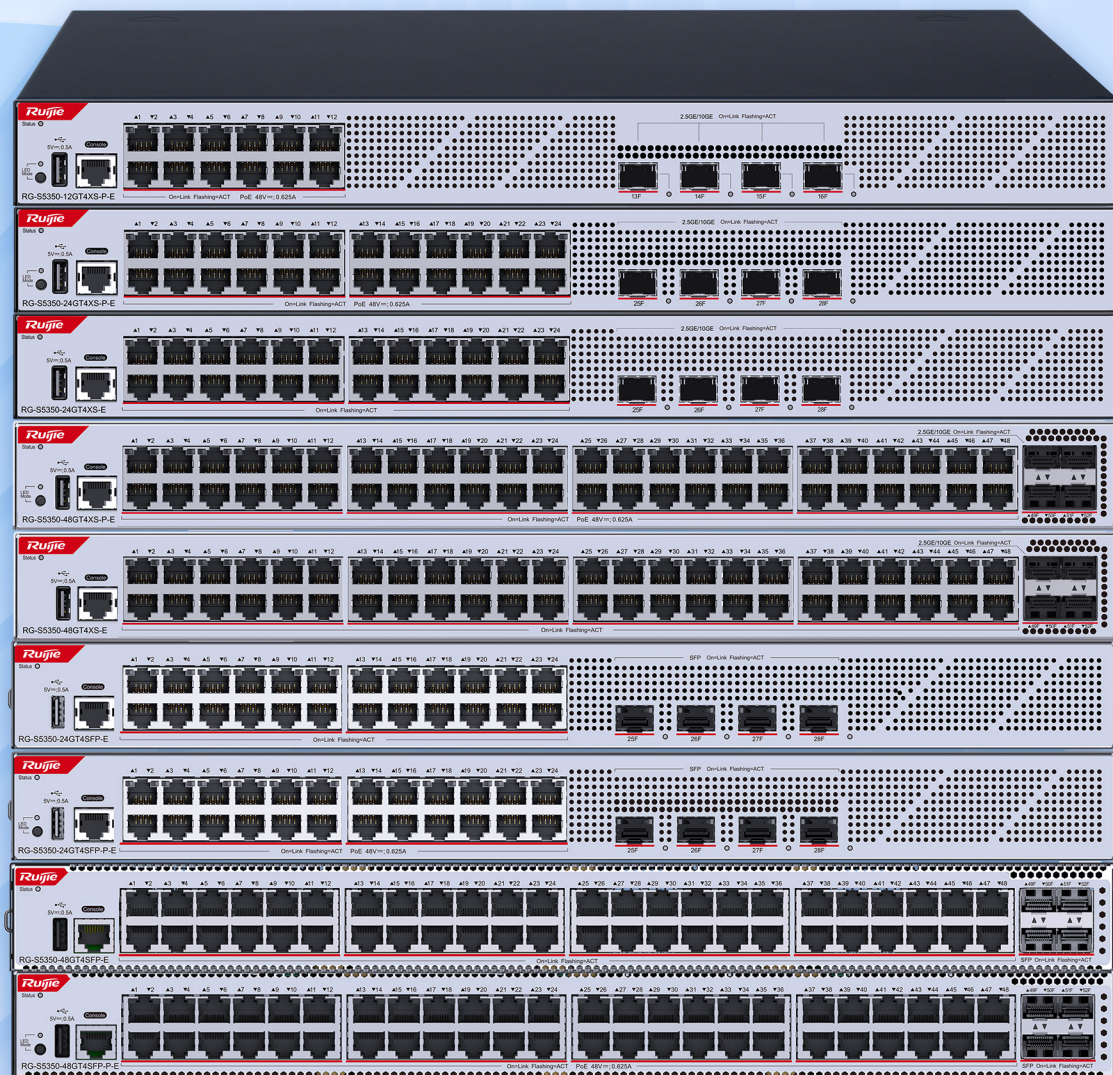


RG-S5350-E Series

Switches



01 Product Overview

RG-S5350-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 flexible, extensible GE or 10GE uplink data transmission. With a new hardware architecture and Ruijie's latest RGOS12.X modular OS, the RG-S5350-E provides more resource entries, faster hardware processing, and better user experience. They lay a foundation for high-performance networks that support IoT service lifecycle management, mobility applications, and cloud applications.

