

USR-ISG216P-SFP

16-Port 10/100/1000BASE-TX+2G SFP Managed Industrial PoE Switch



USR-ISG216P-SFP is a hardened 18-port Industrial PoE Switch, provides non-blocking wire-speed performance in harsh industrial environment. It also provides 16-port 10/100/1000BASE-TX RJ45 PoE +2G SFP 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.

The USR-ISG216P-SFP provides the flexibility to all kinds of 10/100/1000Mbps Ethernet Media on RJ-45 port and performs highly stable fiber performance.

The USR-ISG216P-SFP is packaged in a compact IP40 case with DIN rail installation. It 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
- Port 1-16 with PoE output, each max.30W PoE budget: 480W max.
- 2-port gigabit SFP uplink

Industrial conformance

- 48V to 57V DC, redundant power input
- -40°C to 80°C operating temperature
- IP40 aluminum housing
- Supports 6KV DC Ethernet ESD protection
- Supports 6KV DC EFT protection for power line
- Free Fall, Shock and Vibration Stability
- DIN-rail hardware design

Specifications:

ROBOT

Model No.	USR-ISG216P-SFP
10/100/1000Base-TX Port	16-Port RJ-45 auto-MDI / MDI-X
PoE Specification	PoE Standard: IEEE802.3af/ IEEE802.3at
	PoE ports:1-16 port
	Power Output: Max. 15.4 watts (IEEE 802.3af) Max. 30 watts (IEEE 802.3at)
	PoE port Auto detect af/at devices
	Output Voltage: DC48V
	Power Pin Assignment:1/2+;3/6-
	Power Type: End-span(Mid-span optional)
1000Base-FX Port	2G SFP Slot
Performance Specification	Bandwidth: 56Gbps Packet Buffer Memory: 12Mbit Packet Forwarding Rate: 41.7Mpps MAC Address Table: 8K
Installation	DIN rail
Maximum Frame Size	10240bytes packet size
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex
Enclosure	IP40 Aluminum housing
LED Indicator	Power: Red Run: Green Fiber: Green Ethernet: Yellow PoE:Green
Power Input	48 to 57V DC redundant power
Power Consumption	< 15watts (excluded PoE)
Surge protection	± 4KV

Network Protocols	IEEE802.3 10BASE-T; IEEE802.3i 10Base-T; IEEE802.3u;100Base-TX/FX; IEEE802.3ab 1000Base-T; IEEE802.3z 1000Base-X; IEEE802.3x;
Network cables	10BASE-T: Cat3,4,5 UTP(≤100 meter) 100BASE-TX: Cat5 or later UTP(≤100 meter) 1000BASE-TX: Cat6 or later UTP(≤100 meter)
Industry Standard	FCC CFR47 Part 15,EN55032 Class A IEC61000-4-2 (ESD): ±8kV (contact), ±12kV (air) IEC61000-4-3 (RS): 10V/m (80~1000MHz) IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz) IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)
MTBF	300,000hours
Dimensions (W x D x H)	175.6 x 135 x 45.5 mm
Weight	Product Weight: 1.18KG Packing Weight: 1.3KG
Working Environment	Working temperature: -40~85℃ ; Storage temperature: -40~85℃ Relative Humidity: 5%~95 %(no condensation)

Software:

Port Features	IEEE 802.3x Flow control
	Interface counters
	Storm Control
Link Aggregation	Static Aggregation
	Dynamic Aggregation, LACP
	Supports up to 8 aggregation groups, each group up to 8 ports Support source MAC, destination MAC, source destination MAC, source IP, destination IP, source destination IP routing strategy
MAC Table Management	Support
Forwarding mode	Support IVL forwarding mode
Static MAC Address	Support
MAC Address Binding	Support
MAC Address Filtering	Support
Mirror	Port-based Mirror
Spanning Tree	IEEE802.1d STP
	IEEE802.1w RSTP
	IEEE802.1s MSTP
ERPS (G.8032)	Single Ring, Sub-Ring, Multi-Ring
	Load balance
	Recovery Time < 50ms
GVRP	Supported
QINQ	VLAN-based QinQ
LLDP	LLDP
	LLDP-MED
Loop Protection	Supported
VLAN	4094 VLAN
	Port-based VLAN
	GVRP
Protocol VLAN	MAC-based VLAN
	IP Subnet-based VLAN
Voice VLAN	Static entry
	LLDP-MED
Port Isolate	Support
IGMP	Snooping IGMP V1 Snooping
	IGMP V2 Snooping
	IGMP V3 Snooping
	Source Port Check

