

# Ultra-High-Speed Industrial Routing (PoE) Switch for large-scale industrial networks

## RS752XG / RP752XG

Industrial 10G Layer 3 48G+4x10G SFP+ Gigabit Routing Switch



The RS752XG is a high-performance managed industrial Ethernet switch equipped with 4 10G SFP uplink ports and 48 10/100/1000Base-X SFP slots, supporting PoE via DC input. Designed with a fanless thermal architecture, wide operating temperature range, and high ingress protection, the RS752XG delivers exceptional reliability in harsh environments, including high/low temperature conditions and lightning-prone areas.

This switch integrates rich Layer 2 and Layer 3 features, including advanced security functions (ACL, IP Source Guard, Port Security, Dying Gasp), IPv4/IPv6 routing capabilities (ECMP, VRRP, OSPFv2, IS-IS), and supports ERPS (Ethernet Ring Protection Switching) to enhance network resilience and flexibility.

With its industrial-grade design and extensive protocol support, the RS752 is ideal for demanding applications such as railway systems, smart cities, intelligent transportation, outdoor surveillance, and other mission-critical deployments.



### Features & Benefits

#### 10G High Throughput Ethernet Switching

- 52-port Ethernet, including 48-port Gigabit Ethernet and 4-port 1/10GbE dual speed SFP+
- Outstanding throughput and flexibility for high-density and ultra high speed connection
- **144Mbps** maximum forwarding rate
- **336Gps** switching capacity
- **16K** MAC address table
- **4K** VLAN
- **12MBytes** packet buffer
- **10K Bytes** Jumbo Frame
- **<10us** forwarding delay
- Store-and-Forward with non-blocking Switch Fabric

#### Management Features

- Auto-Installation for simple plug-and-play deployment
- Various configuration paths, including WebGUI, CLI filtering, Telnet/SSH, SNMP and RMON
- Network administrators can manage the switch through an industry-standard CLI and configure remotely through SNMP from MIB and private MIB, which significantly reduce operating costs
- Port Mirroring: SPAN, RSPAN

#### Optional PoE

- 48 Ports 802.3af/at PoE with PoE management
- DC48-58V Power Input
- 300W Total PoE Budget

#### Enhanced Cyber Security for Critical Applications

- 240 ACL entries, IP Standard ACL / ACL6, MAC Extended ACL / ACLv6, IP Extended ACL / ACLv6
- IP Source Guard, DHCP Snooping, DDoS, Port Security
- **802.1X/RADIUS**

#### Dynamic Routing with Redundancy Protection

- IPv4 and IPv6 routing: OSPF, OSPFv2 and ECMP
- VRRP guarantees sustainable routing in a single point of failure

#### Industrial Design for High Reliability

- Wide operation temperature range -25°C~+70°C
- IP40 Protection with fanless design
- Surge Protection of Power and Ethernet Ports
- High EMC/EMI standards



## Interfaces

### System LED

- 1 x Power
- 1 x Status

### Fanless IP40 Protection



### RS232 Console

- 1-port RJ45

### 10G SFP+

- 4-port 1/10G SFP

### Gigabit Ethernet

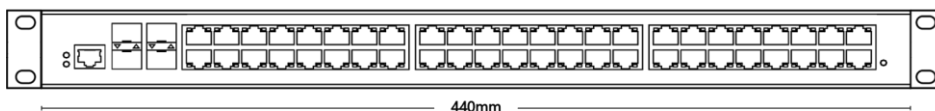
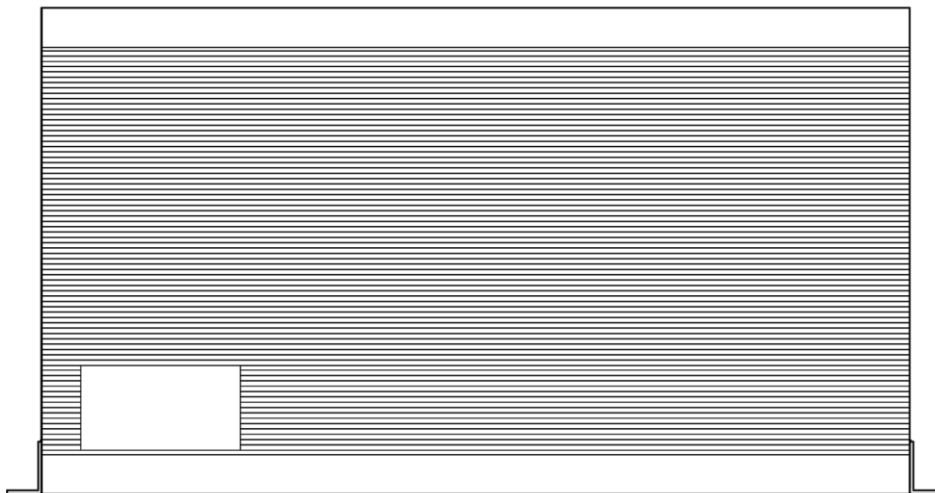
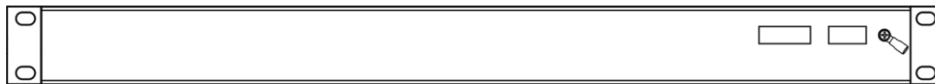
- 48-port 10/100/1000M RJ45

