

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

RS752 v2 / RP752

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



The RS752 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 RS752 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

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

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

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

Optional PoE

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



Interfaces

System LED

- 1 x Power
- 1 x Status



RS232 Console

- 1-port RJ45

10G SFP+

- 4-port 1/10G SFP

Fanless IP40 Protection

Gigabit Ethernet

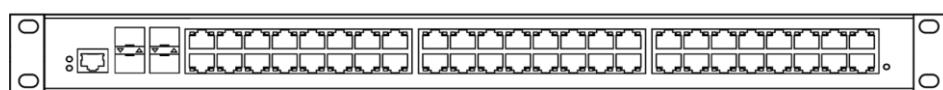
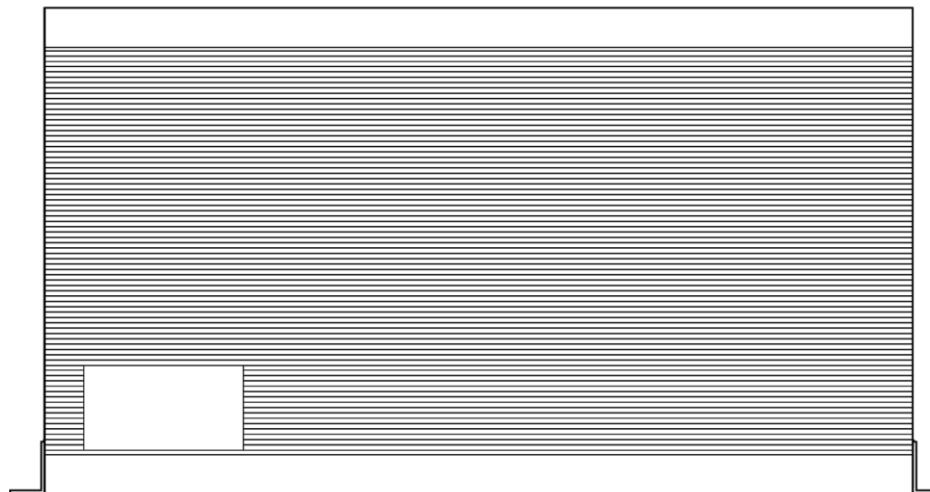
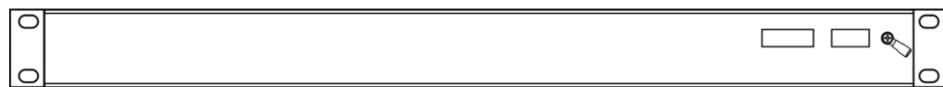
- 48-port 10/100/1000M RJ45

Gigabit Ethernet PoE (RP752)

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



Dimensions



440mm

44mm



Technology	
Standard	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	
Switch Technology	Store and Forward Technology with Non-Blocking Switch Fabric
Number of MAC Address	16K
Packet Buffer Memory	12Mbytes
Jumbo Frame	10 Kbytes
VLAN	4K VLANs
VLAN ID	1~4093
Class of Service	8 Priority Queues per Port
Interface	
Ethernet Port	48 x 10/100/1000Base-T RJ45, Auto Negotiation 4 x 1/10G SFP+, Auto Negotiation/DDM
System LED	1 x Power: Green On 1 x System Status: Ready (Green On), Failure (Amber On)
Ethernet Port LED	Link (Green On), Activity (Green Blinking), Speed 1000M(Amber On), Speed 100M (Green On) , Speed 10M (Off)
SFP LED	Link (Green On), Activity (Green Blinking)
Console	1 x RS232 for System Configuration. Baud Rate: 115200.n.8.1
Power Requirement	
Input Voltage	Non-PoE : DC12-58V : AC100~240V 50-60HZ PoE : DC48-58V
Power Consumption	Non-PoE<35W PoE<400W

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



Ordering Information

Model Name	Description
RS752-AC-E	Industrial 48G+4 10G SFP+ Gigabit Routing Switch, AC Power, EU plug
RS752-AC+DC-E	Industrial 48G+4 10G SFP+ Gigabit Routing Switch, AC+DC Power, EU plug
RP752-48GP-2DC	Industrial 48G+4 10G SFP+ Gigabit Routing PoE Switch, 48xPoE, dual DC 48-58V
Package List	
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
SFPXGM03
SFP+, 10Gbps, LC, multi, DDM, 300Meter, 0~70°C
SFPXGM03T
SFP+, 10Gbps, LC, multi, DDM, 300Meter, -40~85°C
SFPXGS10
SFP+, 10Gbps, LC, single, DDM, 10KM, 0~70°C
SFPXGS10T
SFP+, 10Gbps, LC, single, DDM, 10KM, -40~85°C