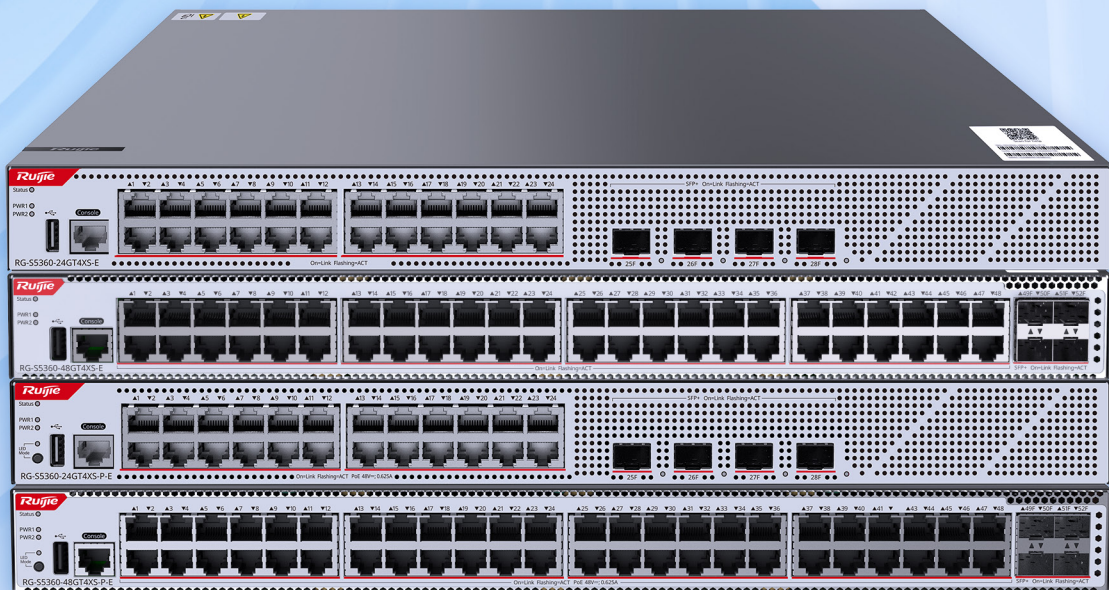


RG-S5360-E Series

Gigabit Switches



01 Product Overview

RG-S5360-E series switches are next-generation gigabit Ethernet switches launched by Ruijie Networks according to its design of security, high efficiency, energy saving, and independent innovation. This series can provide full gigabit access and flexibly extensible 10GE uplink data exchange. With a new hardware architecture and Ruijie's latest RGOS12.X modular OS, the RG-S5360-E provides more resource entries, faster hardware processing, and better user experience.

02 Product Appearance

RG-S5360-24GT4XS-E



RG-S5360-48GT4XS-E



RG-S5360-24GT4XS-P-E



RG-S5360-48GT4XS-P-E



03 Product Highlights

- Multiple port types — full gigabit access and flexible, extensible 10GE uplink, PoE/PoE+ power supply, faster speed, and experience enhancement.
- Supports VSU, delivering flexible networking.
- Is a Layer 3 access switch that supports Layer 3 protocols, and SDN.
- Provides multiple network management methods, achieving simple and easy network maintenance.
- Resistance to harsh environments and excellent anti-corrosion performance. The PoE models adopt a wide temperature design and can run stably in the temperature range from -40°C to +65°C (-40°F to +149°F).
- Uses RGOS modular operating system to provide more entries, faster hardware processing, and better operation experience.
- Provides open and programmable RGOS modular operating system. Basic functions are incorporated into the main version, and custom functions are released in app mode, ensuring stability of the basic functions.
- Rectifies faults related to processes online in seconds, without interrupting network operation.
- Supports Python that allows applications across platforms.
- Online upgrade and extension of functions to ensure nonstop services.
- Uses two flash chips to store BOOT software (system boot program), achieving hardware-level BOOT redundancy and avoiding switch startup failures caused by flash chip failures.

04 Product Features

Sound Security Protection Policies

The RG-S5360-E supports Address Resolution Protocol (ARP) spoofing prevention in multiple modes. The RG-S5360-E offers protection against ARP attacks by recording clients' authenticated IP and MAC addresses, regardless of whether they obtain addresses automatically from the DHCP server or use static IP addresses. When it receives ARP packets from hosts, it compares the addresses in the packet with the recorded IP and MAC addresses and forwards only those packets whose addresses match, while discarding any forged ones. This ensures that ARP spoofing is prevented outside the network and that network users are protected.

Additionally, the RG-S5360-E proactively defends against various Distributed Denial of Service (DDoS) attacks that can affect a network's availability. Virus attacks on computers due to network openness can occur, and attackers may also launch attacks on network devices and servers for different purposes. In common ARP flooding attacks, the gateway can fail to respond to request packets, while ICMP flooding attacks can cause network devices to crash due to high CPU load. DHCP request flooding attacks can exhaust the addresses of the DHCP server and result in failures to allocate IP addresses to authenticated users.

The RG-S5360-E provides an advanced hardware CPU

protection mechanism: CPU protect policy (CPP). It classifies data traffic sent to the CPU, processes the traffic by queue priority, and rate-limits the bandwidth as required. This protection mechanism also fully protects the CPU from being occupied by unauthorized traffic, defends against malicious attacks, and prevents resource consumption, thereby ensuring the security of the CPU and switch itself.