### Gigabit Ethernet PoE (RP752XG)

- 48-port 10/100/1000M RJ45 PoE



## Dimensions



Technology	
<b>Standard</b>	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX Fast Ethernet
	IEEE 802.3ab 1000Base-T Gigabit Ethernet copper
	IEEE 802.3z Gigabit Ethernet Fiber
	IEEE 802.3ae 10 Gigabit Ethernet over fiber
	IEEE 802.3x Flow Control and back-pressure
	IEEE 802.1p Class of Service (CoS)
	IEEE 802.1Q VLAN and GVRP
	IEEE 802.1Q Double Tag VLAN (QinQ)
	IEEE 802.1D Rapid Spanning Tree (RSTP)
	IEEE 802.1S Multiple Spanning Tree Protocol (MSTP)
	IEEE 802.3ad Link Aggregation Control Protocol (LACP)
	IEEE 802.1x Port based Network Access Protocol
Performance	
<b>Switch Technology</b>	Store and Forward Technology with Non-Blocking Switch Fabric
<b>Number of MAC Address</b>	16K
<b>Packet Buffer Memory</b>	12Mbytes
<b>Jumbo Frame</b>	10 Kbytes
<b>VLAN</b>	4K VLANs
<b>VLAN ID</b>	1~4093
<b>Class of Service</b>	8 Priority Queues per Port
Interface	
<b>Ethernet Port</b>	48 x 10/100/1000Base-T RJ45, Auto Negotiation 4 x 1/10G SFP+, Auto Negotiation/DDM
<b>System LED</b>	1 x Power: Green On 1 x System Status: Ready (Green On), Failure (Amber On)
<b>Ethernet Port LED</b>	Link (Green On), Activity (Green Blinking), Speed 1000M(Amber On), Speed 100M (Green On) , Speed 10M (Off)
<b>SFP LED</b>	Link (Green On), Activity (Green Blinking)
<b>Console</b>	1 x RS232 for System Configuration. Baud Rate: 115200.n.8.1
Power Requirement	
<b>Input Voltage</b>	Non-PoE : DC12-58V ; AC100~240V 50-60HZ PoE : DC48-58V
<b>Power Consumption</b>	Non-PoE<35W PoE<400W

Software	
<b>Management Interface</b>	Console: Command Line Interface (CLI) Management Port: Telnet, SNMP, CGI WebGUI
<b>Time Management</b>	Network Time Protocol NTP
<b>Network Management</b>	IPv4/IPv6, SNMP v1/v2c/v3/Trap, MIBs, RMON, TFTP, System Log, SMTP, Management IP
<b>Traffic Management</b>	Flow Control, 64 Link Aggregation, VLAN, QinQ, Class of Service, Traffic Prioritize, IGMP Snooping v1/v2/v3, Rate Control, Port Mirror SPAN, RSPAN
<b>L3 Routing</b>	IPv4/IPv6 routing, RIP, OSPF v2, ECMP, VRRP, IGMPv1/v2/v3
<b>Security</b>	IEEE 802.1X/RADIUS, SSH, SSL, ACL L2/L3/L4, IPv6 ACL L3/L4, IP Source Guard, DHCP Snooping
<b>Redundancy</b>	Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSTP), ERPS
Mechanical	
<b>Installation</b>	19", 1U Rackmount
<b>Enclosure Material</b>	Steel Metal IP40
<b>Dimension</b>	440 x 44 x 245 mm (W x H x D)
<b>Weight</b>	3.6kg with package
Environmental	
<b>Operating Temperature &amp; Humidity</b>	-25°C~70°C , 10%~95% Non- Condensing
<b>Storage Temperature</b>	-40°C~85°C
<b>MTBF</b>	100,000 hours
<b>Warranty</b>	3 years
Standard	
<b>Surge protection of Power</b>	AC: IEC 61000-4-5 Level 3 (4KV/2KV) (1.2/50us) DC: IEC 61000-4-5 Level X (8KV/8KV) (1.2/50us)
<b>Surge protection of Ethernet ports</b>	IEC 61000-4-5 Level 3 (4KV/2KV) (10/700us)
<b>Radiated Immunity Test</b>	IEC 61000-4-3 Level 3 (10V/m)
<b>Electrical Fast Transient / Burst Immunity Test</b>	IEC 61000-4-4 Level 3 (1V/2V)
<b>conducted immunity</b>	IEC 61000-4-6 Level 3 (10V/m)
<b>Power Frequency Magnetic Field Immunity</b>	IEC 61000-4-8 Level4 (30A/m)
<b>Voltage Dips</b>	IEC 61000-4-11 Level3 (10V)
<b>ESD protection</b>	IEC 61000-4-2 Level 4 (8K/15K)



## Ordering Information

Model Name	Description
<b>RS752XG-4XGF-AC-E</b>	Industrial 48G+4 10G SFP+ Gigabit Routing Switch, AC Power, EU plug
<b>RS752XG-4XGF-AC+DC-E</b>	Industrial 48G+4 10G SFP+ Gigabit Routing Switch, AC+DC Power, EU plug
<b>RP752XG-24GP4XGF-2DC</b>	Industrial 48G+4 10G SFP+ Gigabit Routing PoE Switch, 48xPoE, dual DC 48-58V
<b>Package List</b>	
1 x Product Unit (Without SFP transceiver)	
2 x Rackmount Ears	
1 x RS232 Console Cable	
1 x Power Cord	
1 x Quick Installation Guide	



## Optional Accessory

Item	
<b>SFPXGM03</b>	SFP+, 10Gbps, LC, multi, DDM, 300Meter, 0~70°C
<b>SFPXGM03T</b>	SFP+, 10Gbps, LC, multi, DDM, 300Meter, -40~85°C
<b>SFPXGS10</b>	SFP+, 10Gbps, LC, single, DDM, 10KM, 0~70°C
<b>SFPXGS10T</b>	SFP+, 10Gbps, LC, single, DDM, 10KM, -40~85°C