

# USR-ISGX408-SFP

## 8 Port gigabit +4 Port 10G SFP L3 Managed Industrial Switch



### Din-rail Aluminum Industrial Switch

USR-ISGX408-SFP switch is a high performance 8 Port 10/100/1000Mbps + 10G SFP+ L3 core switch. It provides Static routing and dynamic routing with advanced hardware processing capacity. The machine adopts modular design, which supports up to 4 Port 10G SFP+, and retains the expansion ability to further support 10GE when realizing gigabit convergence or access. It supports IPv4/IPv6 hardware double stack and line speed forwarding, so that customers can easily cope with the coming IPv6 era, which provides high capacity exchange capacity. USR-ISGX408-SFP switch has the operating temperature of -40℃ ~ 80℃, has the super firmness to adapt to all kinds of harsh environment, can also be very convenient to install in the machine room cabinet. The rack-mounted characteristics and wide temperature operation make the switch a plug and play industrial-grade device, providing a reliable and convenient solution for users to network their Ethernet devices.

### Strong processing ability

USR-ISGX408-SFP switch is based on the powerful and stable processing power of VCore-III MIPS-based CPU

USR-ISGX408-SFP provides up to 1.2Tbps of switching capacity port full speed filtering and forwarding 406Mpps

To ensure that the trunk network of large traffic data without blocking Forwarding.

### Product features:

- Data control: Supports 802.3x full-duplex flow control and network storm suppression
- Redundant network: supports STP, RSTP, MSTP and ERPS
- Redundancy backup: supports the virtual route redundancy protocol VRRP
- Multicast management: Support IGMP Snooping V1, V2, and V3
- VLAN: supports IEEE 802.1Q vlans to effectively isolate broadcast domains

Link aggregation: Support static/dynamic link aggregation, provide perfect bandwidth utilization

- QOS: Support COS/DSCP, 4 queues, support WRR/SP scheduling mode
- Security management: Security management: supports ACL and 802.1x
- Management: Supports WEB, CLI, and SNMP management

Monitoring and maintenance: Support port mirroring, interface status monitoring, log management

## Specifications:

ROBOT

Model No.	USR-ISGX408-SFP
Interface	8-Port 10/100/1000Mbps RJ45  4-Port 10G SFP+  1-Port console
Performance Specification	Bandwidth(switch capacity): 1.2Tbps  Packet Buffer Memory:32Mbit  Packet Forwarding Rate: 406Mpps  MAC Address Table: 32K
Installation	Din-rail
Maximum Frame Size	10240bytes
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: X1~X4(Green)  Ethernet:Yellow
Power Input	12 to 52V DC redundant power
Power Consumption	< 18watts
Surge protection	±4KV
Network Protocols	IEEE 802.3ad, link aggregation protocols  IEEE802.3 10BASE-T;  IEEE802.3i 10Base-T;  IEEE802.3u;100Base-TX/FX;  IEEE802.3ab 1000Base-T;  IEEE802.3z 1000Base-X;  IEEE 802.3ae,10G  IEEE 802.3x, Full duplex Ethernet data link Laminar flow control  IEEE 802.3az,EEE high efficient Ethernet

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 x45.5mm
Weight	Product Weight: 0.8KGS Packing Weight: 0.9KGS
Working Environment	Working temperature: -40~80℃ ; Storage temperature: -40~80℃ Relative Humidity: 5%~95 %( no condensation)

