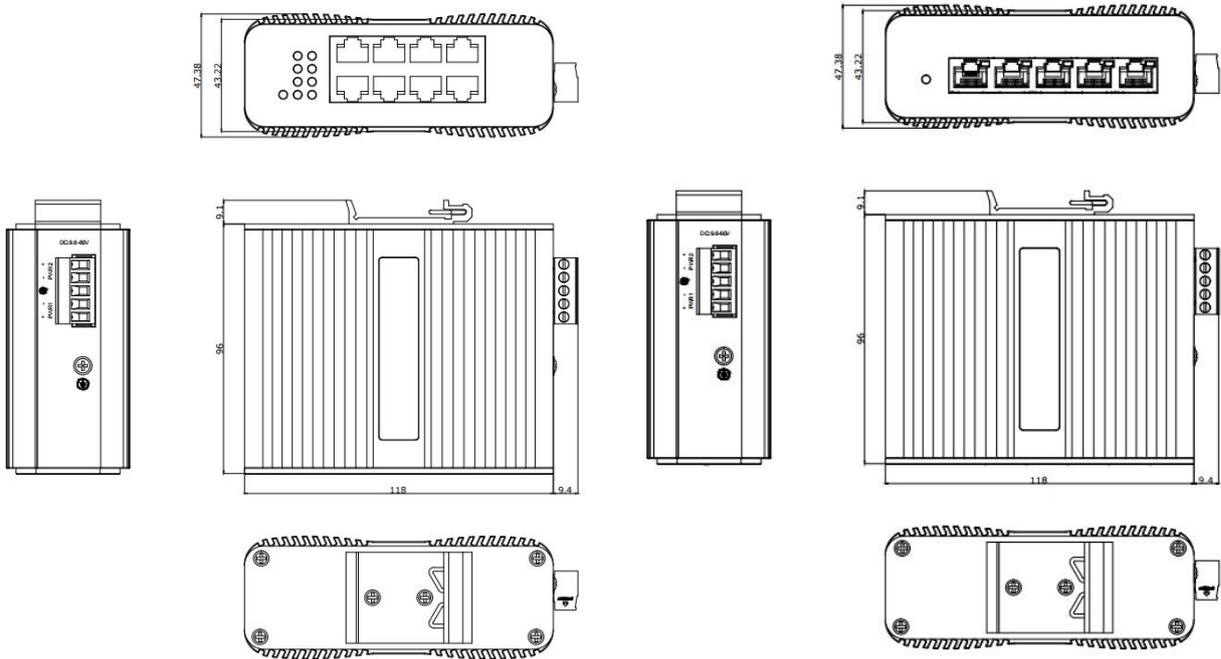
6. Interface Description

6.1. Power supply

The device supports redundant & wide power supply, DC 9.6-60V voltage input. When both power supplies are connected, only one power source operates. In the event of a failure in the operating power source, it

automatically switches to the other power source, ensuring the stable operation of the switch.

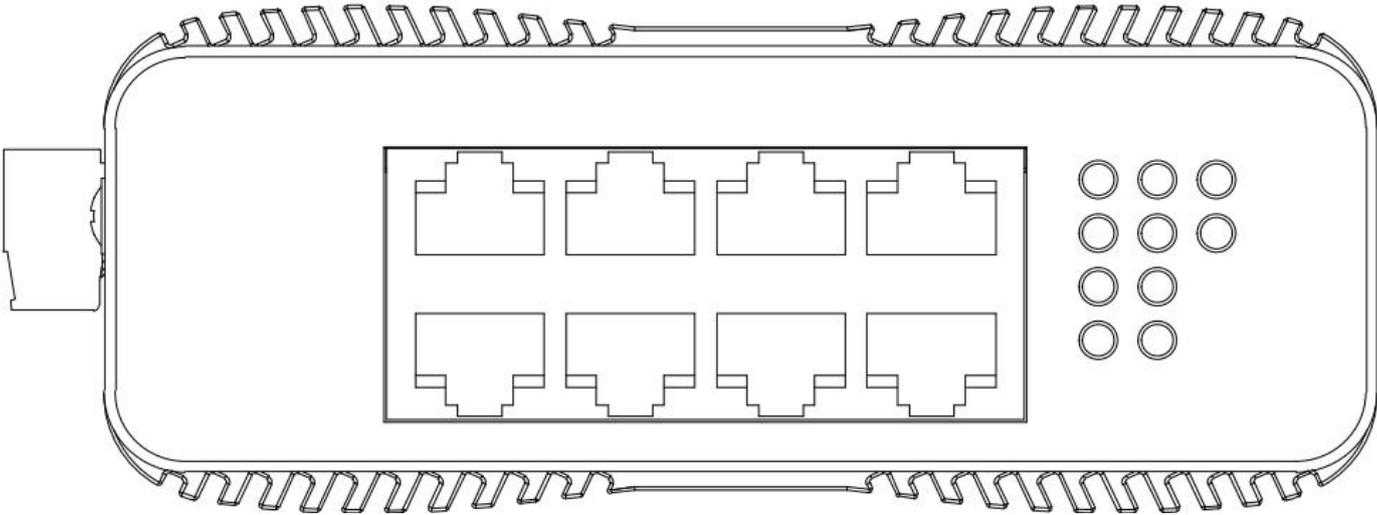*Note: The switched can work well when one of the power is connected.*

