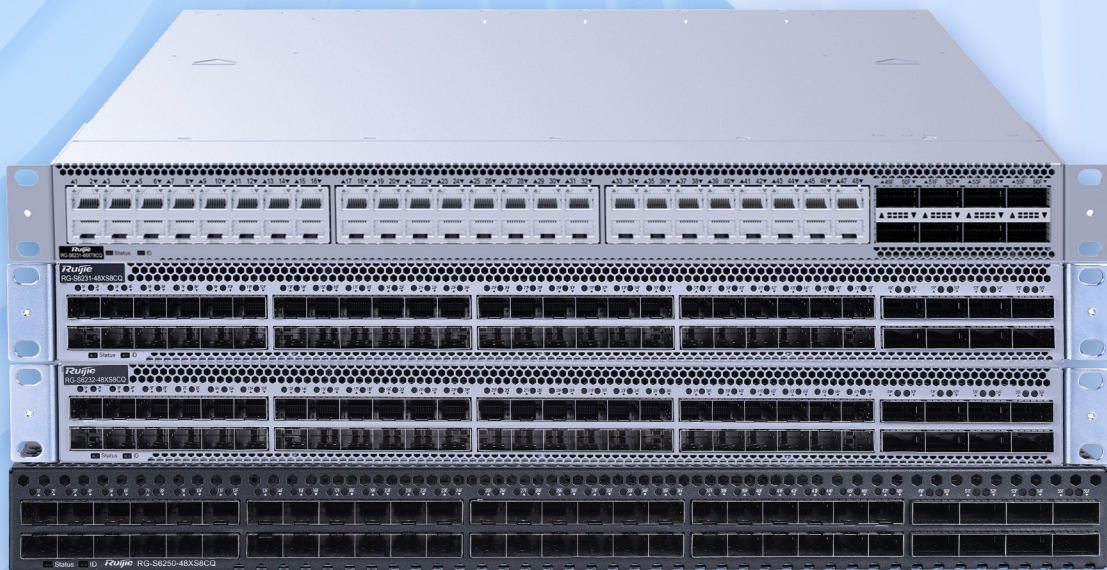


# RG-S6200 Series

Next-Generation Data Center and  
Cloud Computing Switch



## 01 Product Overview

The RG-S6200 series switch is a next-generation, high-performance, and high-density 10GE switch developed by Ruijie Networks for data centers. It provides 48 x 10GE ports and 8 x 100GE ports, with each 100GE port supporting auto-negotiation between 100GE and 40GE. The switch features 1+1 redundancy for power modules and 3+1 redundancy for fan modules, both of which support hot-swapping.

The RG-S6200 series includes RG-S6231-48XT8CQ, RG-S6231-48XS8CQ, RG-S6232-48XS8CQ, and RG-S6250-48XS8CQ.

## 02 Product Appearance



RG-S6231-48XT8CQ Front View



RG-S6231-48XT8CQ Rear View



RG-S6231-48XS8CQ Front View



RG-S6231-48XS8CQ Rear View



RG-S6232-48XS8CQ Front View



RG-S6232-48XS8CQ Rear View



RG-S6250-48XS8CQ Front View



RG-S6250-48XS8CQ Rear View

## 03 Product Features

### Setting Up a Non-Blocking Data Center Network with a Large Buffer

The RG-S6200 series switch is a line-rate switch, coping with heavy east-west traffic easily. It is ideal for high-traffic, next-generation data centers.

One single chassis provides up to 48 x 10GE ports and 8 x 100GE ports for uplink connection. All ports support data forwarding at the line rate.

To cope with non-blocking transmission of heavy traffic in data centers, the switch offers a large buffer and the advanced buffer scheduling mechanism, ensuring the effective utilization of the device's buffering capacity.

### Data Center Virtualization

The switch adopts the virtual switching unit 2.0 (VSU2.0) technology to virtualize multiple physical devices into one logical device for unified operation and management, which reduces network nodes and enhances network reliability. The switch implements fast switchover within 50 ms to 200 ms upon a link failure, ensuring uninterrupted transmission for critical service traffic. In addition, it supports Multi-Chassis Link Aggregation Group (M-LAG), enabling dual-active uplink connection to servers and switches.