02 Product Appearance

RG-S5350-24GT4XS-E



RG-S5350-48GT4XS-E



RG-S5350-12GT4XS-P-E



RG-S5350-24GT4XS-P-E



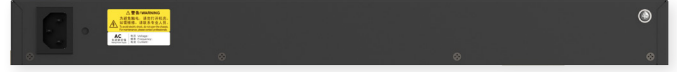
RG-S5350-48GT4XS-P-E



RG-S5350-24GT4SFP-E



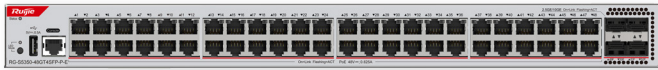
RG-S5350-48GT4SFP-E



RG-S5350-24GT4SFP-P-E



RG-S5350-48GT4SFP-P-E



03 Product Highlights

- Multiple port types — full gigabit access and flexible, extensible GE or 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.
- 10 kV surge protection on an interface, 6 kV surge protection for PoE power, 6 kV surge protection for non-PoE power, higher performance, and greater anti-interference capability.
- Intelligent variable-speed fans, advanced heat dissipation architecture, operating noise less than 35 dB.
- Applications to be installed, and makes it easy for customizing functions.
- RGOS modular operating system, providing more entries, faster hardware processing, and better operation experience.
- 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 basic functions.
- Rectification of faults related to processes online in seconds, without interrupting network operations.
- 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-S5350-E supports Address Resolution Protocol (ARP) spoofing prevention in multiple modes. The RG-S5350-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-S5350-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-S5350-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-S5350-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-S5350-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-S5350-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 uplink 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

The RG-S5350-E supports STP (IEEE 802.1D), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s) to achieve fast convergence, improve 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.

With the Rapid Link Detection Protocol (RLDP), the RG-S5350-E can quickly detect link connectivity and unidirectional optical fiber links. Through loop detection on a port, the RG-S5350-E can prevent network failures caused by the loops due to unauthorized connection between the port and hubs.

The RG-S5350-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 RG-S5350-E can detect links within milliseconds, and quickly converge routing and other services through association with upper-layer routing protocols, ensuring service continuity.

Energy Efficiency

Ruijie integrates multiple energy-saving designs into the RG-S5350-E. The RG-S5350-E reduces loud noise produced by deployment in offices and solves excessive energy consumption resulting from the large-scale deployment of access devices.

In addition, the RG-S5350-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 energy efficient Ethernet (EEE) is another highlight of the RG-S5350-E series switches. If a port is always idle in a period of time, the system enables the port to enter the energy saving mode. When the port needs to receive or

send a packet, the system resumes services on the port by periodically sending listening streams, achieving the effect of energy saving.

The RG-S5350-E provides automatic and energy-saving PoE modes.

SDN

The RG-S5350-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-S5350-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.

05 Product Specifications

Hardware Specifications

Port Specifications

Port Specifications	RG-S5350-24GT4XS-E	RG-S5350-48GT4XS-E	RG-S5350-12GT4XS-P-E	RG-S5350-24GT4XS-P-E	RG-S5350-48GT4XS-P-E
Fixed service ports	24 x 10/100/1000 BASE-T ports 4 x 1GE/2.5GE/10GE SFP+ ports	48 x 10/100/1000 BASE-T ports 4 x 1GE/2.5GE/10GE SFP+ ports	12 x 10/100/1000 BASE-T ports, supporting PoE/PoE+ 4 x 1GE/2.5GE/10GE SFP+ ports	24 x 10/100/1000 BASE-T ports, supporting PoE/PoE+ 4 x 1GE/2.5GE/10GE SFP+ ports	48 x 10/100/1000 BASE-T ports, supporting PoE/PoE+ 4 x 1GE/2.5GE/10GE SFP+ ports
Fixed management port	1 x RJ45 console port				
USB	1 x USB 2.0 port				
USB hot swapping	Supported				
Cable hot swapping	Supported by all ports				