The RG-S5360-E adopts the Network Foundation Protection Policy (NFPP) technology to rate-limit ARP packets, ICMP request packets, DHCP Request messages, and other packets sent from users to networks. It discards packets of which the rate exceeds the threshold, identifies attack behaviors, and isolates users who launch attacks. This ensures network stability.

DHCP snooping enables the RG-S5360-E to receive DHCP Response messages only from trusted ports and prevent spoofing from unauthorized DHCP servers. With DHCP snooping, it dynamically monitors ARP packets, checks users' IP addresses, and discards invalid packets that do not match binding entries, thereby effectively preventing ARP spoofing and source IP address spoofing.

VSU

The RG-S5360-E supports Virtual Switching Unit (VSU).

VSU enables multiple physical devices to be connected through aggregate links and virtualized into one logical device. By using the same IP address, Telnet process, and CLI for management, along with automatic version check and configuration, network administrators can manage just one logical device, thereby enhancing work efficiency.

Simplified management: The network administrator can manage multiple switches uniformly because there is no need to connect separately to each switch for configuring and managing them.

Simplified network topology: A VSU serves as a switch within a network and eliminates Layer 2 loops and MSTP configurations by connecting peripheral devices through aggregate links. Various control protocols can run on the VSU.

Fault rectification within milliseconds: A VSU connects to peripheral devices through aggregate links. If a fault occurs on one device or member link in the VSU, data and services can be switched to another member link within 50 ms to 200 ms.

High scalability: User devices can be added to or removed from a virtualized network, without affecting normal operation of other devices.

Increase in return on investment (ROI): Aggregate links used for connecting the VSU to peripheral devices realize link redundancy and load balancing, fully leveraging all network devices and bandwidth resources. Any 10G port can be used to build a VSU through data transmission cables, without additional cabling and expansion cards. Moreover, the types of ports and cables are not limited. All this protects the ROI.

High Reliability

Wide Temperature Design

The RG-S5360-E series PoE switches adopt a wide temperature design and can run stably at a temperature range from -40°C to +65°C (-40°F to +149°F). This delivers superior network performance in extremely cold and hot environments, meeting the application demands in extreme environments.

Nano Coating Protection

The advanced nano-coating is applied on the PCBs of the RG-S5360-E series switches, which improves the product durability by 30%. The switches offer multiple protective functions such as anti-corrosion, salt tolerance, and anti-sulfurization. The RG-S5360-E can run properly for a long time in environments with high humidity and salt spray level. Therefore, the RG-S5360-E is ideal for coastal areas and scenarios with high industrial corrosion risks.

Software-Driven Redundancy and Recovery

The RG-S5360-E supports STP (IEEE 802.1D), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s) to achieve fast

convergence, improve the fault tolerance capability, and ensure stable network operation and link load balancing. It effectively utilizes network channels to improve utilization of redundant links.

The Virtual Router Redundancy Protocol (VRRP) ensures network stability for the switch.

The Rapid Link Detection Protocol (RLDP) enables the RG-S5360-E to quickly detect link connectivity and unidirectional optical links. The port loop detection function helps the RG-S5360-E to prevent network failures caused by loops due to unauthorized port connections with hubs.

The RG-S5360-E supports the Ethernet Ring Protection Switching (ERPS) technology, which is a Layer 2 link redundancy protocol designed for the core Ethernet. The control device blocks loops and restores links, and non-control devices directly report their link status to the control device, without processing from other non-control devices. Therefore, loop elimination and service recovery time of ERPS is faster than that of STP. ERPS implements link restoration within milliseconds.

When STP is disabled, the Rapid Link Protection Protocol (RLDP) can still provide basic link redundancy and millisecond-level fault rectification faster than STP.

With the Bidirectional Forwarding Detection (BFD), the switches are able to detect links within milliseconds, and quickly converge routing and other services through the correlation with upper-layer routing protocols, ensuring the continuity of services.

Energy Efficiency

Ruijie integrates multiple energy-saving designs into the RG-S5360-E. The RG-S5360-E reduces loud noise produced by deployment in offices and solves excessive energy consumption resulted from the large-scale deployment of access devices.

In addition, the RG-S5360-E adopts the next-generation hardware architecture as well as advanced energy-efficient circuit design and components, to significantly save energy and lower noise. It is equipped with variable-speed axial fans to intelligently control the fan speed based on the ambient temperature, which reduces the power consumption and noise while ensuring stable device operation.

The RG-S5360-E provides automatic and energy-saving PoE modes.

SDN

The RG-S5360-E supports OpenFlow 1.3, and can collaborate with Ruijie's Software-Defined Networking

(SDN) controller to easily build a large-scale Layer 2 or Layer 3 network. It allows the network to be smoothly upgraded to an SDN network and provides access control, visualized O&M, and other SDN features. It greatly reduces network O&M costs while significantly simplifying network management.

Easy Network Maintenance

The RG-S5360-E supports routine network diagnosis and maintenance based on SNMP, RMON, Syslog, and USB-based backup log and configuration. A network administrator can use various management and maintenance modes such as command line interface (CLI), web network management, Telnet, and CWMP-based zero-touch configuration to facilitate device management.