### Data Center Overlay Networking

The switch supports Virtual Extensible Local Area Network (VXLAN), thereby meeting the data center overlay networking requirements. This addresses the issue of limited VLAN availability and scalability on conventional data center networks.

On a basic network constructed using RG-S6200 series switches, new subnets can be divided based on the overlay network without changing the physical topology, eliminating the bottleneck of IP addresses and broadcast domains of physical networks.

### Data Center Layer 2 Network Expansion

The VXLAN technology encapsulates Layer 2 packets into User Datagram Protocol (UDP) packets and is used to build a logical Layer 2 network over a Layer 3 network. The Ethernet Virtual Private Network (EVPN) protocol enables the RG-S6200 series switch to automatically discover and authenticate virtual tunnel endpoints (VTEPs). This reduces the number of packets that are flooded on the VXLAN data plane and minimizes dependence

on multicast deployment at the underlying layer, and simplifies VXLAN deployment. As a result, it enhances the efficiency of building large Layer 2 networks, meeting the needs of data centers with large Layer 2 network deployment requirements.

### Carrier-Class High Reliability

The RG-S6200 series switch supports built-in redundant power modules and modular fan modules. The power and fan modules can be hot swapped without affecting service continuity on the switch. The switch provides power and fan fault detection and alarm function. It automatically adjusts the fan speed based on temperature changes, better adapting to data center environments. The switch also supports device-level and link-level reliability protection as well as overcurrent protection, overvoltage protection, and over temperature protection.

The switch also offers a wide range of link-level reliability technologies such as Rapid Ethernet Uplink Protection Protocol (REUP), graceful restart (GR), and bidirectional forwarding detection (BFD). On the network that carries multiple services with heavy traffic, these mechanisms enable fast network convergence and ensure smooth service rollout.

### IPv4/IPv6 Dual-Stack Protocols and Multilayer Switching

The hardware of the RG-S6200 series switch supports IPv4 and IPv6 protocol stacks and multilayer line-rate switching, and differentiates and processes IPv4 and IPv6 packets. The switch also supports multiple tunneling technologies such as manually configured tunnels, automatic tunnels, and Intra-Site Automatic Auto Tunnel Addressing Protocol (ISATAP) tunnels, offering flexible solutions for IPv6 network communication based on the specific IPv6 network planning requirements and the current network environment.

The switch supports a variety of IPv4 routing protocols, including static routing, Routing Information Protocol (RIP), Open Shortest Path First (OSPF), Intermediate System to Intermediate System (IS-IS), and Border Gateway Protocol version 4 (BGP4), allowing users to flexibly choose the appropriate routing protocol for building networks in different environments.

The switch also supports various IPv6 routing protocols, including IPv6 static routing, Routing Information Protocol next generation (RIPng), OSPFv3, and BGP4+. Users can flexibly select an IPv6 routing protocol to upgrade the live network to an IPv6 network or establish a new IPv6 network.

## Flexible and Comprehensive Security Policies

The RG-S6200 series switch can effectively defend against virus and hacker attacks through multiple built-in mechanisms, such as DoS attack defense, IP scanning attack defense, ARP packet validity check, and multiple hardware-based ACLs.

The hardware-based IPv6 ACLs can easily control the access of IPv6 users at the network edge even on an IPv4 network. The switch allows IPv4 and IPv6 users to coexist and can control access permissions of IPv6 users, for example, restricting access to sensitive resources on a network.

The switch supports Telnet access control based on source IP addresses, which prevents unauthorized users and hackers from attacking and controlling the switch, thus enhancing network management security. Through Secure Shell (SSH) and Simple Network Management Protocol version 3 (SNMPv3), the switch can encrypt management information in Telnet and SNMP processes. This ensures information security of management devices and prevents hackers from attacking and controlling the devices.

The switch denies unauthorized network access and enables

authorized network access by employing multi-tuple binding, port security, time range-based ACL, and traffic-based rate limiting. The switch can strictly control user access to enterprise networks and campus networks and deny communication requirements of unauthorized users.

## All-Round Management Features

The switch provides various management ports including the console port, management port, and USB port, and supports Simple Network Management Protocol (SNMP) v1/v2c/v3, universal network management platform, and service management software such as BMC. The switch provides various management modes such as CLI, Telnet, and cluster management, and different encryption modes such as SSH2.0 and SSL, facilitating easy and secure management.

