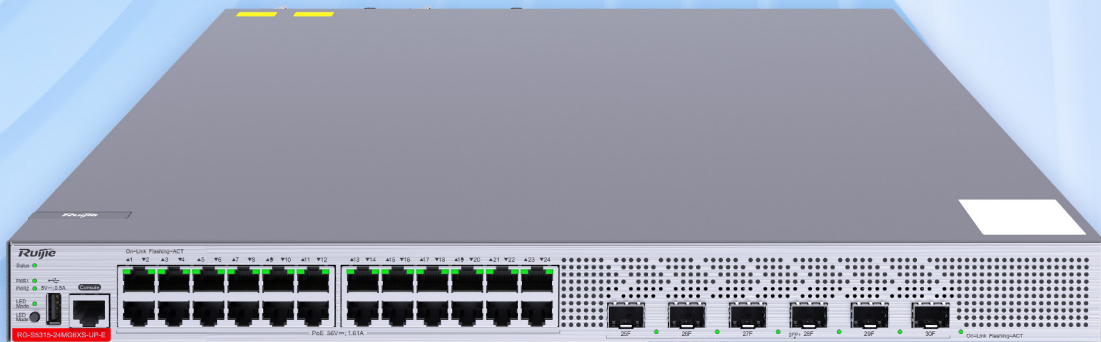# RG-S5315-E Series
## 2.5G Multi-GE Switches

01 Product Overview

The RG-S5315-E series switches developed by Ruijie Networks are next-generation 2.5G multi-GE switches featuring high security, efficiency, energy conservation, and independent innovation. The RG-S5315-E provides 100/1000/2500BASE-T ports for access and six 1G/2.5G/10G SFP+ ports for uplink communications. With an advanced hardware architecture and Ruijie RGOS 12.X modular operating system (OS), the RG-S5315-E delivers faster hardware processing performance and more convenient operation experience.

02 Product Appearance
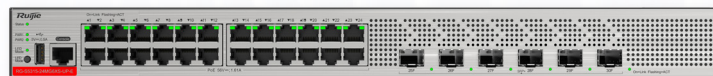
Front View of the RG-S5315-24MG6XS-UP-E
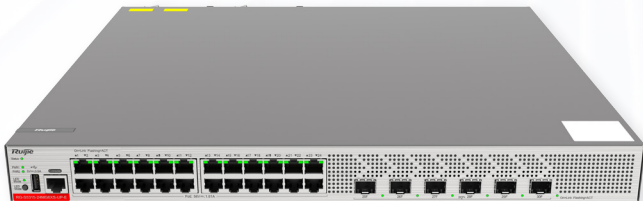
Front Top View of the RG-S5315-24MG6XS-UP-E

Rear Top View of the RG-S5315-24MG6XS-UP-E

03 Product Highlights

- Multiple port types — 100/1000/2500BASE-T ports meet the high bandwidth requirements of Wi-Fi 6 and Wi-Fi 7 APs, and flexible, extensible 10GE uplink, faster speed, and experience enhancement.

- Supports modular power module redundancy; a single port supports up to 90W PoE++ power supply, and the entire device has a maximum PoE output.

- 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.

- 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

Multi-GE Rates

Recent years have witnessed the rapid evolution of the Ethernet port standards from 100BASE-T to 1000BASE-T (IEEE 802.3ab) that is widely applied to devices covering PCs and access points (APs). However, as the Wi-Fi 6 and Wi-Fi 7 technologies have been introduced, APs can delivers an uplink rate of 2.5 Gbps, posing an increasing challenge to GE network devices. The RG-S5315-E series switches provide various port types, including 100/1000/2500BASE-T ports, which can better adapt to Wi-Fi 6 and Wi-Fi 7 APs.