An LED mode button is available on the panel of the switch. You can press this button to check the current communication status and PoE status of all ports on the switch.

gRPC-based telemetry enables the RG-S5360-E to periodically collect information such as the CPU and memory.

IPv4/IPv6 Dual-stack Multi-layer Switching

The RG-S5360-E hardware supports both IPv4 and IPv6 dual stacks, as well as multi-layer line-rate switching in order to differentiate and process packets of each protocol effectively. With flexible IPv6 network communication solutions, the RG-S5360-E can meet various IPv6 network demands such as planning or maintenance. The RG-S5360-E supports a wide range of IPv4 routing protocols, covering IPv4 static routing, RIP, OSPFv2, IS-ISv4, and BGP4. Fitting for different network environments, one can select appropriate routing protocols for flexible network building. Additionally, the RG-S5360-E also supports abundant IPv6 routing protocols such as IPv6 static routing, RIPng, OSPFv3, IS-ISv6, and BGP4+. These protocols can be flexibly selected to either upgrade an existing network to IPv6 or establish a new one.

05 Product Specifications

Hardware Specifications

Port Specifications

Port specifications	RG-S5360-24GT4XS-E	RG-S5360-48GT4XS-E	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
Fixed service port	24 x 10/100/1000BASE-T ports 4 x 1GE/2.5GE/10GE SFP+ ports	48 x 10/100/1000BASE-T ports 4 x 1GE/2.5GE/10GE SFP+ ports	24 x 10/100/1000BASE-T ports, supporting PoE/PoE+ 4 x 1GE/2.5GE/10GE SFP+ ports	48 x 10/100/1000BASE-T ports, supporting PoE/PoE+ 4 x 1GE/2.5GE/10GE SFP+ ports
Module slot	2 x power module slots			
Power module	PA70IB		PA600IP-F PA1000IP-F (supporting mixed insertion)	
Fixed management port	1 x RJ45 console port			
USB	1 x USB 2.0 port			

System Specifications

System specifications	RG-S5360-24GT4XS-E	RG-S5360-48GT4XS-E	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
System packet forwarding rate ^{*1}	115 Mpps	158 Mpps	115 Mpps	158 Mpps

System specifications	RG-S5360-24GT4XS-E	RG-S5360-48GT4XS-E	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
System switching capacity ^{*2}	154 Gbps	211 Gbps	154 Gbps	211 Gbps
CPU	Dual-core CPU, each core with the clock speed of 1.0 GHz			
Real-time clock (RTC)	Supported			
BootROM	16 MB (storing boot software for 1+1 boot redundancy)			
Flash memory	512 MB			
Memory	1GB DDR4			
Switch buffer	4 MB			
Number of MAC addresses	16,000			
ARP table size	4,000			
ND table size	4,000			
Number of IPv4 unicast routes	6,000			
Number of IPv4 multicast routes	1,000			
Number of IPv6 unicast routes	2,000			
Number of IPv6 multicast routes	750			
Number of ACEs	Ingress: 1,750 Egress: 800			
Number of IGMP groups	1,000			
Number of MLD groups	750			
Number of VSU members	8			

^{*1} means the system's packet forwarding rate.

^{*2} means the system's switching capacity.

Power Supply and Consumption

Power supply and consumption	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
Power supply	2 x pluggable power modules	
Power module redundancy	1+1 redundancy	
Power input	RG-PA70IB (AC input): Rated input voltage: 100 V AC to 240 V AC, 50/60 Hz Maximum input voltage: 90 V AC to 264 V AC, 47 Hz to 63 Hz Maximum input current: 2 A	
Maximum output power	RG-PA70IB: 70 W	
Maximum power consumption	25 W	30 W
Energy saving	Supported	

Power supply and consumption	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
Power supply	2 x pluggable power modules	
Power module redundancy	Only when the PoE load of the whole device is less than PoE output power of single power supply and dual power supplies are used, redundancy is supported.	
Power input	RG-PA600I-P-F (AC input): - Rated input voltage: 100 V AC to 240 V AC, 50/60 Hz - Maximum input voltage: 90 V AC to 264 V AC, 47 Hz to 63 Hz - Maximum input current: 8 A RG-PA1000I-P-F (AC input 1): - Rated input voltage: 100 V AC to 130 V AC, 50/60 Hz - Maximum input voltage: 90 V AC to 143 V AC, 47 Hz to 63 Hz - Maximum input current: 12 A RG-PA1000I-P-F (AC input 2): - Rated input voltage: 200 V AC to 240 V AC, 50/60 Hz - Maximum input voltage: 180 V AC to 264 V AC, 47 Hz to 63 Hz - Maximum input current: 8 A	
Maximum output power	RG-PA600I-P-F: 600 W RG-PA1000I-P-F: 100 V AC to 130 V AC: 930 W 200 V AC to 240 V AC: 1000 W Note: When the ambient temperature is higher than 55°C (131°F), the maximum output power is reduced by 50%.	
PoE port	Ports 1 to 24 support PoE/PoE+ (IEEE802.3af/at) power supply	Ports 1 to 48 support PoE/PoE+ (IEEE802.3af/at) power supply
PoE power cable pairs	Mode A (1-2, 3-6 pairs)	
PoE output power	Each PoE port provides up to 30 W of power. The maximum power depends on the configured power supply. 1 x RG-PA600I-P-F: 370 W 2 x RG-PA600I-P-F: 740 W; 1 x RG-PA1000I-P-F: 740 W; 2 x RG-PA1000I-P-F: 1480 W; a maximum output of 720 W over 24 ports (30 W x 24) Note: The maximum number of powered devices supported by the switch is determined by the available power of the switch and the actual power consumption of each device.	Each PoE port provides up to 30 W of power. The maximum power depends on the configured power supply. 1 x RG-PA600I-P-F: 370 W 2 x RG-PA600I-P-F: 740 W; 1 x RG-PA1000I-P-F: 740 W; 2 x RG-PA1000I-P-F: 1480 W; a maximum output of 1440 W over 48 ports (30 W x 48) Note: The maximum number of powered devices supported by the switch is determined by the available power of the switch and the actual power consumption of each device.
Maximum power consumption	35 W (without PoE load) 750 W (full PoE load)	45 W (without PoE load) 1485 W (full PoE load)
Energy saving	Supported	