In addition, the switch supports the switched port analyzer (SPAN), remote switched port analyzer (RSPAN), and multiple SPAN monitoring ports, making network traffic monitoring intuitive. The switch provides various network traffic analysis reports to help you promptly optimize the network architecture and adjust resource deployment.

## 04 Product Specifications

### Hardware Specifications

| Item                   | RG-S6231-48XT8CQ                                                                                                           | RG-S6231-48XS8CQ                                                                                                          | RG-S6232-48XS8CQ | RG-S6250-48XS8CQ                                                                                                           |
|------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------|
| Dimensions (W x D x H) | 442 mm x 480 mm x 44 mm (17.40 in. x 18.90 in. x 1.73 in.)                                                                 | 442 mm x 387 mm x 44 mm (17.40 in. x 15.24 in. x 1.73 in.)                                                                |                  |                                                                                                                            |
| Rack height            | 1 RU                                                                                                                       |                                                                                                                           |                  |                                                                                                                            |
| Unit weight            | 10.4 kg (22.93 lbs., empty chassis)<br>13 kg (28.66 lbs., a chassis installed with two power modules and four fan modules) | 7.4 kg (16.31 lbs., empty chassis)<br>10 kg (22.05 lbs., a chassis installed with two power modules and four fan modules) |                  | 5.6 kg (12.35 lbs., empty chassis)<br>8.2 kg (18.08 lbs., a chassis installed with two power modules and four fan modules) |
| Switching capacity     | 4.8 Tbps                                                                                                                   |                                                                                                                           |                  | 2.56 Tbps                                                                                                                  |
| Packet forwarding rate | 1000 Mpps                                                                                                                  |                                                                                                                           |                  | 1920 Mpps                                                                                                                  |
| Service port           | 48 x 100/1000/10G BASE-T ports<br>8 x 40G/100G QSFP28 ports                                                                | 48 x 1G/10G SFP+ ports<br>8 x 40G/100G QSFP28 ports                                                                       |                  |                                                                                                                            |
| Management port        | 1 x RJ45 console port<br>1 x RJ45 MGMT port                                                                                |                                                                                                                           |                  |                                                                                                                            |
| USB port               | 1 x USB 2.0 port (Type A connector)                                                                                        |                                                                                                                           |                  |                                                                                                                            |