High-Power PoE Power Supply

In the previous scenarios of power over Ethernet (PoE) remote power supply, only PoE (IEEE 802.3af) and PoE+ (IEEE 802.3at) standards are available. If the power exceeds 30 W, PoE cannot be used for power supply. Instead, power cords must be deployed for mains power supply, and even Extra High Voltage (EHV) power deployment is required. This imposes tremendous challenges on deployment costs and period, maintenance, and security during the deployment. In compliance with the IEEE 802.3bt standard, the RG-S5315 adopts high-power PoE power supply and achieves a maximum PoE++ output of 90 W through a single Ethernet port to significantly improve user experience.

VSU

The RG-S5315-E supports the virtual switching unit (VSU). VSU enables multiple physical devices to be connected and virtualized into one logical device. The devices use the same IP address, Telnet process, and CLI for management, and support automatic version check and automatic configuration. In this context, a network administrator only need to manage one logical device, improving working efficiency and experience.

Simplified management: The network administrator can manage multiple switches in a unified manner without connecting to each switch for separate configuration and management.

Simplified network topology: A VSU serves as a switch on a network and connects to peripheral devices through aggregate links. Therefore, no Layer 2 loop occurs and Multiple Spanning Tree Protocol (MSTP) configuration is not required. Various control protocols can run on the VSU.

Fault recovery 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 100 ms.

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

Increase in return on investment: Aggregate links used for connecting the VSU to peripheral devices not only provide redundant links but also implement load balancing. All network devices and bandwidth resources are fully leveraged. In addition, all 10GE ports of the switches can be connected to form a VSU through any data transmission cables, without the need for additional cables or expansion modules. There are no restrictions on the port and cable types, maximizing users' investment protection.

Sound Security Protection Policies

Address Resolution Protocol (ARP) spoofing is a type of common network attacks that often bring significant consequences. The RG-S5315-E supports ARP anti-spoofing in multiple modes. Regardless of whether hosts obtain addresses from a Dynamic Host Configuration Protocol (DHCP) server or use static IP addresses, the RG-S5315-E records hosts' real IP and MAC addresses, and compares them with addresses carried in received ARP packets. The RG-S5315-E forwards only ARP packets whose addresses match the recorded IP and MAC addresses and discards forged ARP packets. This way, users on the network are protected against ARP spoofing attacks.

The RG-S5315E can proactively defend against various Distributed Denial-of-Service (DDoS) attacks on networks. The openness of networks makes them vulnerable to threats and disruptions due to computer virus infections or attacks on network devices and servers conducted by unauthorized users. Common issues are as follows: ARP flood attacks cause a gateway to become unresponsive to requests. Internet Control Message Protocol (ICMP) flood attacks overload the CPUs of network devices, preventing them from functioning properly. DHCP flood attacks deplete addresses of a DHCP server, and users cannot obtain IP addresses for network access.

The RG-S5315-E features a unique hardware CPU protection mechanism called CPU Protection Policy (CPP). This policy allows the switch to classify data traffic sent to the CPU, process it based on the queue priority, and apply rate limits as needed. CPP effectively protects the

CPU from unauthorized traffic, malicious attacks, and excessive resource consumption, ensuring the overall security of both the CPU and the switch.

The RG-S5315-E adopts the innovative Network Foundation Protection Policy (NFPP) technology to limit the rate of sending ARP, ICMP, DHCP, and other types of packets to networks. The switches discard packets sent at a rate exceeding the threshold, identify attacks, and isolate users launching attacks. In this way, basic networks are protected against network attacks, guaranteeing network stability.

DHCP snooping enables the RG-S5315-E series switches to receive DHCP responses only from trusted ports and prevent spoofing from unauthorized DHCP servers. With DHCP snooping, the switches dynamically monitor ARP packets, check users' IP addresses, and discard packets that do not match the binding entries, thereby effectively preventing ARP spoofing and source IP address spoofing.

High Availability

The RG-S5315-E series switches support Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), which help the switches achieve fast convergence, improve the fault tolerance capability, and ensure stable network operation and link load balancing. The switches utilize network channels appropriately to raise the utilization of redundant links.

By supporting Virtual Router Redundancy Protocol (VRRP), the switches effectively guarantee network stability.