Dimensions and Weight

Dimensions and weight	RG-S5360-24GT4XS-E	RG-S5360-48GT4XS-E	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
Unit dimensions (W x D x H)	442mm x 420 mm x 43.6 mm (17.40 in. x 16.53 in. x 1.72 in.)			
Rack height	1 RU			
Unit weight	4.0 kg (8.82 lbs)	4.2 kg (9.26 lbs)	4.1 kg (9.04 lbs)	4.55 kg (10.03 lbs)
Mounting	Mounting on a workbench or in a rack (cabinet)			

Environment and Reliability

Environment and reliability	RG-S5360-24GT4XS-E	RG-S5360-48GT4XS-E	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
Temperature	Operating temperature: 0°C to 45°C (32°F to 113°F) at an altitude range of 0 m to 1,800 m (0 ft. to 5,905.51 ft.) Note: At an altitude between 1,800 m (5,905.51 ft.) and 5,000 m (16,404.20 ft.), every time the altitude increases by 220 m (721.78 ft.), the maximum temperature decreases by 1°C (1.8°F). Storage temperature: -40°C to +70°C (-40°F to +158°F)		Operating temperature: -40°C to +65°C (-40°F to +149°F) at an altitude range of 0 m to 1,800 m (0 ft. to 5,905.51 ft.) Note: At an altitude between 1,800 m (5,905.51 ft.) and 5,000 m (16,404.20 ft.), every time the altitude increases by 220 m (721.78 ft.), the maximum temperature decreases by 1°C (1.8°F). Storage temperature: -40°C to +70°C (-40°F to +158°F)	Operating temperature: -40°C to +65°C (-40°F to +149°F) at an altitude range of 0 m to 1,800 m (0 ft. to 5,905.51 ft.) Note: At an altitude between 1,800 m (5,905.51 ft.) and 5,000 m (16,404.20 ft.), every time the altitude increases by 220 m (721.78 ft.), the maximum temperature decreases by 1°C (1.8°F). When three or four 80-km long-reach optical transceivers are configured, the operating temperature range is -40°C to +50°C (-40°F to +122°F). Storage temperature: -40°C to +70°C (-40°F to +158°F)
Humidity	Operating humidity: 10% to 90% RH (non-condensing) Storage humidity: 5% to 95% RH (non-condensing)			
Altitude	Operating altitude: -500 m to +5,000 m (-1640.42 ft. to +16,404.20 ft.) Storage altitude: -500 m to +5,000 m (-1640.42 ft. to +16,404.20 ft.)			
Mean time between failure (MTBF)	207,962 hours (about 23 years)	208,926 hours (about 23 years)	209,714 hours (about 23 years)	200,253 hours (about 22 years)
Fan	Fanless	2x fixed fan module		
Heat dissipation	Fanless design, natural cooling	Left-to-rear, front-to-rear		
Acoustic noise	SPL: fanless, quiet, < 20 dB	SPL at ambient temperature of 27°C (80.6°F): 36 dB	SPL at ambient temperature of 27°C (80.6°F): 36 dB (30% PoE load, 2 RG-PA1000I-P-F power modules, adjusted fan speed)	SPL at ambient temperature of 27°C (80.6°F): 36 dB (30% PoE load, 2 RG-PA1000I-P-F power modules, adjusted fan speed)
Power module hot swapping	Supported			
USB hot swapping	Supported			
Cable hot swapping	Supported by all ports			
Fan monitoring	Fanless design	PID-based multi-level speed adjustment Fan speed control (manual configuration not supported) Fan failure alarming		
Temperature monitoring	Supported			
ESD	ESD contact/air discharge: 6 kV/8 kV ESD susceptibility contact/air discharge: 8 kV/15 kV			
Surge protection	Service port: common mode 10 kV Power port: common mode 6 kV, differential mode 6 kV			

Certifications and Regulatory Compliance

Certifications and regulatory compliance	RG-S5360-24GT4XS-E	RG-S5360-48GT4XS-E	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
Safety regulation	IEC 62368-1			
EMC regulation	EN 300386, EN 55032 Class A, EN 55035, EN IEC 61000-3-2, EN 61000-3-3, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11			
RoHS	European RoHS Directive 2011/65/EU & Amendment(EU) 2015/863			