| Item              | RG-S6231-48XT8CQ                                                                                                                                                                                                                                                                                                                                                                                                                            | RG-S6231-48XS8CQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | RG-S6232-48XS8CQ                                                                                                                                                                                                                                                                                                                                                                                                                         | RG-S6250-48XS8CQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module slot       | 2 x power module slots<br>4 x fan module slots                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Power consumption | Maximum power consumption: 309 W<br>Typical power consumption: 258 W<br>Static power consumption: 106 W                                                                                                                                                                                                                                                                                                                                     | Maximum power consumption: 268 W<br>Typical power consumption: 136W<br>Static power consumption: 80.9 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Maximum power consumption: 280 W<br>Typical power consumption: 149W<br>Static power consumption: 89 W                                                                                                                                                                                                                                                                                                                                    | Maximum power consumption: 300 W<br>Typical power consumption: 165 W<br>Static power consumption: 98 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Power input       | <p>RG-PA550I-F (AC input):<br/>Rated input voltage: 100 V AC to 240 V AC, 50 Hz/60 Hz<br/>Maximum input voltage: 90 V AC to 140 V AC, 180 V AC to 264 V AC, 47 Hz to 63 Hz<br/>Rated input current: 7.2 A to 3.5 A (100 V AC to 240 V AC)<br/>Power port type: C14</p> <p>RG-PA550I-F (HVDC input):<br/>Rated input voltage: 240 V DC<br/>Maximum input voltage: 180 V DC to 310 V DC<br/>Rated current: 3.6 A<br/>Power port type: C14</p> | <p>RG-PA550I-F (AC input):<br/>Rated input voltage: 100 V AC to 240 V AC, 50 Hz/60 Hz<br/>Maximum input voltage: 90 V AC to 140 V AC, 180 V AC to 264 V AC, 47 Hz to 63 Hz<br/>Rated input current: 7.2 A to 3.5 A (100 V AC to 240 V AC)<br/>Power port type: C14</p> <p>RG-PA550I-F (HVDC input):<br/>Rated input voltage: 240 V DC<br/>Maximum input voltage: 180 V DC to 310 V DC<br/>Rated current: 3.6 A<br/>Power port type: C14</p> <p>RG-PA550I-R (AC input):<br/>Rated input voltage: 100 V AC to 240 V AC, 50 Hz/60 Hz<br/>Maximum input voltage: 90 V AC to 140 V AC, 180 V AC to 264 V AC, 47 Hz to 63 Hz<br/>Rated input current: 7.2 A to 3.5 A (100 V AC to 240 V AC)<br/>Power port type: C14</p> <p>RG-PA550I-R (HVDC input):<br/>Rated input voltage: 240 V DC<br/>Maximum input voltage: 180 V DC to 310 V DC<br/>Rated current: 3.6 A<br/>Power port type: C14</p> | <p>RG-PA550I-F (AC input):<br/>Rated input voltage: 100 V AC to 240 V AC, 50 Hz/60 Hz<br/>Maximum input voltage: 90 V AC to 140 V AC, 180 V AC to 264 V AC, 47 Hz to 63 Hz<br/>Rated input current: 7.2 A to 3.5 A (100 V to 240 V AC)<br/>Power port type: C14</p> <p>RG-PA550I-F (HVDC input):<br/>Rated input voltage: 240 V DC<br/>Maximum input voltage: 180 V DC to 310 V DC<br/>Rated current: 3.6 A<br/>Power port type: C14</p> | <p>RG-PA550I-F (AC input):<br/>Rated input voltage: 100 V AC to 240 V AC, 50 Hz/60 Hz<br/>Maximum input voltage: 90 V AC to 140 V AC, 180 V AC to 264 V AC, 47 Hz to 63 Hz<br/>Rated input current: 7.2 A to 3.5 A (100 V AC to 240 V AC)<br/>Power port type: C14</p> <p>RG-PHD550I-F (AC input):<br/>Rated input voltage: 100 V AC to 240 V AC, 50 Hz/60 Hz<br/>Maximum input voltage: 90 V AC to 264 V AC, 47 Hz to 63 Hz<br/>Rated input current: 10 A<br/>Power port type: C14</p> <p>RG-PHD550I-F (HVDC input):<br/>Rated input voltage: 336 V DC<br/>Maximum input voltage: 160 V DC to 400 V DC<br/>Rated input current: 10 A<br/>Power port type: C14</p> |

| Item        | RG-S6231-48XT8CQ                                                                                                                                                                                                                                                                                     | RG-S6231-48XS8CQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RG-S6232-48XS8CQ | RG-S6250-48XS8CQ                                                                                                                                                         |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power input |                                                                                                                                                                                                                                                                                                      | RG-PHD550I-F (AC input):<br>Rated input voltage: 100 V AC to 240 V AC, 50 Hz/60 Hz<br>Maximum input voltage: 90 V AC to 264 V AC, 47 Hz to 63 Hz<br>Rated input current: 10 A<br>Power port type: C14<br><br>RG-PHD550I-F (HVDC input):<br>Rated input voltage: 336 V DC<br>Maximum input voltage: 160 V DC to 400 V DC<br>Rated input current: 10 A<br>Power port type: C14<br><br>RG-PD800I-F (DC input):<br>Rated input voltage: -48 V DC<br>Maximum input voltage: -36 V DC to -72 V DC<br>Rated input current: 23 A<br>Power port: three-pin power port |                  | RG-PD800I-F (DC input):<br>Rated input voltage: -48 V DC<br>Maximum input voltage: -36 V DC to -72 V DC<br>Rated input current: 23 A<br>Power port: three-pin power port |
| Temperature | Operating temperature: 0°C to 45°C (32°F to 113°F)<br>Storage temperature: -40°C to +70°C (-40°F to +158°F)<br>Note: At altitudes ranging from 1800 m (5,905.51 ft.) to 5000 m (16,404.20 ft.), the maximum temperature decreases by 1°C (1.8°F) for every 200 m (656.17 ft.) increase in elevation. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                                                                                                                                                                          |
| Humidity    | Operating humidity: 10% RH to 90% RH (non-condensing)<br>Storage humidity: 5% RH to 95% RH (non-condensing)                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                                                                                                                                                                          |
| Altitude    | Operating altitude: ≤ 5,000 m (16,404.20 ft.)<br>Storage altitude: ≤ 5000 m (16,404.20 ft.)                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                                                                                                                                                                          |
| Cooling     | Air cooling, front-to-rear airflow (port-side intake)                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                                                                                                                                                                          |