Port Specifications	RG-S5350-24GT4SFP-E	RG-S5350-48GT4SFP-E	RG-S5350-24GT4SFP-P-E	RG-S5350-48GT4SFP-P-E
Fixed service ports	24 x 10/100/1000 BASE-T ports 4 x 1GE SFP ports	48 x 10/100/1000 BASE-T ports 4 x 1GE SFP ports	24 x 10/100/1000 BASE-T ports, supporting PoE/PoE+ 4 x 1GE SFP ports	48 x 10/100/1000 BASE-T ports, supporting PoE/PoE+ 4 x 1GE SFP ports
Fixed management port	1 x RJ45 console port			
USB	1 x USB 2.0 port			
USB hot swapping	Supported			
Cable hot swapping	Supported by all ports			

System Specifications

System Specifications	RG-S5350-24GT4XS-E	RG-S5350-48GT4XS-E	RG-S5350-12GT4XS-P-E	RG-S5350-24GT4XS-P-E	RG-S5350-48GT4XS-P-E
System packet forwarding rate *1	115 Mpps	158 Mpps	94 Mpps	115 Mpps	158 Mpps
System switching capacity *2	154 Gbps	211 Gbps	125 Gbps	154 Gbps	211 Gbps
Switch buffer	4 MB				
CPU	Dual-core CPU, each core with the clock speed of 1.0 GHz				
Real-time clock (RTC)	Supported				
BootROM	16 MB				
Flash memory	512 MB				
Memory	DDR4 1GB				
Switch buffer	4 MB				
MAC address table size	16,000				
ARP 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 VSU members	8				

System Specifications	RG-S5350-24GT4SFP-E	RG-S5350-48GT4SFP-E	RG-S5350-24GT4SFP-P-E	RG-S5350-48GT4SFP-P-E
System packet forwarding rate ^{*1}	50 Mpps	94 Mpps	50 Mpps	94 Mpps
System switching capacity ^{*2}	67 Gbps	125 Gbps	67 Gbps	125 Gbps
Switch buffer	4 MB			
CPU	Dual-core CPU, each core with the clock speed of 1.0 GHz			
Real-time clock (RTC)	Supported			
BootROM	16 MB			
Flash memory	512 MB			
Memory	DDR4 1GB			
Switch buffer	4 MB			
ARP 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 VSU members	8			

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

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

Dimensions and Weight

Dimensions and Weight	RG-S5350-24GT4XS-E	RG-S5350-48GT4XS-E	RG-S5350-12GT4XS-P-E	RG-S5350-24GT4XS-P-E	RG-S5350-48GT4XS-P-E
Unit dimensions (W x D x H)	442 mm x 220 mm x 43.6mm (17.40 in. x 8.66 in. x 1.72 in.)				
Shipping dimensions (W x D x H)	540 mm x 338 mm x 154 mm (21.26 in. x 13.31 in. x 6.06 in.)				
Rack height	1 RU				
Unit weight	3.1 kg (6.83 lbs)	3.25 kg (7.17 lbs)	3.3 kg (7.28 lbs)	3.4 kg (7.50 lbs)	4.0 kg (8.82 lbs)
Mounting	Mounting on a workbench/wall or in a rack (cabinet)				

Dimensions and Weight	RG-S5350-24GT4SFP-E	RG-S5350-48GT4SFP-E	RG-S5350-24GT4SFP-P-E	RG-S5350-48GT4SFP-P-E
Unit dimensions (W x D x H)	442 mm x 220 mm x 43.6mm (17.40 in. x 8.66 in. x 1.72 in.)			
Shipping dimensions (W x D x H)	540 mm x 338 mm x 154 mm (21.26 in. x 13.31 in. x 6.06 in.)			
Rack height	1 RU			
Unit weight	3.1 kg (6.83 lbs)	3.25 kg (7.17 lbs)	3.4 kg (7.50 lbs)	4.0 kg (8.82 lbs)
Mounting	Mounting on a workbench/wall or in a rack (cabinet)			

