

Ultra-High-Speed Routing Switch for large-scale industrial networks

RS752

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

The RS752 is a high-performance industrial rackmount 10G Layer 3 Routing Switch equipped with 48 Gigabit ports and 4 10GbE SFP+ ports. Multicast routing at Layer 3 provides fast data packet flow between distributed IP subnets. Enhanced Cyber Security features including ACL for L2/L3/L4, IPv6 ACL for L3/L4, IP Source Guard, DAI, DHCP Snooping. With four 10GbE SFP+ ports, RS752 guarantees ultra-high speed and extended fiber distance, which make it an ideal backbone routing switch for large-scale industrial enterprise installations, where transmitting large amounts of data, voice, and high-quality video across networks is crucial.



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
- **131Mbps** maximum forwarding rate
- **176Gps** switching capacity
- **32K** MAC address table
- **4MBytes** packet buffer
- 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
- LLDP topology control
- Software and Configuration download/upload: TFTP, FTP, SCP, SFTP
- Port Mirroring: SPAN, RSPAN

High availability from hardware and software perspectives

- Hot-swappable power supplies
- Out-of-band management reduce operating costs
- Up to 8 ports per link aggregation group (LACP) and up to 64 groups
- Up to 32 paths ECMP routing for load balancing and redundancy
- Multi-chassis Link Aggregation

Enhanced Cyber Security for Critical Applications

- ACL for L2/L3/L4, IPv6 ACL for L3/L4
- IP Source Guard, DAI, DHCP Snooping
- **802.1X/RADIUS**, TACACS+
- Port MAC secure learning
- Private VLAN/IP Security/Port Security
- Management IP filtering (SNMP/Web/Telnet/SSH)

Dynamic Routing with Redundancy Protection

- IPv4 and IPv6 routing: OSPF, OSPFv3, BGP4, and ECMP
- Multicast routing features for IGMP v1/v2/v3, PIM-DM/SM, MLD v1/v2 and PIM-DM6/SM6
- VRRP guarantees sustainable routing in a single point of failure



Interfaces

System LED

- 1 x Power
- 1 x Status

Hot Swappable Power Module

Gigabit Ethernet

- 48-port 10/100/1000M RJ45

10G SFP+

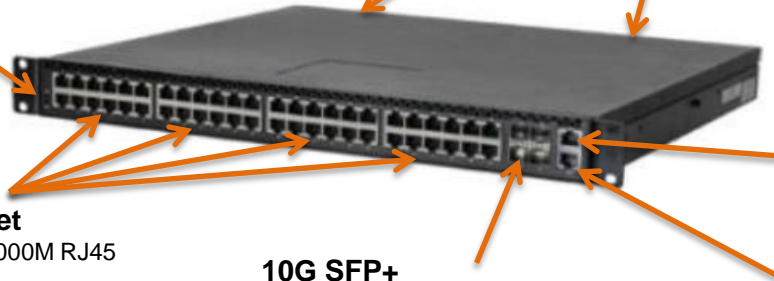
- 4-port 1/10G SFP

RS232 Console

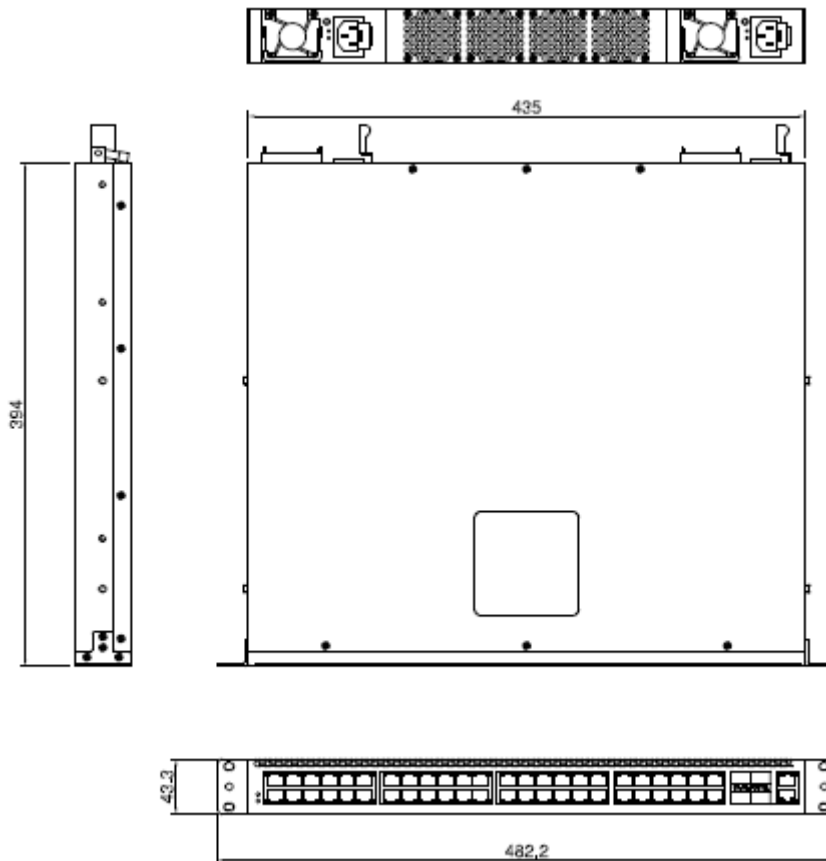
- 1-port RJ45

Management Port

- 1-port RJ45



Dimensions



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 802.1AB Link Layer Discovery Protocol (LLDP)
	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	32K
Packet Buffer Memory	4Mbytes
Jumbo Frame	12 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 2 x PSU(Back): Normal (Green On), Power/Fan Abnormal (Amber 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)
Management Port	1 x Out-of-Band 10/100/1000Base-T RJ45, Auto Negotiation
Console	1 x RS232 for System Configuration. Baud Rate: 115200.n.8.1
Power Requirement	
Power Connector	2 x AC Power Connectors for Redundant Power (Hot Swappable)
Input Voltage	100~240VAC, 50/60Hz
Power Consumption	95W (L2 64B line rate; 10G-SR optics, 100% fan duty)