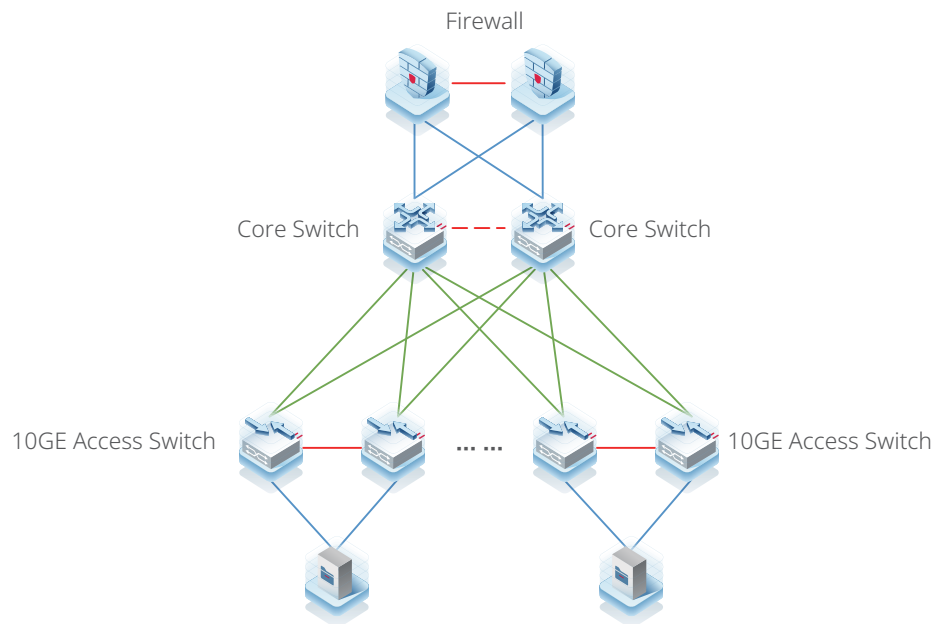
## Software Specifications

| Item              | RG-S6231-48XT8CQ                                                                                                                                                                                                                                                                                                                                                                                                                                                 | RG-S6231-48XS8CQ | RG-S6232-48XS8CQ | RG-S6250-48XS8CQ |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|
| Layer 2 protocols | IEEE802.3ae (10GBase), IEEE802.3ak, IEEE802.3an, IEEE802.3x, IEEE802.3ad (static link aggregation, LACP, M-LAG), IEEE802.1p, IEEE802.1Q, IEEE802.1D (STP), STP root guard, and BPDU guard<br>IEEE802.1w(RSTP), IEEE802.1s(MSTP)<br>IGMP Snooping v1/v2, MLD Snooping, Jumbo Frame(9Kbytes)<br>IEEE 802.1ad (QinQ and selective QinQ), GVRP, Three modes (access, trunk, and hybrid), LLDP, static MAC address, MAC address filtering, MAC address quantity limit |                  |                  |                  |
|                   | IEEE 802.3ab, ERPS                                                                                                                                                                                                                                                                                                                                                                                                                                               |                  |                  | N/A              |

