

# **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

# **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)

#### **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

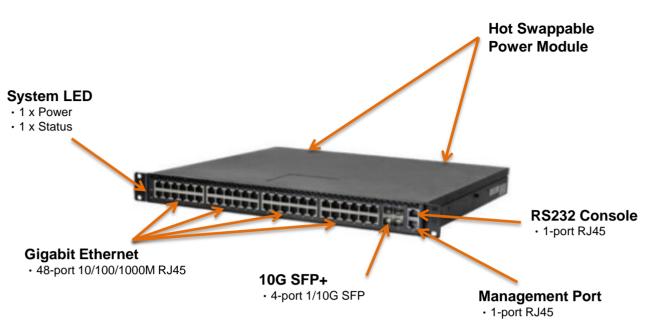
#### **Dynamic Routing with Redundancy Protection**

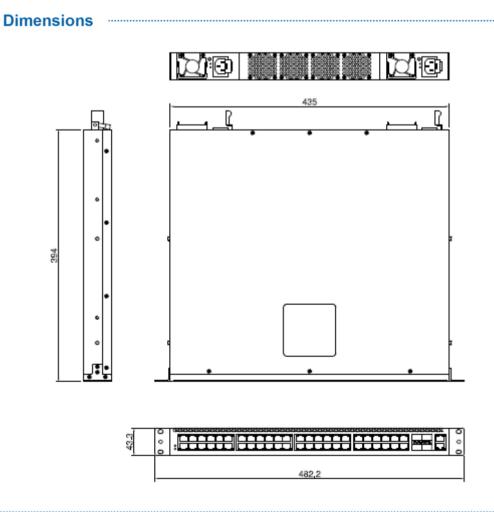
- · IPv4 and IPv6 routing: OSPF, OSPFv3, BGP4, and **ECMP**
- · Multicast routing features for IGMP v1/v2/v3, PIM-DM/SM, MLD v1/v2 and PIM-DM6/SM6
- · VRRP guarantees sustainable routing in a single point of failure

### 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









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, OSFP 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
<b>Enclosure Material</b>	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



Item	
SFP-4111-10	SFP+, 10Gbps, LC, single, DDM, 10KM, 0~70°C
SFP-4121-300M	SFP+, 10Gbps, LC, multi, DDM, 300M, 0~70°C