Software	
Management Interface	Console: Command Line Interface (CLI) Management Port: Telnet, SNMP, CGI WebGUI
Time Management	Simple Network Time Protocol (SNTP) v4
Network Management	IPv4/IPv6, SNMP v1/v2c/v3/Trap, MIBs, RMON, LLDP, DHCP relay/client/Option 82, TFTP, System Log, SMTP
Traffic Management	Flow Control, Port Trunk/802.3ad LACP, VLAN, Private VLAN, GVRP, GMRP, QinQ, Class of Service, Traffic Prioritize, IGMP Snooping v1/v2/v3, Rate Control, Port Mirror
L3 Routing	IPv4/IPv6 routing, RIPv1/v2, RIPng, OSPF v2/v3, ECMP, BGP4, Policy-based Routing, VRRP, IGMPv1/v2/v3, Mroute, MLDv2, DVMRP, PIM-DM6/SM6
Security	IEEE 802.1X/RADIUS, Port MAC Secure Learning, Management IP, TACACS+, Management VLAN, SSH, SSL, ACL L2/L3/L4, IPv6 ACL L3/L4, IP Source Guard, DAI, DHCP Snooping
Redundancy	Rapid Spanning Tree Protocol (RSTP), Multiple Spanning Tree Protocol (MSTP), Multi-Chassis Link Aggregation Group (MC-LAG)
Mechanical	
Installation	19", 1U Rackmount
Enclosure Material	Steel Metal
Dimension	435 x 42.8 x 393 mm (W x H x D)
Weight	7.15kg with package
Environmental	
Operating Temperature & Humidity	-10°C~55°C , 10%~95% Non- Condensing
Storage Temperature	-40°C~85°C
MTBF	>180,000 hours
Warranty	3 years
Standard	
EMC	EMI: IEC/EN 61000-3-2/3, IEC/EN55022 FCC Class A, CE Radiation, Conduction EMS:IEC/EN 55024 IEC61000-4-2/3/4/5/6/8/11
Vibration	IEC 60068-2-6/36
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32



Ordering Information

Model Name	Description
RS752-E	Industrial 48G+4 10G SFP+ Gigabit Routing Switch, dual AC Power, EU plug
RS752-U	Industrial 48G+4 10G SFP+ Gigabit Routing Switch, dual AC Power, US plug
	Package List
	1 x Product Unit (Without SFP transceiver)
	2 x Rackmount Ears
	1 x RS232 Console Cable
	2 x Power Cord
	1 x Quick Installation Guide



Optional Accessory

Item	
SFPGEM05	SFP, 1000Mbps, LC, multi, 550M, 0~70°C
SFPGEM05T	SFP, 1000Mbps, LC, multi, 550M, -40~85°C
SFPGEM05D	SFP, 1000Mbps, LC, multi, DDM, 550M, 0~70°C
SFPGEM05DT	SFP, 1000Mbps, LC, multi, DDM, 550M, -40~85°C
SFPGEM2	SFP, 1000Mbps, LC, multi, 2KM, 0~70°C
SFPGEM2T	SFP, 1000Mbps, LC, multi, 2KM, -40~85°C
SFPGEM2D	SFP, 1000Mbps, LC, multi, DDM, 2KM, 0~70°C
SFPGEM2DT	SFP, 1000Mbps, LC, multi, DDM, 2KM, -40~85°C
SFPGES10	SFP, 1000Mbps, LC, single, 10KM, 0~70°C
SFPGES10T	SFP, 1000Mbps, LC, single, 10KM, -40~85°C
SFPGES10D	SFP, 1000Mbps, LC, single, DDM, 10KM, 0~70°C
SFPGES30	SFP, 1000Mbps, LC, single, 30KM, 0~70°C
SFPGES30T	SFP, 1000Mbps, LC, single, 30KM, -40~85°C
SFPGES30D	SFP, 1000Mbps, LC, single, DDM, 30KM, 0~70°C
SFPXGM03D	SFP+, 10Gbps, LC, multi, DDM, 300M, 0~70°C
SFPXGS10D	SFP+, 10Gbps, LC, single, DDM, 10KM, 0~70°C
SFPGES10-A	SFP, 1000Mbps, LC, single, 10KM, BiDi TX-1310nm RX-1550nm, 0~70°C
SFPGES10-B	SFP, 1000Mbps, LC, single, 10KM, BiDi TX-1550nm RX-1310nm, 0~70°C
SFPGES10T-A	SFP, 1000Mbps, LC, single, 10KM, BiDi TX-1310nm RX-1550nm, -40~85°C
SFPGES10T-B	SFP, 1000Mbps, LC, single, 10KM, BiDi TX-1550nm RX-1310nm, -40~85°C
SFPGES10D-A	SFP, 1000Mbps, LC, single, DDM, 10KM, BiDi TX-1310nm RX-1550nm, 0~70°C
SFPGES10D-B	SFP, 1000Mbps, LC, single, DDM, 10KM, BiDi TX-1550nm RX-1310nm, 0~70°C
SFPGEM05	SFP, 1000Mbps, LC, multi, 550M, 0~70°C
SFPGEM05T	SFP, 1000Mbps, LC, multi, 550M, -40~85°C