| Item                     | RG-S6231-48XT8CQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | RG-S6231-48XS8CQ | RG-S6232-48XS8CQ | RG-S6250-48XS8CQ |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|
| Layer 3 protocols (IPv4) | Static routing, BGP4, OSPFv2, IS-IS, RIPv1, RIPv2, MBGP, LPM routing, policy-based routing (PBR), route-policy, ECMP, WCMP, VRRP, IGMP v1/v2/v3, PIM-SSM/SM/DM, MSDP, and Any-RP, BFD for BGP/IS-IS/OSPF/ static routing, manual tunnel, GRE tunnel                                                                                                                                                                                                                                                                                                                                                  |                  |                  |                  |
| Basic IPv6 protocols     | Neighbor discovery, ICMPv6, path MTU discovery, DNSv6, DHCPv6, ICMPv6, ICMPv6 redirection, IS-ISv6, ACLv6, IPv6 TCP/UDP, SNMPv6, IPv6 Ping/Traceroute, IPv6 RADIUS, IPv6 Telnet/SSH, IPv6 FTP/TFTP, NTPv6, IPv6 MIB for SNMP, IPv6 VRRP, IPv6 QoS                                                                                                                                                                                                                                                                                                                                                    |                  |                  |                  |
| IPv6 features            | Static routing, ECMP, PBR, OSPFv3, RIPv6, BGP4+, IS-ISv6, IPv6 VRRP, MLDv1/v2, PIM-SMv6, manual tunnel, GRE tunnel, automatic tunnel, IPv4 over IPv6 tunnel, and ISATAP tunnel                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                  |                  |
| Data center features     | VXLAN routing and VXLAN bridging<br>EVPN VXLAN<br>VXLAN mapping<br>IPv4 VXLAN over IPv4<br>IPv6 VXLAN over IPv4<br>IPv6 VXLAN over IPv6<br>IPv6 VXLAN over IPv6<br>VXLAN over IPv6<br>M-LAG<br>OpenFlow 1.3<br>RDMA, RoCEv2, PFC, and ECN                                                                                                                                                                                                                                                                                                                                                            |                  |                  |                  |
| Process                  | gRPC<br>sFlow sampling<br>IPFIX sampling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |                  |                  |
| QoS                      | IEEE 802.1p, ToS, and DSCP priority mapping<br>ACL traffic classifier, and priority tagging Mark/Remark<br>Various queue scheduling mechanisms such as SP (PQ), WRR, DRR, SP (PQ)+WRR, and SP (PQ)+DRR<br>Flexible queue scheduling algorithms based on ports or queues<br>Congestion avoidance mechanisms such as WRED and tail discarding<br>Ingress/egress port-based rate limiting and CAR                                                                                                                                                                                                       |                  |                  |                  |
| MPLS                     | MPLS VPN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |                  |                  |
| Virtualization           | Virtual switching unit (VSU)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                  |                  |
| Buffer management        | Buffer usage monitoring and traffic microburst detection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |                  |                  |
| High availability        | GR for RIP/OSPF/BGP, BFD, DLDP, VRRP, VRRP load balancing/dual-active, BFD for VRRP, REUP, RLDP, 1+1 power redundancy and fan redundancy, and hot swappable line cards and power modules                                                                                                                                                                                                                                                                                                                                                                                                             |                  |                  |                  |
| Security features        | Network Foundation Protection Policy (NFPP), CPU Protection Policy (CPP), DDoS/DoS attack defense, ICMP attack defense, unauthorized packet detection, data encryption, source IP spoofing defense, IP scanning attack defense, RADIUS/TACACS, IPv4/v6 packet filtering by basic ACL, extended ACL, port-based ACL, or VLAN-based ACL, cleartext and MD5-based authentication for OSPF, RIPv2, and BGPv4 packets, Telnet login from specified IP addresses, uRPF, broadcast packet suppression, DHCP snooping, ARP spoofing defense (ARP anti-spoofing), ARP check, and hierarchical user management |                  |                  |                  |
| Management mode          | SNMP v1/v2c/v3, Telnet, Console, MGMT, RMON, SSHv1/v2, FTP/TFTP, NTP, Syslog, SPAN/RSPAN/ERSPAN, Telemetry, ZTP, NETCONF, Python, fan and power alarm, temperature alarm, and configuration rollback                                                                                                                                                                                                                                                                                                                                                                                                 |                  |                  |                  |
| Other protocols          | DHCP Client, DHCP Relay, DHCP Server, DNS Client, UDP Relay, Proxy ARP, and Syslog                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                  |                  |

## 05 Typical Applications

### Data Center 10GE Access



## 06 Ordering Guide

Take the following steps to order an RG-S6200 series switch:

- Select the chassis with all power modules and fan modules.

