

USR-ISG016P Specification



16port 10/100/1000Base-TX Industrial **POE** Switch with Wide Operating Temperature



Slim Type with more Practicability and Convenience

USR-ISG016P an Industrial 16-port Fast Ethernet Switch POE, provides non-blocking wire-speed performance in harsh industrial environment. It also provides 16-port 10/100/1000BASE-TX POE interfaces delivered in an IP40 rugged, strong case with redundant power system. Its slim case is suitable for such applications as surveillance system deployments, control management and wireless service in climatically demanding environments with wide temperature range from -40°C to 85°C.

TheUSR-ISG016P series provides the flexibility to all kinds of 10/100Mbps Ethernet Media on RJ-45 port and performs highly stable fiber performance.

TheUSR-ISG016P series is packaged in a compact IP40 case that allows either DIN rail or panel mounting to have efficient usage of cabinet space. It provides an integrated power supply with a wide range of voltages for worldwide operation. It also offers dual-redundant, reversible polarity 48V DC to 57V DC power supply inputs for high availability applications requiring dual or backup power inputs.

Interface

- 16-port 10/100/1000Base-Tx RJ-45 with auto negotiation and auto-MDI/ MDI-X function
- 16 port with 802.3af/at POE+ (port 1 to port 16)

Industrial Conformance

- 12V to 52V DC, redundant power input
- 48-57VDC (POE)
- -40°C to 85°C operating temperature
- IP40 metal case
- Supports 6KV DC Ethernet ESD protection
- Supports 6KV DC EFT protection for power line
- Free Fall, Shock and Vibration Stability
- DIN-rail and wall-mountable hardware design

Layer 2 Features

- Complies with the IEEE 802.3, IEEE 802.3u Fast Ethernet standard
- Auto-MDI / MDI-X detection
- Store-and-Forward Switching Architecture
- Features Store-and-Forward mode
- Automatic (half-duplex) and (full-duplex)
- Supports packet size of up to 1522bytes
- Automatic source address learning and aging

Applications

Transport Networking

Industrial Ethernet Switch,USR-ISG016P series, offers high reliability and security to guarantee the continuous industrial operation in harsh environments such as **control cabinet of transportation, factory floors** or and **environments with extremely low or high temperature**. In the industrial networking environments, each networked device is required to keep running continuously in the hazardous status. If industrial equipment fails to connect to the network, it might influence the entire operation of industrial systems and thus cause incredibly financial loss. With theUSR-ISG016P Industrial Ethernet Switch, which complies with all the requirements of industrial applications, customers may enjoy high reliability, fast recovery capability, and safe Ethernet network operation.

Industrial Area Switch for Data Collection and Forwarding

TheUSR-ISG016P's IP40-rated metal case is particularly designed for the most heavy industrial demanding environments, such as factories, harbors, warehouses, and more. When installed at these establishments, it can enhance the work performance of these establishments by speedily transferring incoming and outgoing data.

Specifications

Product	USR-ISG016P
10/100/1000Base-TX Port	16 port RJ-45 auto-MDI / MDI-X
POE port	16 port with IEEE802.3af/at POE+ function (port 1 to port 16)
Performance Specification	Bandwidth: 20 Gbps Packet Buffer Memory:512K Packet Forwarding Rate:148800pps/port MAC Address Table: 2 K
Installation	DIN rail kit and wall mount ear
Maximum Frame Size	1522bytes packet size
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex
Enclosure	IP40 slim type metal case
LED Indicator	Power: Red Ethernet: Yellow POE: Green
Power Input	12 to 52V DC redundant power POE :48-57V DC
Power Consumption	3 watts / 10BTU (maximum)
Protection	ESD (Ethernet): 6KVDC Surge (Power): 6KVDC
Network Protocols	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u;100Base-TX/FX; IEEE802.3z 100Base-X; IEEE802.3ab 1000Base-T; IEEE802.3x;
Network cables	10BASE-T: Cat3,4,5 UTP(≤100 meter) 100BASE-TX: Cat5 or later UTP(≤10meter) 1000BASE-TX: Cat6 or later UTP(≤100 meter)
POE	POE standard : IEEE802.3af/at PoE ports: 1-16 port support PoE Power Output: 15.4 watts (IEEE 802.3af)

	Max. 30 watts (IEEE 802.3at) Power Pin Assignment: 1/2+;3/6- Power Type: End-span(Mid-span optional)
Industry Standard	FCC CFR47 Part 15, EN55022/CISPR22, Class A EMS: IEC61000-4-2 (ESD): $\pm 8\text{kV}$ (contact), $\pm 15\text{kV}$ (air) IEC61000-4-3 (RS): 10V/m (80MHz-2GHz) IEC61000-4-4 (EFT): Power Port: $\pm 4\text{kV}$; Data Port: $\pm 2\text{kV}$ IEC61000-4-5 (Surge): Power Port: $\pm 2\text{kV/DM}$, $\pm 4\text{kV/CM}$; Data Port: $\pm 2\text{kV}$ IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz) IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)
Certification	CE, RoHS, FCC
Dimensions (W x D x H)	175.6 x 135 x 45.5mm
Weight	Product Weight: 0.52KG Packing Weight: 0.62KG
Working Environment	Working temperature: $-40\sim 85^{\circ}\text{C}$; Storage temperature: $-40\sim 85^{\circ}\text{C}$ Relative Humidity: 5%~95 % (no condensation)

Dimensions