With the Rapid Link Detection Protocol (RLDP), the RG-S5315-E can quickly detect the link connectivity and unidirectional optical links. Through port loop detection, the switches can prevent network failures caused by the loops that occurs in the scenario where an unauthorized port is connected to hubs.

The RG-S5315-E series switches support the Ethernet Ring Protection Switching (ERPS) technology, which is an international Layer 2 link redundancy backup protocol designed for the core Ethernet. The loop blocking and link recovery of ERPS are implemented on the owner device, and non-owner devices directly report their link status to the controlling device, without processing of other non-controlling devices. Therefore, link recovery time of ERPS is shorter than that of STP. Based on the above differences, ERPS supports link recovery within milliseconds in the ideal environment.

When STP is disabled, RLDP can still provide basic link redundancy and millisecond-level fault recovery that is faster than STP.

Bidirectional Forwarding Detection (BFD) provides

millisecond-level detection for links, and can work with upper-layer routing protocols to achieve rapid convergence of routing and other services, thereby ensuring service continuity.

Easy Network Maintenance

The RG-S5315-E supports Simple Network Management Protocol (SNMP), Remote Monitoring (RMON), syslog, sFlow, and USB-based log and configuration backup for routine network diagnosis and maintenance. Administrators can utilize diversified management and maintenance methods including the CLI, web-based network management platform, Telnet, CPE WAN Management Protocol (CWMP), also known as TR-069, and zero-touch provisioning (ZTP) to facilitate device management.

A PoE button is available on the panel of the switch. You can press this button to check both communication status and PoE status of all ports on the switch.

The switches support telemetry based on Google Remote Procedure Calls (GRPC) to periodically collect CPU and memory information.

IPv4/IPv6 Dual-Stack Multi-Layer Switching

The RG-S5315-E hardware supports IPv4/IPv6 dual stacks and multilayer line-rate switching to differentiate and process IPv4 and IPv6 packets. The RG-S5315-E also provides flexible IPv6 network communication solutions for users to perform network planning or maintain the network based on various IPv6 network demands. The RG-S5315-E supports a wide range of IPv4 routing protocols, covering IPv4 static routing, RIP, and OSPFv2. You can select appropriate routing protocols to flexibly build networks based on various network environments. The switches also support abundant IPv6 routing protocols, including IPv6 static routing, Routing Information Protocol next generation (RIPng), and OSPFv3. You can select the routing protocols to upgrade an existing network to an IPv6 network or build a new IPv6 network.

Energy-Saving Design

In response to China's call for green energy and energy conservation, Ruijie carries out an in-depth study on noise and energy consumption issues in conventional switches and integrates multiple energy-saving design ideas into the RG-S5315-E series switches. The switches have reduced noises in offices and slashed excessive energy consumption arising from the mass deployment.

The RG-S5315-E series switches adopt the next-generation hardware architecture and advanced energy-efficient

circuit design and components, which helps significantly lower overall power consumption, save energy, and reduce noise. RG-S5315-E series switches are equipped with variable-speed axial fan modules to intelligently control the fan speed based on the ambient temperature, which reduces the power consumption and noise and

ensures stable operation of the switches.

In the networking where PoE power supply is adopted, the RG-S5315-E provides automatic and energy-saving modes.

05   Specifications

Hardware Specifications

Port Specifications

Port Specifications	RG-S5315-24MG6XS-UP-E
Fixed service port	24 x 100/1000/2500BASE-T ports, supporting PoE/PoE+/ PoE++ 6 x 1GE/2.5GE/10GE SFP+ ports
Module slot	2 x power module slots
Power module	RG-PA1000I-P-F RG-PA600I-P-F
Fixed management port	1 x RJ45 console port
USB port	1 x USB port

System Specifications

System Specifications	RG-S5315-24MG6XS-UP-E
System packet forwarding rate *1	240 Gbps
System switching capacity *2	180 Mpps
CPU	Dual-core CPU built-in MAC processor, each core with the clock speed of 1.0 GHz
Real-time clock (RTC)	Supported
BootROM	16 MB
Flash memory	256 MB
Memory	1 GB
Switch buffer	2 MB

*1 means the system's packet forwarding rate.