Power supply and Consumption

Power supply and Consumption	RG-S5350-24GT4XS-E	RG-S5350-48GT4XS-E
Power supply	1 x fixed power supply	
Power input	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 - Maximum input current: 0.6 A	AC input - Rated input voltage: 100 V AC to 240 V AC, 50/60Hz - Maximum input voltage: 90 V AC to 264 V AC - Maximum input current: 1.5 A
Maximum output power	Fixed power supply: 25 W	Fixed power supply: 40 W
Maximum power consumption	25 W	40 W
Leakage current	≤ 3.5 mA	
Energy saving	Supported	

Power supply and Consumption	RG-S5350-12GT4XS-P-E	RG-S5350-24GT4XS-P-E	RG-S5350-48GT4XS-P-E
Power supply	1 x fixed power supply		
Power input	AC input - Rated input voltage: 100 V AC to 240 V AC, 50/60Hz - Maximum input voltage: 90 V AC to 264 V AC - Maximum input current: 6 A		
Maximum output power	Built-in power supply: 409 W		Built-in power supply: 460 W
Maximum power consumption	35 W (without PoE load)		52 W (without PoE load) 460 W (full PoE load)
Leakage current	≤ 3.5 mA		
Energy saving	Supported		
PoE port	Ports 1 to 12 support PoE/PoE+ (IEEE802.3af/at) power supply	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 is 370 W.		Each PoE port provides up to 30 W of power. The maximum power is 405 W.
Energy saving	supported		

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.

Power supply and Consumption	RG-S5350-24GT4SFP-E	RG-S5350-48GT4SFP-E
Power supply	1 x fixed power supply	
Power input	AC input - Rated input voltage: 100 V AC to 240 V AC, 50/60Hz - Maximum input voltage: 90 V AC to 264 V AC - Maximum input current: 0.6 A	AC input - Rated input voltage: 100 V AC to 240 V AC, 50/60Hz - Maximum input voltage: 90 V AC to 264 V AC - Maximum input current: 1.5 A
Maximum output power	Fixed power supply: 25 W	Built-in power supply: 40 W
Maximum power consumption	25 W	40 W
Leakage current	≤ 3.5 mA	
Energy saving	Supported	

Power supply and Consumption	RG-S5350-24GT4SFP-P-E	RG-S5350-48GT4SFP-P-E
Power supply	1 x fixed power supply	
Power input	- AC input - Rated input voltage: 100 V AC to 240 V AC, 50/60Hz - Maximum input voltage: 90 V AC to 264 V AC - Maximum input current: 6 A	
Maximum output power	Fixed power supply: 409 W	Fixed power supply: 460 W
Maximum power consumption	35 W (without PoE load) 405 W (full PoE load)	52 W (without PoE load) 460 W (full PoE load)
Leakage current	≤ 3.5 mA	
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 is 370 W.	Each PoE port provides up to 30 W of power. The maximum power is 405 W.
Energy saving	Supported	

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.

Environment and Reliability

Environment and Reliability	RG-S5350-24GT4XS-E	RG-S5350-48GT4XS-E	RG-S5350-12GT4XS-P-E	RG-S5350-24GT4XS-P-E	RG-S5350-48GT4XS-P-E
Temperature	Operating temperature: 0°C to 45°C (32°F to 113°F) Storage temperature: -40°C to +70°C (-40°F to +158°F) 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).				
Humidity	Operating humidity: 10% to 90% RH (non-condensing) Storage humidity: 5% to 95% RH (non-condensing)				

Environment and Reliability	RG-S5350-24GT4XS-E	RG-S5350-48GT4XS-E	RG-S5350-12GT4XS-P-E	RG-S5350-24GT4XS-P-E	RG-S5350-48GT4XS-P-E
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)	211,466 hours (about 24 years)	209,714 hours (about 23 years)	200,253 hours (about 22 years)
Fan	No fan	1 x fixed fan module			
Heat dissipation	Fanless design, natural cooling	Front-to-right and left-to-right airflow			
Acoustic noise	Fanless, quiet, < 20 dB	27°C(80.6°F): 32 dB	27°C(80.6°F): 35 dB	27°C(80.6°F): 32 dB	27°C(80.6°F): 35 dB
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				