## 07 Ordering Information

### Chassis

| Model            | Description                                                                                                                                                                                                                     |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RG-S6231-48XT8CQ | RG-S6231-48XT8CQ chassis, 48 x 10BASE-T Ethernet ports, 8 x 100GE QSFP28 ports, 2 x power module slots, 4 x fan module slots. The chassis is equipped with two power modules (RG-PA550I-F) and four fan modules (M1EFAN III-F). |
| RG-S6231-48XS8CQ | RG-S6231-48XS8CQ chassis, 48 x 10GE SFP+ ports, 8 x 100GE QSFP28 ports, 2 x power module slots, 4 x fan module slots. The chassis is equipped with two power modules (RG-PA550I-F) and four fan modules (M1EFAN III-F).         |
| RG-S6232-48XS8CQ | RG-S6232-48XS8CQ chassis, 48 x 10GE SFP+ ports, 8 x 100GE QSFP28 ports, 2 x power module slots, 4 x fan module slots. The chassis is equipped with two power modules (RG-PA550I-F) and four fan modules (M1EFAN III-F).         |
| RG-S6250-48XS8CQ | RG-S6250-48XS8CQ chassis, 48 x 10GE SFP+ ports, 8 x 100GE QSFP28 ports, 2 x power module slots, 4 x fan module slots. The chassis is equipped with two power modules (RG-PA550I-F) and four fan modules (M1EFAN II-F).          |

## Power Modules

| Model        | Description                                                                                                                         |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------|
| RG-PA550I-F  | 550 W power module (supporting AC and 240 V HVDC)                                                                                   |
| RG-PD800I-F  | 800 W power module (supporting 48 V LVDC) for the RG-S6250-48XS8CQ and the RG-S6510-48VS8CQ                                         |
| RG-PA550I-R  | 550 W AC power module (rear-to-front airflow, supporting AC and 240 V HVDC), used with rear-to-front airflow fan module M1EFAN IV-R |
| RG-PHD550I-F | 550 W AC power module (supporting 336 V HVDC)                                                                                       |

## Fan Modules

| Model        | Description                                                                                                                  |
|--------------|------------------------------------------------------------------------------------------------------------------------------|
| M1EFAN II-F  | Fan module (port-side intake) for the RG-S6250-48XS8CQ                                                                       |
| M1EFAN III-F | Fan module (port-side intake) for the RG-S6231-48XT8CQ, the RG-S6231-48XS8CQ, the RG-S6232-48XS8CQ, and the RG-S6501-48VS8CQ |
| M1EFAN IV-R  | Fan module (fan-side intake), applicable to the RG-S6231-48XS8CQ and the RG-S6231-48XT8CQ                                    |

## 40G Optical Transceivers

| Model                | Description                                                                                                                     |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 40G-AOC-5M           | 40G QSFP+ active optical cable (AOC), 5 m (16.40 ft.)                                                                           |
| 40G-AOC-30M          | 40G QSFP+ active optical cable, 30 m (98.43 ft.)                                                                                |
| 40G-QSFP-SR-MM850    | 40G SR optical transceiver, QSFP+ form factor, MPO, 150 m (492.13 ft.) over multimode fiber (MMF)                               |
| 40G-QSFP-LSR-MM850   | 40G SR optical transceiver, QSFP+ form factor, MPO, 400 m (1,312.34 ft.) over MMF                                               |
| 40G-QSFP-LR4-SM1310  | 40G LR4 optical transceiver, QSFP+ form factor, Duplex LC, 10 km (32,808.40 ft.) over single-mode fiber (SMF)                   |
| 40G-QSFP-iLR4-SM1310 | 40G iLR4 optical transceiver, QSFP+ form factor, Duplex LC, 2 km (6,561.68 ft.) over SMF                                        |
| 40G-QSFP-LX4-SM1310  | 40G LX4 optical transceiver, QSFP+ form factor, Duplex LC, 150 m (492.13 ft.) over OM3/OM4 MMF, or 2 km (6,561.68 ft.) over SMF |

## 100G Optical Transceivers

| Model                 | Description                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------------------|
| 100G-AOC-5M           | 100G AOC, QSFP28 form factor, 5 m (16.40 ft.)                                                         |
| 100G-AOC-10M          | 100G AOC, QSFP28 form factor, 10 m (32.81 ft.)                                                        |
| 100G-QSFP-SR-MM850    | 100G SR optical transceiver, QSFP28 form factor, MPO, 850 nm, 100 m (328.08 ft.) over MMF             |
| 100G-QSFP-iLR4-SM1310 | 100G iLR4 optical transceiver, QSFP28 form factor, Duplex LC, 1310 nm, 2 km (6,561.68 ft.) over SMF   |
| 100G-QSFP-LR4-SM1310  | 100G LR4 optical transceiver, QSFP28 form factor, Duplex LC, 1310 nm, 10 km (32,808.40 ft.) over SMF  |
| 100G-QSFP-ER4-SM1310  | 100G ER4 optical transceiver, QSFP28 form factor, Duplex LC, 1310 nm, 40 km (131,233.60 ft.) over SMF |