*2 means the system's switching capacity.

Dimensions and Weight

Dimensions and Weight	RG-S5315-24MG6XS-UP-E
Unit dimensions (W x D x H)	442 mm × 420 mm × 43.6 mm (17.40 in. x 16.54 in. x 1.72 in.)
Shipping dimensions (W x D x H)	575 mm × 568 mm × 185 mm (22.64 in. x 22.36 in. x 7.28 in.)

Dimensions and Weight	RG-S5315-24MG6XS-UP-E
Rack height	1 RU
Unit weight	4.1 kg (9.04 lbs)
Shipping weight	6.8 kg (14.99 lbs)

Power Supply and Consumption

Power Supply and Consumption	RG-S5315-24MG6XS-UP-E
Power supply	2 x pluggable power modules
Power module redundancy	Dual IEEE 802.3at or IEEE 802.3af power supplies are supported, and power supplies can work in hot standby mode.
Power input	RG-PA600I-P-F (AC input): • Rated input voltage: 100 V AC to 240 V AC, 50 Hz to 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 Hz to 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 Hz to 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;
PoE port	All RJ45 ports support PoE/PoE+/PoE++ (IEEE802.3af/at/bt) power supply.
PoE power cable pairs	Four pairs (1–2, 3–6, 4–5 and 7–8 pairs)
PoE output power	Each PoE port provides up to 90 W of power. The maximum power depends on the configured power supply. • 1 x RG-PA600I-P-F: 470 W • 2 x RG-PA600I-P-F: 940 W; • 1 x RG-PA1000I-P-F: 800 W • 2 x RG-PA1000I-P-F: 1600 W; a maximum output of 1600 W over 24 ports
Maximum power consumption	≤ 75 W (without PoE load) < 1675 W (with PoE full load)

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-S5315-24MG6XS-UP-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: 0–5,000 m (0–16,404 ft.) Storage altitude: 0–5,000 m (0–16,404 ft.)
Mean time between failure (MTBF)	> 200,000 hours
Fan	2 x fixed fan modules
Heat Dissipation	Air intake from the left and front panel, air exhaust from the rear panel
Acoustic noise	SPL at ambient temperature of 27°C (80.6°F): 31.9 dB (30% PoE load, 2 RG- PA600I-P-F power modules, adjusted fan speed), 32.3 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
Power Supply Monitoring	Obtaining the power supply model: supported Obtaining the in-place status: supported Fault alarm: supported
Fan monitoring	Automatic fan speed regulation Fan failure alarm
Temperature monitoring	Temperature monitoring: supported Temperature alarm: supported Overtemperature protection: 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

Certification and Regulatory Compliance

Certification and Regulatory Compliance	RG-S5315-24MG6XS-UP-E
Safety regulations	IEC 62368-1
EMC regulations	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

Model	RG-S5315-24MG6XS-UP-E
IEEE 802.1Q VLAN	A maximum of 4,000 IEEE 802.1Q VLANs Port-based VLAN MAC-based VLAN Private VLAN Voice VLAN GARP VLAN Registration Protocol (GVRP)
QinQ	Basic QinQ Selective QinQ
ACL	Standard IP ACLs (IP-based hardware ACLs) Extended IP ACLs (hardware ACLs based on IP addresses or TCP/UDP port IDs) Extended MAC ACLs (hardware ACLs based on source MAC addresses, destination MAC addresses, and optional Ethernet type) Time-based ACLs Expert ACLs (hardware ACLs based on flexible combinations of the VLAN ID, Ethernet type, MAC address, IP address, TCP/UDP port ID, protocol type, and time) ACL 80 IPv6 ACL Global ACL ACL redirection
QoS	Port traffic identification Rate limiting on port traffic 802.1p/differentiated services code point (DSCP)/type of service (ToS) traffic classification Eight priority queues per port Strict priority (SP), Weighted Round Robin (WRR), and SP+WRR queue scheduling
Mirroring	One-to-one mirroring, many-to-one mirroring, one-to-many mirroring Switched port analyzer (SPAN) and remote SPAN Flow-based local and remote mirroring
DHCP	DHCP server DHCP client DHCP snooping DHCP relay IPv6 DHCP snooping IPv6 DHCP client IPv6 DHCP relay
Security feature	3-tuple binding (IP address, MAC address, and port) 3-tuple binding (IPv6 address, MAC address, and port) Filtering of invalid MAC addresses Port- and MAC-based 802.1X authentication MAC Authentication Bypass (MAB) Portal authentication and Portal 2.0 authentication ARP check Dynamic ARP Inspection (DAI) ARP packet rate limiting Gateway ARP spoofing prevention Broadcast storm suppression Hierarchical management of administrators and password protection RADIUS and TACAS+ AAA (IPv4/IPv6) for device login management Secure Shell (SSH) and SSH V2.0

