RG-S7800C & RG-S7800C-X Series
Multi-service Core Switch

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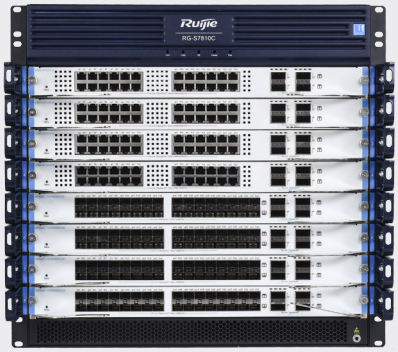
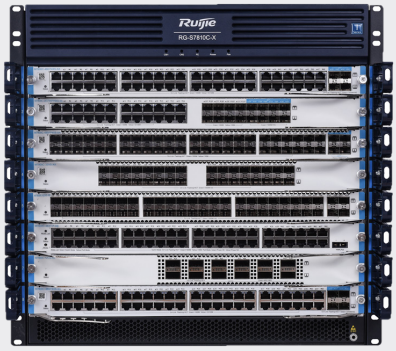
Product Pictures

RG-S7805C

RG-S7808C



RG-S7810C



RG-S7810C-X

Product Overview

The RG-S7800C and RG-S7800C-X series switches, multi-service core switches released by Ruijie Networks for next-generation converged networks, integrate features of campus networks and data centers.

Using the modular operating system (OS), the RG-S7800C and RG-S7800C-X support IPv4, IPv6, and other network services, satisfying application requirements of the Ethernet in the future. In addition, it supports Virtual Switching Unit (VSU) that simplifies customers' network architecture and improves O&M efficiency.

The RG-S7800C and RG-S7800C-X series switches can be deployed on MANs, campus networks, and data centers based on service requirements. They lay a foundation for high-performance networks that support IoT service lifecycle management, mobility applications, and cloud applications.

Product Highlights

- Employs the advanced Clos multi-level multi-plane architecture to separate the control plane from the forwarding plane. This ensures non-blocking switching at line rate among all interfaces, and delivers continuous bandwidth upgrade and service support capabilities.
- Provides highly-efficient energy-saving system and power supply system, supports dynamic power management, and is equipped with intelligent fan modules for multi-level speed regulation, significantly reducing energy consumption.
- 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.
- Supports the x86 platform, which supports containers, allows third-party management applications to be installed, and makes it easy for customizing functions.
- Rectifies faults related to processes online in seconds, without interrupting network operation.
- Supports Python that allows applications across platforms.
- Supports high-speed access to northbound interfaces, with the performance of up to thousands of operations. It can associate with the controller to upgrade the man-machine interface to machine-machine interface.
- Upgrades and extends functions online to ensure nonstop services.
- Is suitable for a mobile network or an IoT of a large campus where thousands of terminals are deployed; automatically isolates multiple service networks, which is independent of interfaces and locations. This simplifies deployment.
- Securely connects to and isolates IoT terminals and users.
- Copes with lossless operation of services on a mobile network or the Internet with its high bandwidth, achieving service continuity.
- Is used as the core device of a campus network or the IoT service, with powerful performance and high reliability to intelligently connect to IoT terminals and mobile terminals.

Product Features

On-demand Resource Allocation Based on Virtualization

The RG-S7800C and RG-S7800C-X series switches adopt VSU to virtualize multiple physical devices into one logical device for unified operation and management, substantially reducing network nodes and lowering network O&M personnel's workload. They can implement fast switchover within 50 ms to 200 ms upon link failures, ensuring nonstop transmission of key services and enhancing network reliability. The inter-device link aggregation technology implements dual active uplinks for access servers and switches, doubling the bandwidth of effective connections. The virtualized devices support Layer 2 and Layer 3 interoperability of IPv4/IPv6 (inner)-based VXLANs.

Carrier-Class High Reliability

The RG-S7800C and RG-S7800C-X series switches support hot patching to realize online patch upgrade.

The RG-S7800C and RG-S7800C-X series switches support GR for OSPF/IS-IS/BGP and BFD for VRRP/OSPF/BGP4/IS-IS/IS-ISv6/static routing, and implement the millisecond-level fault detection mechanism through protocols, with the fault detection time less than 50 ms.

The switches support 1+1 hardware monitoring system for centralized monitoring of cards, fans, power supplies, and environment.

The RG-S7800C and RG-S7800C-X provide visualized

hardware health status, making it easy for a network administrator to monitor the fan status, power, temperature, and onboard voltage. In particular, the network administrator can identify voltage exceptions during routine inspection and handle the exceptions in a timely manner, thereby preventing system breakdown caused by such exceptions.