Environment and Reliability	RG-S5350-24GT4SFP-E	RG-S5350-48GT4SFP-E	RG-S5350-24GT4SFP-P-E	RG-S5350-48GT4SFP-P-E
Temperature	Operating temperature: 0°C to 45°C (32°F to 113°F) Storage temperature: -40°C to +70°C (-40°F to +158°F) 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).			
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	1 x fixed fan module		
Heat dissipation	Fanless design, natural cooling	Front-to-right and left-to-right airflow		
Acoustic noise	Fanless, quiet, < 20 dB	27°C(80.6°F): 32 dB		27°C(80.6°F): 35 dB
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			

Software Specifications

RG-S5350-E Series	
Feature	Description
Ethernet switching	Jumbo frame (maximum length: 9,216 bytes)
	802.3az EEE
	IEEE 802.1Q (4K 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, (IEEE 802.1.d), RSTP, (IEEE 802.1w), and MSTP (IEEE 802.1s)
	ERPS (G.8032)
	LLDP/LLDP-MED
IP service	Static and dynamic ARP, ARP proxy, and ARP entry timeout
	DHCP client, DHCP relay, and DHCP server
	DHCP snooping
	DNS
	DNS client, DNS proxy, and DNSv6 client
	DHCPv6 client, DHCPv6 relay, and DHCPv6 server
	DHCPv6 snooping
IP routing	Neighbor Discovery (ND) and ND snooping
	Static routing
	RIP and RIPng
	OSPFv2 and OSPFv3
	IS-ISv4 and IS-ISv6
	BGP4 and BGP4+
	IPv4 and IPv6 VRF
Multicast	IPv4 and IPv6 PBR
	IGMP v1/v2/v3, and IGMP proxy
	IGMP v1/v2 snooping
	PIM-DM, PIM-SM, and PIM-SSM
	PIM SMv6, and PIM-SSMv6
	MSDP
	MLDv1/v2 and MLD proxy
	MLD snooping v1/v2
	PIM-SMv6 and PIM-SSM v6
	Multicast source IP address check
	Multicast source port check
	Multicast querier

RG-S5350-E Series	
Feature	Description
ACL and QoS	Standard IP ACLs Extended IP (hardware ACLs Extended MAC ACLs Time-based ACLs Expert-level ACLs ACL80 IPv6 ACL on IP addresses)
	Extended IP ACLs (hardware ACLs based on IP addresses or TCP/UDP port numbers)
	Extended MAC ACLs (hardware ACLs based on source MAC addresses, destination MAC addresses, and optional Ethernet type)
	Expert-level ACLs (hardware ACLs based on flexible combinations of the VLAN ID, Ethernet type, MAC address, IP address, TCP/UDP port number, protocol type, and time range)
	Time based ACLs, ACL 80, and IPv6 ACL
	Global ACLs
	ACL redirection
	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
Security	Multiple AAA modes
	RADIUS and TACAS+
	RADIUS authentication and authorization
	IEEE802.1X authentication, MAC address bypass (MAB) authentication, and interface-based and MAC address-based 802.1X authentication
	Web authentication
	HTTPS
	SSHv1 and SSHv2
	Global IP-MAC binding
	ICMPv6
	Port isolation and port security
	IP source guard
	SAVI
	ARP spoofing prevention
	CPP and NFPP
	Portal authentication and Portal 2.0 authentication
	ARP check DAI ARP packet rate limiting Gateway ARP spoofing prevention
	Broadcast storm suppression
	Hierarchical management of administrators and password protection
	BPDU guard
	Port protection