Model	RG-S5315-24MG6XS-UP-E
Security feature	Bridge Protocol Data Unit (BPDU) guard IP source guard CPP and NFPP Port protection
Ring network protocol	In compliance with the G.8032 international standard ring network protocol Ethernet Ring Protection Switching (ERPS), well compatible with other products that support this protocol
PoE	IEEE 802.3af/at/bt-compliant power supply Automatic and energy-efficient power supply management modes Uninterruptible power supply upon warm start Scheduled power-on and power-off of PoE ports based on the time policy Port priority
IP routing	IPv4/IPv6 static routing Routing Information Protocol (RIP), RIP next generation (RIPng), Open Shortest Path First Version 2 (OSPFv2), and OSPFv3 Routing policy
Basic IPv6 protocols	IPv6 addressing, Neighbor Discovery (ND), ICMPv6, IPv6 ping, IPv6 tracert, and other IPv6 protocols
SAVI	Neighbor Solicitation (NS), Neighbor Advertisement (NA), Router Solicitation (RS), and Router Advertisement (RA) packet attack defense Preventing an unauthorized DHCPv6 server from allocating IPv6 addresses Cache of invalid terminal information
VSU	VSU Local stacking and remote stacking Cross-chassis link bundling within the stack Virtualization through standard service ports
Reliability	1+1 power redundancy Bidirectional Forwarding Detection (BFD) IPv6-based gateway hot backup protocol (Virtual Router Redundancy Protocol Version 3 [VRRPv3])
ZTP	CWMP (TR-069)
Management feature	SNMPv1/v2c/v3, CLI (Telnet/console), RMON (1, 2, 3, 9), Web, SSH, syslog/debugging, Network Time Protocol (NTP)/Simple Network Time Protocol (SNTP), File Transfer Protocol (FTP), Trivial File Transfer Protocol (TFTP), and sFlow

06 Protocol Compliance

RG-S5350-E Series	
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

RG-S5350-E Series	
Organization	**Standard and Protocol**
IETF	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 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

RG-S5350-E Series

| Organization	Standard and Protocol
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-S5315-E series switches feature security, efficiency, intelligence, and energy saving design and can meet networking requirements of the following scenarios:

- Full gigabit LAN access of large enterprise and institution campuses, such as LANs of government buildings, universities, and large manufacturing, energy, and metallurgical enterprises
- Gigabit access to commercial systems, such as those of health care organizations, libraries, exhibition centers, and websites
- Access of VoIP phones, WLAN access points (APs), and high-definition cameras
- Gigabit access to the server cluster and 10 Gbps high-bandwidth uplink
- Flexible and diversified security control policies required to prevent and control network viruses and network attacks, and to provide secure access for users