The RG-S7800C and RG-S7800C-X employ the fault isolation technology to monitor the optical module status. If an optical module is faulty, the optical module is isolated and has no impact on the running of other interfaces or the switch. After the faulty optical module is replaced, the corresponding interface is restored immediately.

In the RG-S7810C-X, all line cards, and active and standby supervisor modules are connected to the same switch fabric module. When any switch fabric module fails, the system can automatically allocate traffic to the remaining switch fabric modules.

Clos Architecture for Non-Blocking Switching

The RG-S7800C and RG-S7800C-X feature advanced Clos multi-level multi-plane architecture, which can separate the control plane from the forwarding plane. That is, it can be independently configured with switch fabric modules and supervisor modules to ensure non-blocking switching at line rate among all ports, delivering continuous bandwidth upgrade and service support capabilities.

It uses the complete orthogonal design for line cards and switch fabric modules. Traffic is transmitted to the switch fabric module through the orthogonal connector for switching, with zero cabling on the backplane and low transmission loss. This greatly reduces signal attenuation and improves the service traffic transmission efficiency in the switch.

SDN

The RG-S7800C and RG-S7800C-X support OpenFlow and NETCONF, and allows the live network to be smoothly upgraded to a software-defined networking (SDN) network. This substantially reduces network maintenance costs while greatly simplifying network management.

High Energy Efficiency

The RG-S7800C and RG-S7800C-X use the low voltage power supply design for the internal system, and highly-efficient power modules guarantee highly efficient power supply.

The multi-core CPU supports dynamic power management to save power at low loads.

The intelligent fan modules support 256-level speed regulating and precise temperature control, saving energy and reducing noise. This allows the RG-S7800C and RG-S7800C-X to run at a high temperature for a long time and adapt to severe environments, greatly lowering power consumption.

RG-S7810C-X and RG-S7808C (used with the M7808C-CM-X supervisor module) support the Coarse Wavelength Division Multiplexing (CWDM) solution with the passive aggregation layer, facilitating the O&M of the aggregation nodes and saving energy. They also support installation of high-density CWDM cards M7800C-8SFG-XB and M7800C-8SFX-XB. Each CWDM card provides eight hyper-converged ports that support 64 Gigabit/10 Gigabit logical interfaces. The operating wavelength range of the optical module on the hyper-converged port is from 1271 nm to 1571 nm. Each wavelength is physically isolated from each other, eliminating mutual interference. Therefore, a bandwidth of Gigabit or 10 Gigabit can be achieved between the access switch and the hyper-converged port, effectively fulfilling the needs of high-bandwidth services.

Ease of Network Maintenance

The RG-S7800C and RG-S7800C-X support the hardware monitoring system in 1+1 redundancy mode to centrally monitor status parameters such as the card, fan module, power module, power supply, and environment parameters.

The RG-S7800C and RG-S7800C-X support routine network diagnosis and maintenance based on the Simple Network Management Protocol (SNMP), Remote Network Monitoring (RMON), Syslog, and other features. A network administrator can use various management and maintenance modes such as command line interface (CLI), web network management, and Telnet to facilitate device management.

Telemetry based on gRPC enables it to periodically collect information about CPU, memory, and other components.

With simplified optical management software and service template embedded in the RG-S7800C and RG-S7800C-X, the RG-S7800C and RG-S7800C-X can be deployed quickly. In addition to network service planning, the RG-S7800C and RG-S7800C-X support plug and play, zero-touch replacement, zero-touch provisioning (ZTP), and optical link fault detection and alarms.

Product Specifications

Hardware Specifications (Working with -CM Series Supervisor Module)