RG-S5350-E Series	
Feature	Description
Reliability	REUP
	RLDP
	RLDP, Layer 2 link connectivity detection, and unidirectional link detection
	DLDP
	IPv4 VRRP v2/v3 and IPv6 VRRP
	BFD, NSR, VRRR, VRRP+
	Basic LACP
	Link tracing, fault notification, and remote loopback based on 802.3ah (EFM)
	Dual-Boot Redundancy
	Fan speed adjustment Fan fault alarm
Device virtualization	Virtual Switching Unit (VSU)
NMS and maintenance	SPAN, RSPAN
	sFlow
	NTP and SNTP
	FTP and TFTP
	SNMP v1/v2c/v3
	RMON (1, 2, 3, 9)
	NETCONF
	CWMP (TR-069)
	gRPC
	CLI (Telnet/Console)
	Web
	Syslog/Debug
	Various types of RMON groups, including event groups, alarm groups, history groups, and statistics groups, as well as private alarm extension groups
	RMON used to implement Ethernet statistics, historical statistics, and alarm functions
	OpenFlow Special 1.3 Flow table analysis defined by all protocols Transmission of specified packets to the controller Configuring the controller's IP address and port Notifying port status changes to the controller
	RNS, configuration rollback, and 802.3ah
	1:1 mirroring N:1 mirroring 1:N mirroring Flow-based local and remote mirroring
PoE	RG-S5350-12GT4XS-P-E, RG-S5350-E-24GT4XS-P-E, RG-S5350-E-48GT4XS-P-E, RG-S5350-24GT4SFP-P-E and RG-S5350-48GT4SFP-P-E IEEE 802.3af and 802.3at Warm start Port priority Automatic and energy-saving power supply management modes Uninterrupted power supply in hot start mode Scheduled power-on or power-off of PoE ports based on the time policy

06 Protocol Compliance

RG-S5350-E Series	
Organization	Standards and Protocol
IETF	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 1058 Routing Information Protocol (RIP) 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 1583 OSPF Version 2 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 1981 Path MTU Discovery for IP version 6 RFC 2131 Dynamic Host Configuration Protocol (DHCP) RFC 2132 DHCP Options and BOOTP Vendor Extensions 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 2571 SNMP Management Frameworks RFC 2711 IPv6 Router Alert Option RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol RFC 2863 The Interfaces Group MIB RFC 2865 Remote Authentication Dial In User Service (RADIUS) RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only) RFC 2934 Protocol Independent Multicast MIB for IPv4 RFC 3046 DHCP Option82 RFC 3101 OSPF Not so stubby area option RFC 3137 OSPF Stub Router Advertisement sFlow RFC 3417 (SNMP Transport Mappings) RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP) RFC 3509 Alternative Implementations of OSPF Area Border Routers RFC 3513 IP Version 6 Addressing Architecture RFC 3575 IANA Considerations for RADIUS

RG-S5350-E Series	
Organization	Standards and Protocol
IETF	RFC 3579 RADIUS Support For EAP RFC 3623 Graceful OSPF Restart RFC 3768 VRRP RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6 RFC 3973 PIM Dense Mode RFC 4022 MIB for TCP 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
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