Software Specifications

Feature	RG-S5360-E Series
Ethernet switching	Jumbo frame (maximum length: 9,216 bytes)
	IEEE 802.3az EEE
	IEEE 802.1Q (4,000 VLANs)
	Voice VLAN
	Super VLAN and private VLAN
	MAC address-based VLAN, interface-based VLAN, protocol-based VLAN, and IP subnet-based VLAN
	GVRP
	Basic QinQ
	Selective QinQ
	STP, RSTP, and MSTP
	ERPS (G.8032)
	LLDP/LLDP-MED
IP service	ARP
	DHCP client, DHCP relay, and DHCP server
	DHCP snooping
	DNS
	DHCPv6 client, DHCPv6 relay, and DHCPv6 server
	DHCPv6 snooping
	Neighbor Discovery (ND) and ND snooping
IP routing	Static routing
	RIP and RIPng
	OSPFv2 and OSPFv3
	BGP4 and BGP4+
	IPv4 and IPv6 VRF
	IPv4 and IPv6 PBR
Multicast	IGMP v1/v2/v3, and IGMP proxy
	IGMP v1/v2 snooping
	PIM-DM, PIM-SM, and PIM-SSM
	MSDP
	MLD v1/v2
	MLD snooping v1/v2
	PIM-SMv6 and PIM-SSM v6

Feature	RG-S5360-E Series
ACL and QoS	Standard IP ACLs
	Extended IP ACLs
	Extended MAC ACLs
	Time-based ACLs
	Expert-level ACLs
	ACL80
	IPv6 ACL
	ACL redirection
Security	Traffic rate limiting on an interface
	Congestion management: RR, SP, WRR, DRR, WFQ, SP+WRR, SP+DRR, and SP+WFQ
	Congestion avoidance: tail drop
	802.1p/DSCP/ToS traffic classification
	Eight priority queues per interface
	Multiple AAA modes
	RADIUS and TACACS+
	Interface-based and MAC address-based 802.1x authentication
	Web authentication
	HTTPS
	SSHv1 and SSHv2
Reliability	Global IP-MAC binding
	Port isolation and port security
	IP source guard
	SAVI
	CPP and NFPP
	REUP, RLDP, DLDP
	IPv4 VRRP v2/v3 and IPv6 VRRP
	BFD
Device virtualization	Link tracing, fault notification, and remote loopback based on 802.3ah (EFM)
	Dual-boot redundancy
NMS and maintenance	Fan speed adjustment
	Fan fault alarm
	Virtual Switching Unit (VSU)
	SPAN, RSPAN
	sFlow
	NTP and SNTP
	FTP and TFTP
	SNMP v1/v2/v3
	RMON (1, 2, 3, 9)
	NETCONF
PoE	CWMP (TR-069)
	gRPC
	RG-S5360-E-24GT4XS-P-E, and RG-S5360-E-48GT4XS-P-E:
	IEEE 802.3af and 802.3at
	Warm start
	Interface priority

06 Protocol Compliance

Organization	Standard and Protocol
IETF	RFC 1157 A Simple Network Management Protocol (SNMP) RFC 1305 Network Time Protocol Version 3 (NTP) RFC 1349 Internet Protocol (IP) RFC 1350 TFTP Protocol (revision 2) RFC 1519 CIDR RFC 1591 Domain Name System Structure and Delegation RFC 1643 Ethernet Interface MIB RFC 1757 Remote Network Monitoring (RMON) RFC 1812 Requirements for IP Version 4 Router RFC 1901 Introduction to Community-based SNMPv2 RFC 1902-1907 SNMP v2 RFC 1918 Address Allocation for Private Internet RFC 2131 Dynamic Host Configuration Protocol (DHCP) RFC 2132 DHCP Options and BOOTP Vendor Extensions RFC 2571 SNMP Management Frameworks RFC 2863 The Interfaces Group MIB RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only) RFC 3046 DHCP Option82 RFC 3417 (SNMP Transport Mappings) RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP) RFC 4022 MIB for TCP RFC 768 User Datagram Protocol (UDP) RFC 783 TFTP Protocol (revision 2) RFC 792 Internet Control Message Protocol (ICMP) RFC 793 Transmission Control Protocol (TCP) RFC 813 Window and Acknowledgement Strategy in TCP RFC 815 IP datagram reassembly algorithms RFC 826 Ethernet Address Resolution Protocol (ARP) RFC 854 Telnet Protocol RFC 959 File Transfer Protocol (FTP) RFC 2865 Remote Authentication Dial In User Service (RADIUS) RFC 3575 IANA Considerations for RADIUS RFC 3579 RADIUS Support For EAP RFC 1058 Routing Information Protocol (RIP) RFC 1583 OSPF Version 2 RFC 1981 Path MTU Discovery for IP version 6 RFC 2236 IGMP RFC 2328 OSPF Version 2 RFC 2460 Internet Protocol, Version 6 (IPv6) RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) RFC 2462 IPv6 Stateless Address Auto configuration RFC 2463 Internet Control Message Protocol for IPv6 (ICMPv6) RFC 2711 IPv6 Router Alert Option RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol RFC 2934 Protocol Independent Multicast MIB for IPv4 RFC 3101 OSPF Not so stubby area option RFC 3137 OSPF Stub Router Advertisement sFlow RFC 3509 Alternative Implementations of OSPF Area Border Routers RFC 3513 IP Version 6 Addressing Architecture

