

# **Business Switch**

USR-SF1005, USR-SF1008, USR-SG1005, USR-SG1008

**User Manual** 



V2.0

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#### 1. Introduction

The USR-S series switches are unmanaged Ethernet switches launched by USR IoT. The ESF series provides a 100Mbps rate while the SG series provides a 1000Mbps rate, with options for either 5 or 8 ports. The adaptive port technology uses storage and forwarding technology, combined with dynamic memory allocation, to ensure efficient distribution to each port. Flow control ensures that data packets are not lost during transmission and reception. The switches are compatible with three types of network environments: 10Base-T, 100Base-TX, and 1000Base-T, and the port speed is automatically matched at 10/100/1000Mbps. The switch is designed with metal shell, this can shield electromagnetic interference and dissipates heat better than plastic cases. With a high level of integration and a compact and lightweight design, these switches are easy to operate and suitable for small and medium-sized offices and home networks.

#### 2. Features

#### **USR-SF Series:**

- Standards: IEEE802.3、IEEE802.3u、IEEE802.3x
- 5/8 10/100 Mbps RJ45 Ports, support Auto-Negotiation and Auto MDI/MDIX
- All ports have Link/Act indicators to display the working status
- Provides remote serial access over the Internet for embedded UART to ethernet module
- Plug and play, no configuration and installation required
- Low power consumption, fanless, and noiseless design
- Adopted Store-And-Forward transmission method
- External power supply, compact size, and suitable for desktop and rail installation

#### **USR-SG Series:**

- Standard: IEEE 802.3、IEEE 802.3u、IEEE802.3x、IEEE802.3ab
- Support Full duplex compliant with IEEE 802.3x standard, and half duplex Compliant with Back-pressure
   standard
- 5/8 10/100/1000 Mbps RJ45 Ports, support Auto-Negotiation and Auto MDI/MDIX
- Support BPDU Frame, EAPOL and QOS WRR queue algorithm
- All ports have Link/Act indicators to display the working status
- Support MAC address learning
- UTP ports support auto-negotiation capability allowing for automatic adjustment of transmission mode
   and speed

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Green energy saving compliant with IEEE802.3az standard



## 3. Interface

Both USR-SF and USR-SG support powered with DC Socket and terminal block.



# 4. Indicators description

Indicator	Status	Descrption			
Power	ON	Power on.			
	OFF	Power off.			
Link/Act	Blinking	Transmitting/receiving data.			
	ON Running at 100Mbps(for USR-ESF005 & USR-ESF008). Running at 1000Mbps(for USR-ESG005 & USR-ESG008).				
	OFF	<ol> <li>No device is linked to the corresponding port.</li> <li>The corresponding port is running at 10Mbps(for USR-ESF005 &amp; USR-ESF008).</li> <li>The corresponding port is running at 10/100Mbps(for USR-ESG005 &amp; USR-ESG008).</li> </ol>			



# **5. Parameters Specifications**

	Paramet	ers Specifications			
Model	USR-SF1005	USR-SF1008	USR-SG1005	USR-SG1008	
	10/100M		10/100/1000M		
Data Transfer Rate	Auto Negotiation and Auto		Auto Negotiation and Auto		
	MDI/MDIX RJ45		MDI/MDIX RJ45		
Number of Ports	5	8	5	8	
Switching Modes	Store and Forward				
Switching Capacity	1.0G	1.6G	10G	16G	
Packet Forwarding Rate	10Mbps:14880pps 100Mbps:148800pps		10Mbps:14880pps 100Mbps:148800pps 1000Mbps:1488000pps		
MAC Address Table	2К				
Network Media (Cable)	10Base-T: UTP Category 3, 5 cable				
	100Base-TX: UTP Category 5 cable				
Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE802.3az		IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE802.3az, IEEE802.3ab		
	Port: Link/Act Indicator		Port: Link/Act Indicator		
LED	100M Link/ACT: Green		1000M Link/ACT: Green		
	POWER: Red		POWER: Red		
	35mm DIN Rail Mounting				
Mounting	Flat mounting				
Dimensions	100*77*31	140*90*31 mm	100*77*31	140*00*21	
טוווופוואוטווא	mm		mm	140*90*31 mm	
Certifications	CE ROHS FCC WEEE				
	Operating temperature: -5°C~45°C				
Operating environment	Storage temperature: -10°C~70°C				
	Operating humidity: 10%~90% RH non-condensing				
	Storage humidity: 5%~90% RH non-condensing				
Power & Consumption	Input: DC 12V / 0.5A,		Input: DC 12V / 0.5A,		
	Consum	nption:<3W	Consumption:<4W		
Accessories	Power adapter (Optional), Terminal Block, Quick Start Guide				



### 6. Dimensions



#### 7. Installation

#### 1. Desktop mounting

Please place the switch on a flat surface with the ventilation holes facing upwards. Do not expose it to environments such as water, condensation, dust, etc., in order to avoid product damage.

#### 2. DIN rail mounting

Please pull down the red latch on the back of the switch and align it parallel to the standard DIN 35mm rail.

Push up the red latch until you hear a 'click' sound and check if it is installed securely.

## 8. Warranty

### 9. Contact Us

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