	IGMP Fast Leave
	IGMP Filter
MLD Snooping	MLD V1 Snooping
	MLD V2 Snooping
	Source Port Check
	MLD Fast Leave
	MLD Filter

Security

ACL	ACL (IP Standard ACL), IPv4/IPv6
	MAC extend ACL
	IP extend ACL
	L2, L3, L4 fields match
	log, redirection, mirroring, speed limit
QoS	QoS Class, Remarking
	SP, WRR queue scheduling
	Ingress port-based rate-limit
	Ingress priority-based rate-limit
	Egress port-based rate-limit
	Egress queue-based rate-limit
	Policy-based QoS
	Storm Control
	8 queues per port
Dot1x	Port Access Control
	User Access Control
	MAC-address Access Control
AAA	Support 802.1x
	Support RADIUS
	Supports authentication, authorization, and accounting through RADIUS server

Management

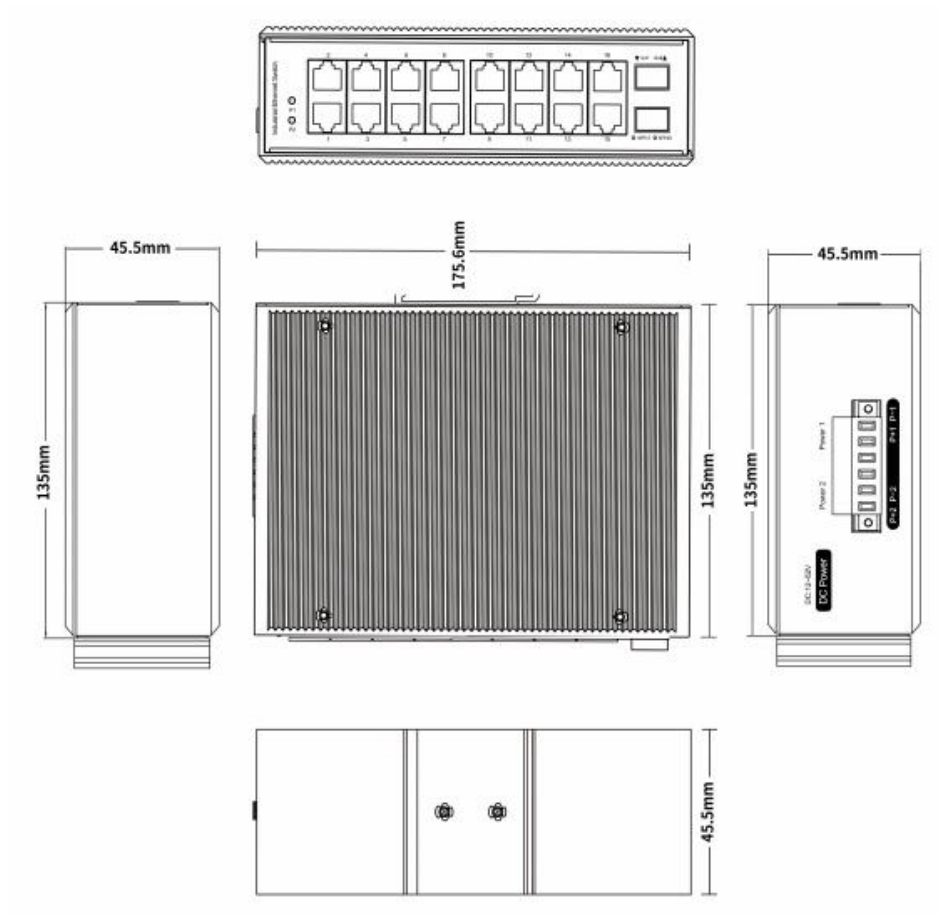
User management	Password protection
SNMP	SNMP V1/V2c/V3
RMON	Statistics Group
	History Group
	Alarm Group
	Events Group
Web management	HTTP V1.1, HTTPS
Firmware Upgrade	Reversion Upgrade
IPv4/IPv6	Support
CLI	Support

Syslog/Debug	Support
Diagnosis	Ping (IPv4), ping (IPv6)
	Trace route(IPv4)
	Trace route(IPv6)

Management

NTP	NTP Client
DHCP	DHCPv4 Client, DHCPv6 Client
DHCP Snooping	DHCP snooping table
	Trust Port
IPv6 DHCP-Guard	Support
Telnet	Telnet Server
TFTP	TFTP Client
SSH	SSH Server

Dimensions



Ordering Information

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