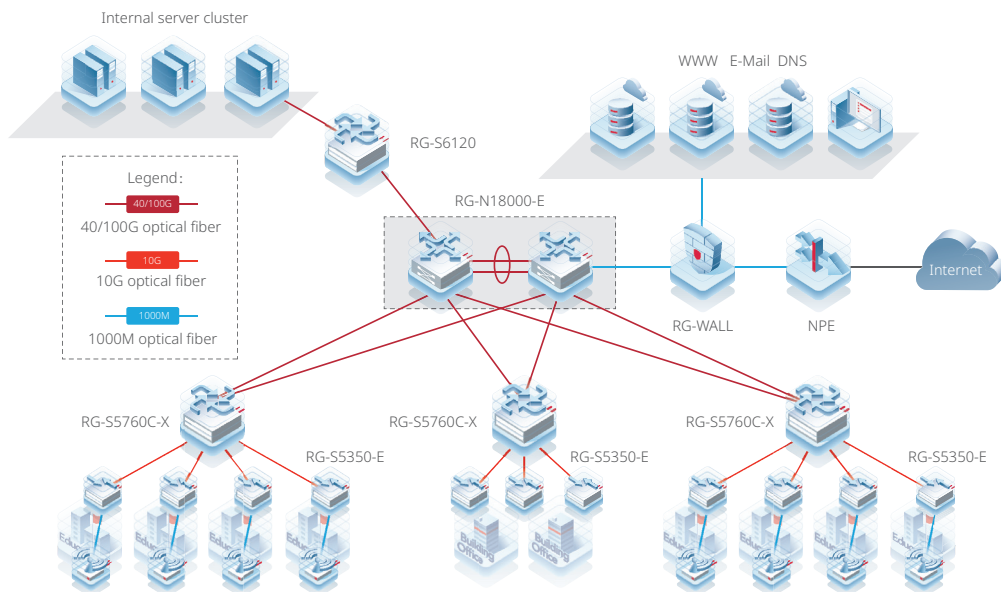
07 Typical Applications

The RG-S5350-E series switches are characterized by security, high efficiency, intelligence, and energy saving to fully meet network requirements in the following scenarios:

- Full 1000M access to a local area network (LAN) in a large-scale institution or enterprise campus, such as the government building, university, and manufacturing/energy/metallurgy unit
- 1000M access to a commercial system such as the healthcare, library, exhibition center, and website
- Access for IP telephones, WLAN access points (APs), and HD cameras
- 1000M access for server groups and high-bandwidth GE or 10G uplink
- Flexible and diverse security control policies are needed to prevent and control network viruses and attacks, ensuring user access security.

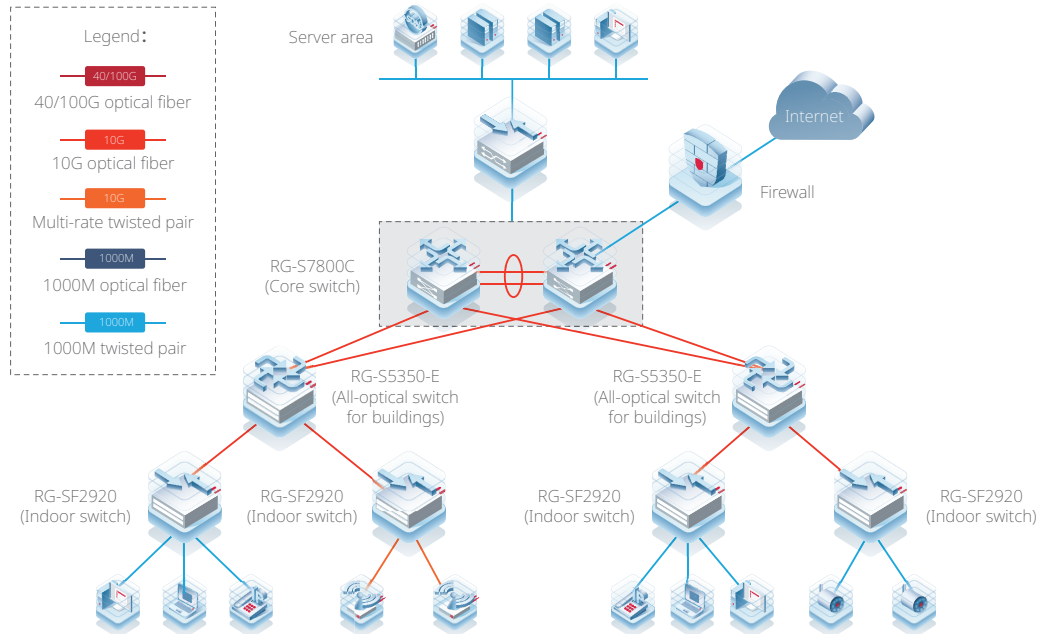
Scenario 1

The RG-S5350-E series serve as access switches. They connect to aggregation switches (RG-S5760-X series) deployed for buildings and core switches (RG-N18000 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-S5350-E series provide access control, visualized O&M, and other intelligent functions.