And the ground screw is used for the grounding of the device.
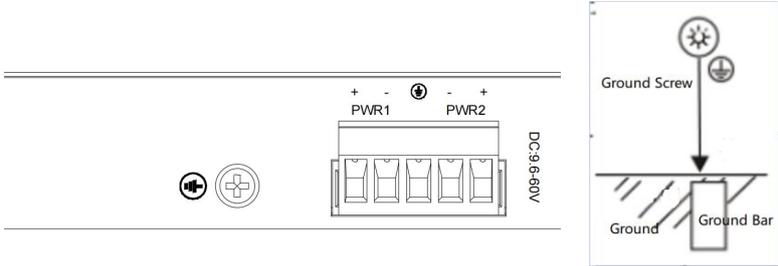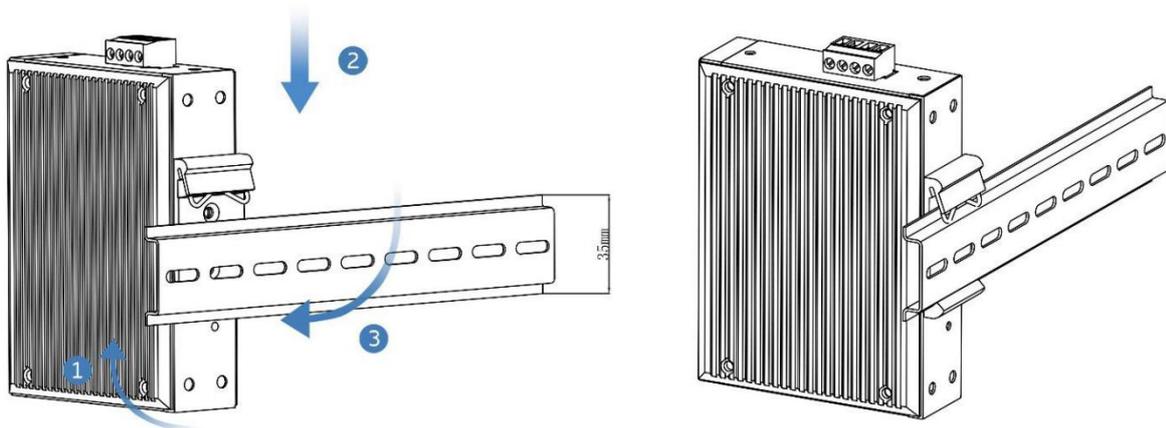

6.2. Indicator

ON: The switch is powered.

Blinking: the switch is transmitting or receiving data.

7. Installation

The product adopts 35mm standard DIN-Rail mounting which is suitable for most industrial scenes, mounting steps as follows:

Step1: Check if the DIN-Rail mounting kit is installed firmly.

Step2: Insert the bottom of DIN-Rail mounting kit (one side with spring support) into DIN-Rail, and then insert the top into DIN-Rail.

Tips: Insert a little to the bottom, lift upward and then insert to the top.

Step3: Check and confirm the product is firmly installed on DIN-Rail, then mounting ends.

Notice Before Mounting:

- To prevent damage from device falls, please place the device in a stable environment.
- When powering the device, ensure you confirm the voltage range and the polarity of the power supply to avoid incorrect operations that could damage the device.
- To reduce the risk of electric shock, ensure the device is well grounded in the working environment.
- Never arbitrarily disassemble the device casing at any time.
- When placing the switch, avoid areas with high dust and strong electromagnetic interference.

8. Contact Us

Jinan USR IOT Technology Limited

Address：Floor 12 and 13, CEIBS Alumni Industrial Building, No. 3 Road of Maolingshan, Lixia District, Jinan, Shandong, China

Official website:https://www.pusr.com

Official shop:https://shop.usriot.com

Technical support: http://h.usriot.com/

Email：sales@usriot.com

Tel：+86-531-88826739

Fax：+86-531-88826739-808

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