Organization	Standard and Protocol
IETF	RFC 3623 Graceful OSPF Restart RFC 3768 VRRP RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6 RFC 3973 PIM Dense Mode RFC 4552 Authentication/Confidentiality for OSPFv3 RFC 4750 OSPFv2 MIB partial support no SetMIB RFC 4940 IANA Considerations for OSPF RFC 5187 OSPFv3 Graceful Restart RFC 5340 OSPFv3 for IPv6 RFC 6620 FCFS SAVI
IEEE	IEEE 802.2 Logical Link Control IEEE 802.1ab Link Layer Discovery Protocol IEEE 802.1ad Provider Bridges IEEE 802.1ax/IEEE802.3ad Link Aggregation IEEE 802.1D Media Access Control (MAC) Bridges IEEE 802.1D Spanning Tree Protocol IEEE 802.1Q Virtual Bridged Local Area Networks (VLAN) IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE Std 802.3x Full Duplex and flow control

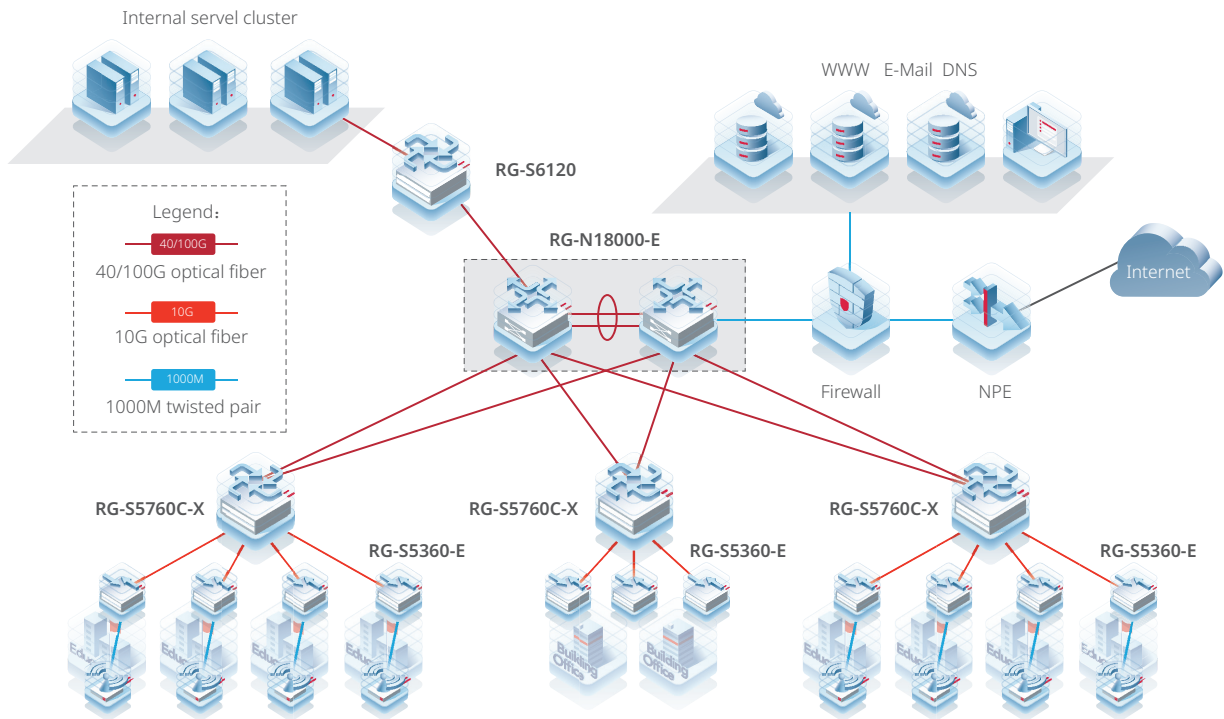
07 Typical Applications

With high security, high efficiency, intelligence, and energy saving, the RG-S5360-E series can fully meet networking requirements in the following scenarios:

- Full gigabit access to LANs of large enterprises, institutions, and campuses, such as the LANs in government buildings, universities, and large manufacturing/energy/metallurgy/other organizations
- Gigabit access to business systems related to medical care, libraries, exhibition centers, and websites
- Access to IP phones, WLAN access points (APs), and HD cameras
- Gigabit access to server clusters and uplink access over 10 Gbps bandwidth
- Requirements for flexible and diversified security control policies to prevent and defend against network viruses and network attacks, and to provide secure access for users