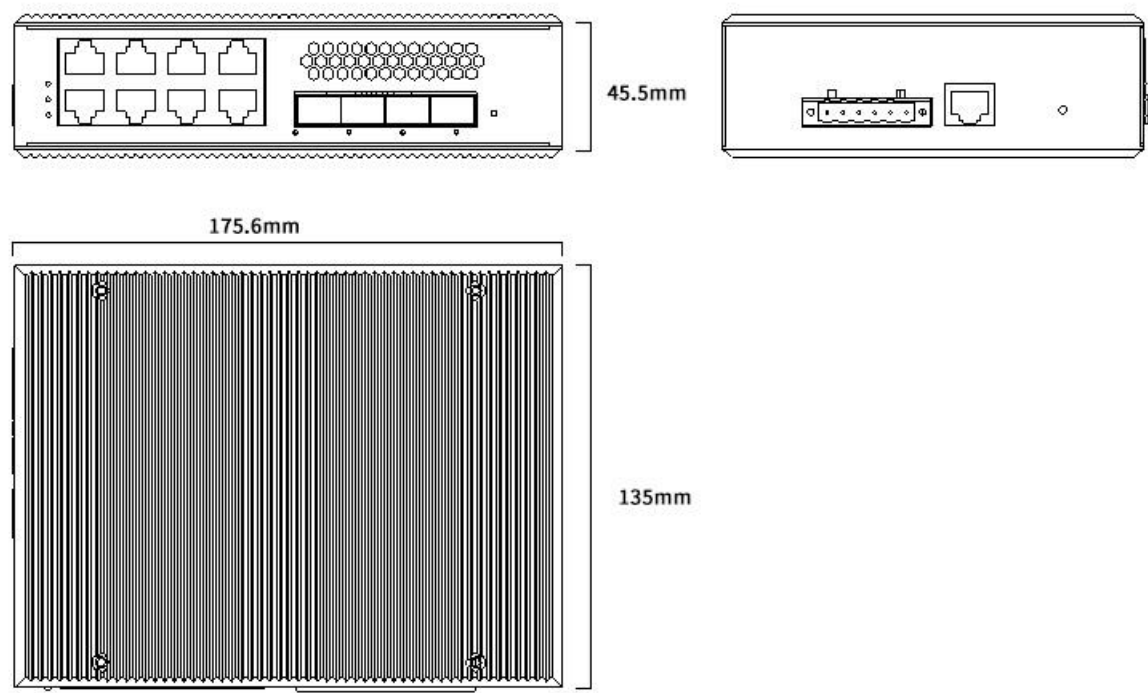
## Management features:

Interface	IEEE802.3X (Full-duplex), Port temperature protection setting Port green Ethernet Energy-saving setting Broadcast storm control based on port speed. The speed limit of the message flow in the access port. The minimum particle size is 64Kbps.
Layer 3 Features	L3 network management, IPV4/IPV6 management L3 soft routing forwarding, Static route, Default route @ 128 pcs, APR@1024pcs
VLAN	4K VLAN based on port, IEEE802.1q VLAN based on the protocol VLAN based on MAC VLAN based on IP Voice VLAN, QinQ configuration

	Port configuration of Access, Trunk, Hybrid
Port Aggregation	LACP, Static aggregation Max 14 aggregation groups and 16 ports per group.
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Industrial Ring	G.8032 (ERPS), Recovery time less than 20ms
Network Protocol	250 Ring at most, Max 250 devices per ring. Multicast
Multicast	MLD Snooping v1/v2, Multicast VLAN Registration (MVR) IGMP Snooping v1/v2, Max 1024 multicast groups, Fast log out
Port Mirroring	Bidirectional data mirroring based on port
QoS	SP (Strict Priority) WFQ (Weighted Fair Queuing) WRR (Weighted Round Robin) Random Early Detect (RED) Weighted Random Early Detection (WRED) Head Of Line Best-Effort Service First come first served 802.1p Cos/Tos, QOS Differentiated Service
ACL	Port-based Issuing ACL, ACL based on port and VLAN L2 to L4 packet filtering, matching first 80bytes message. Provide ACL based on MAC, Destination MAC address, IP Source, Destination IP, IP Protocol Type, TCP/UDP Port, TCP/UDP Port Range, and VLAN, etc.
Security	Support IP ACL, MAC ACL, Vlan ACL, support ACL based on L3 L4 IP+MAC Port binding Support IP Source Guard, RP Detection Support IEEE 802.1x port verification, support Radius
DHCP	DHCP Client, DHCP Snooping, DHCP Server, DHCP Relay
IP routing	Supports port-based input/output bandwidth management. Supports static routes. IPV6 Supports the virtual route redundancy protocol VRRP.

	Dynamic routes such as RIP, RIPvng, OSPF, and OSPFv3 are supported.
System maintenance	<p>Supports configuration file uploading and downloading. Upload the upgrade package.</p> <p>Supports factory restore on WEB, Supports the system log function.</p> <p>Support Ping 、tracert、 cable detection and other diagnostic functions.</p> <p>Supports WEB management (HTTP and HTTPS).</p> <p>Supports CLI management. Supports Telnet remote management.</p> <p>Supports SSH 2.0. Supports SNMP network management.</p> <p>Support RMON; Supports NTP clients. Support PTP (1588v2)</p>

**Dimensions**



**Ordering Information**

USR-ISGX408-SFP	8-Port 10/100/1000Mbps + 4-Port 10G SFP L3 Managed Industrial Switch
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