Scenario 1

The RG-S5315-E series access switches can connect with RG-S6150-X or RG-S6120 series aggregation switches and RG-N18000-E series core switches to deliver a 2.5 Gbps link to users and a high-performance 10 Gbps link from the aggregation switch to the core switch. This setup meets the growing data demands of access users. In the SDN solution, intelligent functions such as admission control and visualized O&M can be implemented.
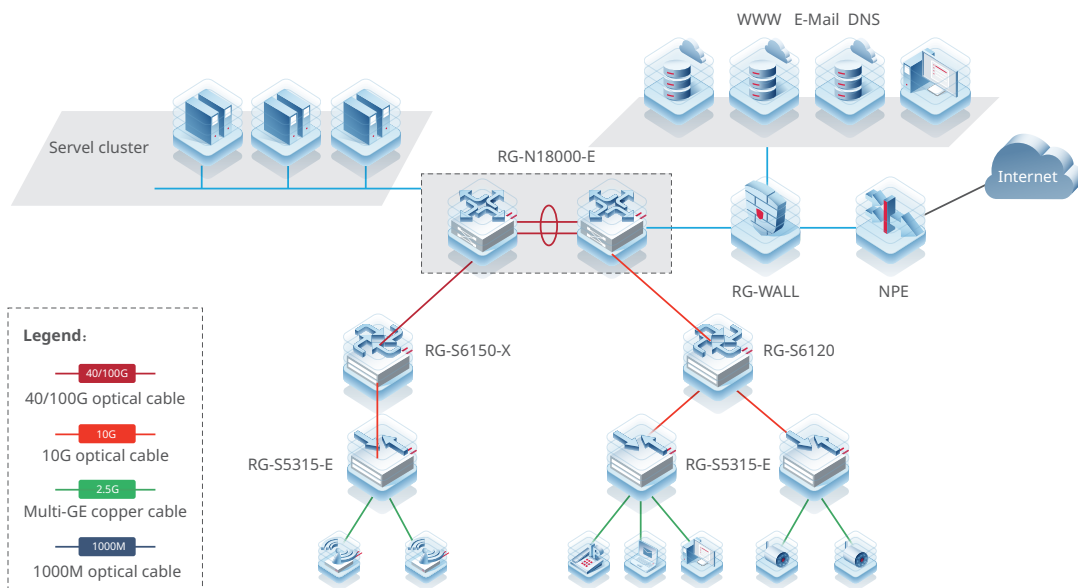
Scenario 2

The RG-S5315-E series switches serve as access switches in Simplified Optical Ethernet Solution (SOE). The following figure shows the typical application topology.
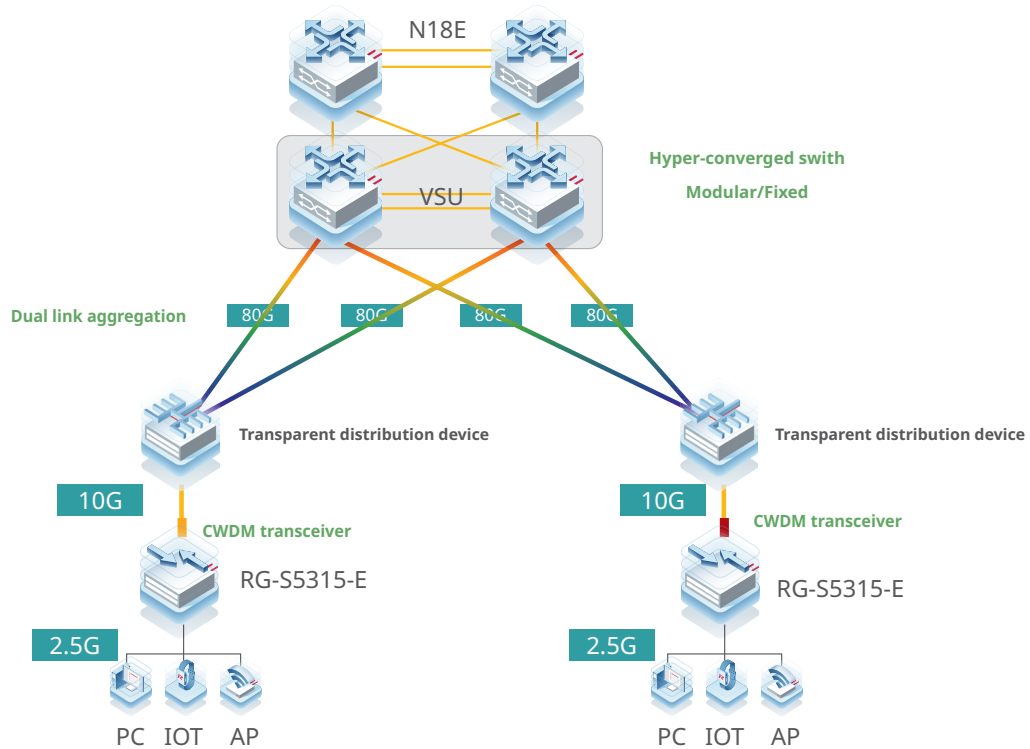
08 Ordering Guide