Scenario 2

The RG-S5350-E series serve as aggregation switches. They connect to indoor access switches (RG-SF29 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-S5350-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

Order switches, expansion modules, power supply modules, and other components as needed. Before ordering an expansion module or power supply module, please contact our online customer service team for the latest support information about the module.

Switches and Power Modules

Model	Description
RG-S5350-24GT4XS-E	24 x 10/100/1000BASE-T ports, 4 x 1GE/2.5G/10GE SFP+ ports
RG-S5350-48GT4XS-E	48 x 10/100/1000BASE-T ports, 4 x 1GE/2.5G/10GE SFP+ ports
RG-S5350-12GT4XS-P-E	12 x 10/100/1000BASE-T ports, supporting PoE/PoE+, 4 x 1GE/2.5G/10GE SFP+ ports
RG-S5350-24GT4XS-P-E	24 x 10/100/1000BASE-T ports, supporting PoE/PoE+, 4 x 1GE/2.5G/10GE SFP+ ports
RG-S5350-48GT4XS-P-E	48 x 10/100/1000BASE-T ports, supporting PoE/PoE+, 4 x 1GE/2.5G/10GE SFP+ ports
RG-S5350-24GT4SFP-E	24 x 10/100/1000BASE-T ports, 4 x 1GE SFP ports
RG-S5350-48GT4SFP-E	48 x 10/100/1000BASE-T ports, 4 x 1GE SFP ports
RG-S5350-24GT4SFP-P-E	24 x 10/100/1000BASE-T ports, supporting PoE/PoE+, 4 x 1GE SFP ports
RG-S5350-48GT4SFP-P-E	48 x 10/100/1000BASE-T ports, supporting PoE/PoE+, 4 x 1GE SFP ports

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

Optical Transceivers and Cables

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-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
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
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

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-S5350-12GT4XS-P-E	RG-S5350-24GT4XS-E	RG-S5350-48GT4XS-E	RG-S5350-24GT4XS-P-E	RG-S5350-48GT4XS-P-E
Chassis	1	1	1	1	1
Power cord	1	1	1	1	1
Grounding wire	1	1	1	1	1
Nylon buckle	1	1	1	1	1
Mounting bracket	2	2	2	2	2
Rubber pad	4	4	4	4	4
Cross recessed countersunk head screw, M4x8, GB819-85	8	8	8	8	8
M6*16 screw	4	4	4	4	4
M6 cage nut	4	4	4	4	4
Mounting Bracket Installation Guide	1	1	1	1	1
Warranty Manual and Network Product Hazardous Substance Statement	1	1	1	1	1
Safety Label and Certification Information Description	1	1	1	1	1
Ruijie Networks Access Product Management Software	1 (pre-installed)	1 (pre-installed)	1 (pre-installed)	1 (pre-installed)	1 (pre-installed)
Shipping dimensions (W x D x H)	540 mm x 338 mm x 154 mm (21.26 in. x 13.31 in. x 6.06 in.)				
Shipping weight	4.10 kg (9.04 lbs)	4.10 kg (9.04 lbs)	4.18 kg (9.22 lbs)	4.25 kg (9.37 lbs)	4.90 kg (10.80 lbs)

Item	RG-S5350-24GT4SFP-E	RG-S5350-48GT4SFP-E	RG-S5350-24GT4SFP-P-E	RG-S5350-48GT4SFP-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
M6*16 screw	4	4	4	4
M6 cage nut	4	4	4	4
Mounting Bracket Installation Guide	1	1	1	1

Item	RG-S5350-24GT4SFP-E	RG-S5350-48GT4SFP-E	RG-S5350-24GT4SFP-P-E	RG-S5350-48GT4SFP-P-E
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 (W x D x H)	540 mm x 338 mm x 154 mm (21.26 in. x 13.31 in. x 6.06 in.)			
Shipping weight	4.10 kg (9.04 lbs)	4.10 kg (9.04 lbs)	4.25 kg (9.37 lbs)	4.90 kg (10.80 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 Ruijie website 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



Ruijie Networks Co., Ltd.

For more information, visit www.ruijie.com or call 86-400-620-8818.