## GE Optical Transceivers

| Model                   | Description                                                                            |
|-------------------------|----------------------------------------------------------------------------------------|
| GE-SFP-LH40-SM1310-BIDI | 1G LH optical transceiver, SFP form factor, BIDI LC, 40 km (131,233.60 ft.) over SMF   |
| GE-SFP-LX20-SM1310-BIDI | 1G LX optical transceiver, SFP form factor, BIDI LC, 20 km (65,616.80 ft.) over SMF    |
| GE-SFP-LX20-SM1550-BIDI | 1G LX optical transceiver, SFP form factor, BIDI LC, 20 km (65,616.80 ft.) over SMF    |
| MINI-GBIC-LH40-SM1310   | 1G LH optical transceiver, SFP form factor, Duplex LC, 40 km (131,233.60 ft.) over SMF |
| MINI-GBIC-LX-SM1310     | 1G LX optical transceiver, SFP form factor, Duplex LC, 10 km (32,808.40 ft.) over SMF  |
| MINI-GBIC-SX-MM850      | 1G SR optical transceiver, SFP form factor, Duplex LC, 550 m (1,804.46 ft.) over MMF   |
| MINI-GBIC-ZX80-SM1550   | 1G ZX optical transceiver, SFP form factor, Duplex LC, 80 km (262,467.19 ft.) over SMF |

## GE Copper Transceivers

| Model           | Description                                                                                                                                                                                                                                      |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mini-GBIC-GT(F) | 1G copper transceiver, SFP form factor, RJ45, used with Cat5e, Cat 6, and Cat6a, transmission distance of up to 100 m (328.08 ft.) For the RG-S6200 series products, the Mini-GBIC-GT(F) transceiver is applicable only to the RG-S6250-48XS8CQ. |
| Mini-GBIC-GT    | 1G copper transceiver, SFP form factor, RJ45, used with Cat5e, Cat 6, and Cat6a, transmission distance of up to 100 m (328.08 ft.)                                                                                                               |

## 10GE Optical Transceivers

| Model            | Description                                                                              |
|------------------|------------------------------------------------------------------------------------------|
| XG-SFP-SR-MM850  | 10G SR optical transceiver, SFP+ form factor, Duplex LC, 300 m (984.25 ft.) over MMF     |
| XG-SFP-LR-SM1310 | 10G LR optical transceiver, SFP+ form factor, Duplex LC, 10 km (32,808.40 ft.) over SMF  |
| XG-SFP-ER-SM1550 | 10G ER optical transceiver, SFP+ form factor, Duplex LC, 40 km (131,233.60 ft.) over SMF |
| XG-SFP-ZR-SM1550 | 10G ZR optical transceiver, SFP+ form factor, Duplex LC, 80 km (262,467.19 ft.) over SMF |
| XG-LR-SM1310     | 10G LR optical transceiver, SFP+ form factor, Duplex LC, 10 km (32,808.40 ft.) over SMF  |
| XG-SFP-AOC1M     | 10G AOC, SFP+ form factor, 1 m (3.28 ft.)                                                |
| XG-SFP-AOC3M     | 10G AOC, SFP+ form factor, 3 m (9.84 ft.)                                                |
| XG-SFP-AOC5M     | 10G AOC, SFP+ form factor, 5 m (16.40 ft.)                                               |
| XG-SR-MM850      | 10G SR optical transceiver, SFP+ form factor, Duplex LC, 300 m (984.25 ft.) over MMF     |

## 08 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.

## 09 More Information

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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: [service\\_rj@ruijie.com](mailto:service_rj@ruijie.com)



**Ruijie Networks Co., Ltd.**

For more information, visit [www.ruijie.com](http://www.ruijie.com) or call 86-400-620-8818.