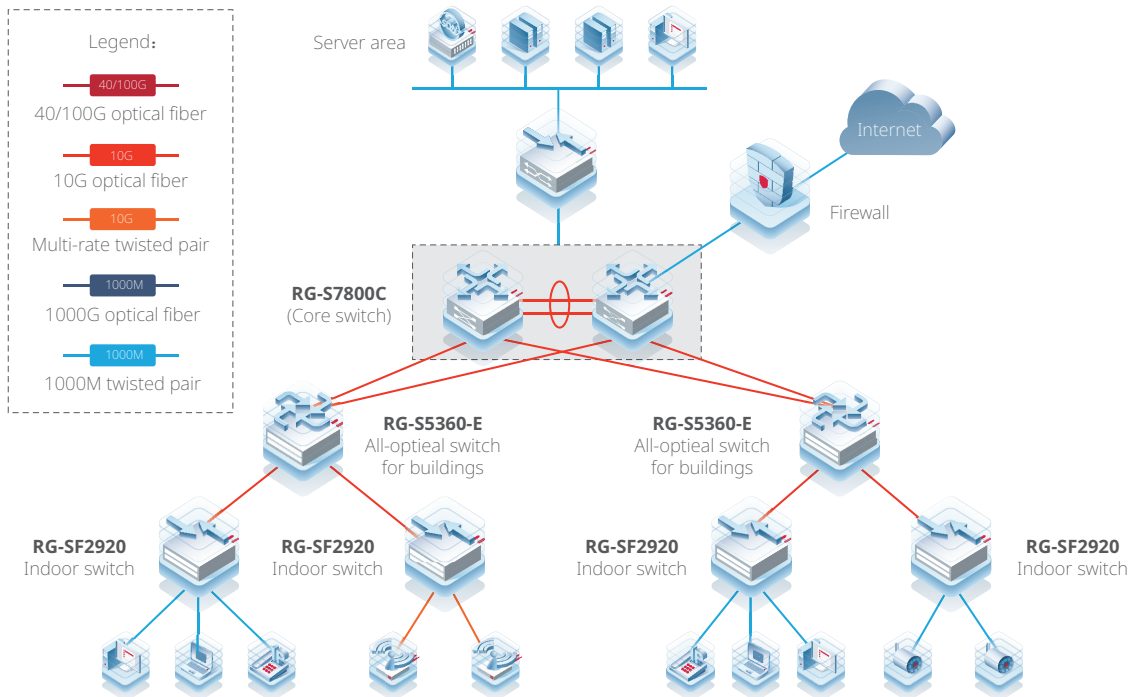
Scenario 1

The RG-S5360-E series serve as access switches. They connect to aggregation switches (RG-S5760C-X series) deployed for buildings and core switches (RG-N18000-E series) deployed for campus networks to provide high-performance 1000M links to the desktop and 10G links from the aggregation layer to the core layer, so as to cope with the increasing information of access users. In SDN solutions, the RG-S5360-E series provide access control, visualized O&M, and other intelligent functions.



Scenario 2

The RG-S5360-E series serve as aggregation switches. They connect to indoor access switches (RG-SF2920 series) and core switches (RG-S7800C series) to build a cost-effective, high-performance, and high-bandwidth network. This network provides 1000M links to the desktop and 10G links from the aggregation layer to the core layer, so as to cope with the increasing information of access users.



08 Ordering Guide

Follow the steps to order the RG-S5360-E series switches.

- Select a switch and expansion modules based on port requirements.
- Select optical transceivers based on port requirements.

Models marked with asterisks (*) in the ordering information are available later.

09 Ordering Information

Switches

Model	Description
RG-S5360-24GT4XS-E	24 x 10/100/1000BASE-T ports, 4 x 1GE/2.5GE/10GE SFP+ ports, 2 modular power supply slots (at least one power module needs to be configured)
RG-S5360-48GT4XS-E	48 x 10/100/1000BASE-T ports, 4 x 1GE/2.5GE/10GE SFP+ ports, 2 modular power supply slots (at least one power module needs to be configured)
RG-S5360-24GT4XS-P-E	24 x 10/100/1000BASE-T ports, supporting PoE/PoE+ and the maximum PoE output power of 720 W, 4 x 1GE/2.5GE/10GE SFP+ ports, 2 modular power supply slots (at least one power module needs to be configured, only when the PoE load of the whole device is less than PoE output power of single power supply and dual power supplies are used, redundancy is supported.)
RG-S5360-48GT4XS-P-E	48 x 10/100/1000BASE-T ports, supporting PoE/PoE+ and the maximum PoE output power of 1440 W, 4 x 1GE/2.5GE/10GE SFP+ ports, 2 modular power supply slots (at least one power module needs to be configured, only when the PoE load of the whole device is less than PoE output power of single power supply and dual power supplies are used, redundancy is supported.)

Note:

4 x 1GE/2.5GE/10GE SFP+ ports support 1GE SFP transceivers, 2.5GE SFP transceivers and 10GE SFP+ transceivers.

Power Module

Model	Description
RG-PA70IB	70 W AC power module
RG-PA600I-P-F	600 W AC power module
RG-PA1000I-P-F	1000 W AC power module

Optical Transceivers

1GE

Model	Description
Mini-GBIC-GT	1000BASE-X to 1000BASE-T, copper SFP transceiver, RJ45, 100 m over Cat 5e/6/6a The port needs to be configured with auto-negotiation
MINI-GBIC-SX-MM850	1000BASE-SX, SFP transceiver, 850 nm, Duplex LC, 500 m over MMF
MINI-GBIC-LX-SM1310	1000BASE-LX, SFP transceiver, 1310 nm, Duplex LC, 10 km over SMF
MINI-GBIC-LH40-SM1310	1000BASE-LH, SFP transceiver, 1310 nm, Duplex LC, 40 km over SMF
MINI-GBIC-ZX80-SM1550	1000BASE-ZX, SFP transceiver, 1550 nm, Duplex LC, 80 km over SMF
GE-SFP-LX20-SM1310-BIDI	1000BASE-LX, SFP transceiver, TX1310/RX1550, BiDi LC, 20 km over SMF
GE-SFP-LX20-SM1550-BIDI	1000BASE-LX, SFP transceiver, TX1550/RX1310, BiDi LC, 20 km over SMF