Follow the steps to order the RG-S5315-E series switches.
- Select a model of RG-S5315-E series switches.
- Select power modules (at least one).
- Select optical transceivers based on optical ports of the switch.

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

09 Package Contents

Item	Quantity
Chassis	1
Grounding wire	1
Mounting bracket	2
Rubber pad	4
M6 x 16 screwM4x8 cross recessed countersunk head screw	8

Item	Quantity
Network Product Warranty Manual and Hazardous Substance Statement	1
Ruijie Networks Access Product Management Software	1 (pre-installed)
User Manual and installation instruction	1

10 Ordering Information

Switch and Power Module

Model	Description
RG-S5315-24MG6XS-UP-E	24 x 100/1000/2500BASE-T ports with auto-negotiation, supporting PoE/PoE+/PoE++ and the maximum PoE output power of 1600 W, 6 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:
- 6 x 1GE/2.5GE /10GE SFP+ ports support 1GE SFP transceivers, 2.5GE SFP transceivers and 10GE SFP+ transceivers.

Power Module

Model	Description
RG-PA600I-P-F	600 W AC power module, PoE power module
RG-PA1000I-P-F	1,000 W AC power module, PoE power module

GE Optical Transceivers

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
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 Optical Transceivers

Model	Description
2.5G-SFP-LX03-SM1310-BIDI-I	2500BASE-LX, SFP transceiver, TX1310/RX1550, BiDi LC, 3 km over SMF
2.5G-SFP-LX03-SM1550-BIDI-I	2500BASE-LX, SFP transceiver, TX1550/RX1310, BiDi LC, 3 km over SMF

10GE Optical Transceivers

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

CWDM Transceivers

Model	Description
GE-SFP-LR(A1-8)-H	1000BASE-LR, access switch-side group of 8 SFP CWDM transceivers, 8 different wavelengths for 8 access devices, Duplex LC, 10 km over SMF, operating temperature of 0°C to 70°C (32°F to 158°F)
GE-SFP-LR(A1-8)-H-E	1000BASE-LR, access switch-side group of 8 SFP CWDM transceivers, 8 different wavelengths for 8 access devices, Duplex LC, 10 km over SMF, operating temperature of 0°C to 85°C (32°F to 185°F)
MG-SFP-LR(A1-8)-H	2.5GBASE-LR, access switch-side group of 8 SFP CWDM transceivers, 8 different wavelengths for 8 access devices, Duplex LC, 10 km over SMF, operating temperature of 0°C to 70°C (32°F to 158°F)
MG-SFP-LR(A1-8)-H-E	2.5GBASE-LR, access switch-side group of 8 SFP CWDM transceivers, 8 different wavelengths for 8 access devices, Duplex LC, 10 km over SMF, operating temperature of 0°C to 85°C (32°F to 185°F)
XG-SFP-LR(A1-8)-H	10GBASE-LR, access switch-side group of 8 SFP+ CWDM transceivers, 8 different wavelengths for 8 access devices, Duplex LC, 10 km over SMF, operating temperature of 0°C to 70°C (32°F to 158°F)
XG-SFP-LR(A1-8)-H-E	10GBASE-LR, access switch-side group of 8 SFP+ CWDM transceivers, 8 different wavelengths for 8 access devices, Duplex LC, 10 km over SMF, operating temperature of 0°C to 85°C (32°F to 185°F)

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