Model	Description
GE-SFP-LH40-SM1310-BIDI	1000BASE-LH, SFP transceiver, TX1310/RX1550, BiDi LC, 40 km over SMF
GE-SFP-LH40-SM1550-BIDI	1000BASE-LH, SFP transceiver, TX1550/RX1310, BiDi LC, 40 km over SMF
GE-SFP-LX03-SM1310-BIDI-I	1000BASE-LX, SFP transceiver, TX1310/RX1550, BiDi LC, 3 km over SMF
GE-SFP-LX03-SM1550-BIDI-I	1000BASE-LX, SFP transceiver, TX1550/RX1310, BiDi LC, 3 km over SMF

Note: BiDi transceivers must be used in pairs. If one end uses GE-SFP-LX20-SM1310-BIDI, the other end must use GE-SFP-LX20-SM1550-BIDI.

2.5GE

Model	Description
2.5G-SFP-LX03-SM1310- BIDI-I	2.5GBASE-LX, SFP transceiver, TX1310/RX1550, BiDi LC, 3 km over SMF
2.5G-SFP-LX03-SM1550- BIDI-I	2.5GBASE-LX, SFP transceiver, TX1550/RX1310, BiDi LC, 3 km over SMF

10GE

Model	Description
XG-SFP-SR-MM850	10GBASE-SR, SFP+ transceiver, 850nm, Duplex LC, 300 m over MMF
XG-SFP-LR-SM1310	10GBASE-LR, SFP+ transceiver, 1310nm, Duplex LC, 10 km over SMF
XG-SFP-ER-SM1550	10GBASE-ER, SFP+ transceiver, 1550nm, Duplex LC, 40 km over SMF
XG-SFP-ZR-SM1550	10GBASE-ZR, SFP+ transceiver, 1550nm, Duplex LC, 80 km over SMF
XG-SFP-LR10-SM1270-BIDI-I	10GBASE-LR, SFP+ transceiver, TX1270/RX1330, BiDi LC, 10 km over SMF
XG-SFP-LR10-SM1330-BIDI-I	10GBASE-LR, SFP+ transceiver, TX1330/RX1270, BiDi LC, 10 km over SMF
XG-SFP-AOC1M	10GBASE, SFP+ active optical cable (AOC), 1 m, including one cable and two optical transceivers
XG-SFP-AOC3M	10GBASE, SFP+ active optical cable (AOC), 3 m, including one cable and two optical transceivers
XG-SFP-AOC5M	10GBASE, SFP+ active optical cable (AOC), 5 m, including one cable and two optical transceivers

10 Package Contents

Item	RG-S5360-24GT4XS-E	RG-S5360-48GT4XS-E	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
Chassis	1	1	1	1
Power cord	1	1	1	1
Grounding wire	1	1	1	1
Nylon buckle	1	1	1	1
Mounting bracket	2	2	2	2
Rubber pad	4	4	4	4
Cross recessed countersunk head screw, M4x8, GB819-85	8	8	8	8

Item	RG-S5360-24GT4XS-E	RG-S5360-48GT4XS-E	RG-S5360-24GT4XS-P-E	RG-S5360-48GT4XS-P-E
M6*16 screw	4	4	4	4
M6 cage nut	4	4	4	4
Mounting Bracket	1	1	1	1
Installation Guide				
Warranty Manual and Network Product Hazardous Substance Statement	1	1	1	1
Safety Label and Certification Information Description	1	1	1	1
Ruijie Networks Access Product Management Software	1 (pre-installed)	1 (pre-installed)	1 (pre-installed)	1 (pre-installed)
Shipping dimensions	570 mm x 565 mm x 180 mm (22.44 in. x 22.24 in. x 7.09 in.)	570 mm x 565 mm x 180 mm (22.44 in. x 22.24 in. x 7.09 in.)	570 mm x 565 mm x 180 mm (22.44 in. x 22.24 in. x 7.09 in.)	570 mm x 565 mm x 180 mm (22.44 in. x 22.24 in. x 7.09 in.)
Shipping weight	6.6 kg (14.55 lbs)	6.6 kg (14.55 lbs)	6.4 kg (14.11 lbs)	7.1 kg (15.65 lbs)

11 Warranty

For more information about warranty terms and period, contact your local sales agency:

- Warranty terms: <https://www.ruijie.com/support/servicepolicy>
- Warranty period: <https://www.ruijie.com/support/servicepolicy/Service-Support-Summary/>

Note: The warranty terms are subject to the terms of different countries and distributors.

12 More Information

For more information about Ruijie Networks, visit the official website of Ruijie Networks or contact your local sales agency:

- Ruijie Networks official website: <https://www.ruijie.com/>
- Online support: <https://www.ruijie.com/support>
- Hotline support: <https://www.ruijie.com/support/hotline>
- Email support: EBGITSC@ruijie.com.cn



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