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C
Port Specifications			
Module slot	2 x supervisor module slots 3 x line card slots 2 x power module slots 1 x fan module slots	2 x supervisor module slots 6 x line card slots 4 x power module slots 2 x fan module slots	2 x supervisor module slots 8 x line card slots (Slot 7 does not support the EB line card.) 2 x switch fabric module slots 4 x power module slots 2 x fan module slots
Supervisor module	M7805C-CM II	M7808C-CM II	M7810C-CM and M7810C-CM-F
Switch fabric module	Built-in	Integrated with supervisor modules	M7810C-CM: M7810C-FE-D I M7810C-CM-F: M7810C-FE-F I
Power module	RG-PA300I-F RG-PA460I-F	RG-PA600I-F RG-PA1600I-F	RG-PA600I RG-PA1600I
Fan module	M05C-FAN	M08-FAN	M10C-FAN
Line card	M7805C-CM II supports the following 9 modules (FA/FB series cannot be used with EB series or DA series): • M7800C-48XS-FB • M7800C-8CQ-FB • M7800C-48GT-FA • M7800C-48SFP-FA • M7800C-32XS4QXS-DA • M7800C-24GT24SFP4XS-EB • M7800C-24SFP/12GT4XS-EB • M7800C-48GT4XS-EB • M7800C-48SFP4XS-EB	M7808C-CM II supports the following 9 modules (FA/FB series cannot be used with EB series or DA series): • M7800C-48XS-FB • M7800C-8CQ-FB • M7800C-48GT-FA • M7800C-48SFP-FA • M7800C-32XS4QXS-DA • M7800C-24GT24SFP4XS-EB • M7800C-24SFP/12GT4XS-EB • M7800C-48GT4XS-EB • M7800C-48SFP4XS-EB	M7810C-CM supports the following 5 modules (The modules cannot be used with FA series or FB series): • M7800C-32XS4QXS-DA • M7800C-24GT24SFP4XS-EB • M7800C-24SFP/12GT4XS-EB • M7800C-48GT4XS-EB • M7800C-48SFP4XS-EB M7810C-CM-F supports the following 4 modules (The modules cannot be used with EB series or DA series): • M7800C-48XS-FB • M7800C-8CQ-FB • M7800C-48GT-FA • M7800C-48SFP-FA
Supervisor module redundancy	1+1 redundancy	1+1 redundancy	1+1 redundancy
Module management port	Supervisor module: • 1 x MGMT port • 1 x console port	Supervisor module: • 1 x MGMT port • 1 x console port	Supervisor module: • 1 x MGMT port • 1 x console port

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C
USB	Supervisor module: 1 x USB 2.0 port (no capacity limit, 2G/4G/8G/16G/32G capacity tested)	Supervisor module: 1 x USB 2.0 port (no capacity limit, 2G/4G/8G/16G/32G capacity tested)	Supervisor module: 1 x USB 2.0 port (no capacity limit, 2G/4G/8G/16G/32G capacity tested)
Module hot swapping	Supported	Supported	Supported
Cable hot swapping	All ports on line cards support hot swapping of cables. The switch-mode power supply supports hot swapping of power cords.	All ports on line cards support hot swapping of cables. The switch-mode power supply supports hot swapping of power cords.	All ports on line cards support hot swapping of cables. The switch-mode power supply supports hot swapping of power cords.
System Specifications			
System packet forwarding rate *1	4,500 Mpps	9,000 Mpps	12,000 Mpps
System switching capacity *2	6 Tbps	12 Tbps	16 Tbps
Switch buffer	EB: 4 MB FB: 32 MB FA: 8 MB DA: 16 MB	EB: 4 MB FB: 32 MB FA: 8 MB DA: 16 MB	EB: 4 MB FB: 32 MB FA: 8 MB DA: 16 MB
CPU	Supervisor module • M7805C-CM II: 1.0 GHz quad-core CPU Line card • EB card: 1.0 GHz quad-core CPU • DA/FA/FB card: 1.5 GHz quad-core CPU	Supervisor module • M7808C-CM II: 1.5 GHz quad-core CPU Line card • EB card: 1.0 GHz quad-core CPU • DA/FA/FB card: 1.5 GHz quad-core CPU	Supervisor module • M7810C-CM/M7810C-CM-F: 1.5 GHz quad-core CPU Line card • EB card: 1.0 GHz quad-core CPU • DA/FA/FB card: 1.5 GHz quad-core CPU Switch fabric module • M7810C-FE-D I/M7810C-FE-F I: 1.5 GHz quad-core CPU
BootROM	16 MB	16 MB	16 MB
Flash memory	M7805C-CM II: 1 GB EB card: 512 MB DA/FA/FB card: 8 GB	M7808C-CM II: 8 GB EB card: 512 MB DA/FA/FB card: 8 GB	M7810C-CM/M7810C-CM-F: 8 GB EB card: 512 MB DA/FA/FB card: 8 GB M7810C-FE-D I: 8 GB M7810C-FE-F I: 8 GB
Memory	M7805C-CM II: DDRIII 4 GB EB card: DDRIII 1 GB DA card: DDR4 1 GB FA/FB card: DDR4 2 GB	M7808C-CM II: DDR4 4 GB EB card: DDR3 1 GB DA card: DDR4 1 GB FA/FB card: DDR4 2 GB	M7810C-CM/M7810C-CM-F: DDR4 4 GB EB card: DDR3 1 GB DA card: DDR4 1 GB FA/FB card: DDR4 2 GB M7810C-FE-D I card: DDR4 1 GB M7810C-FE-F I: DDR4 2 GB

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C
MAC address	Number of global MAC addresses • EB card: 64,000 • DA card: 96,000 (default) and 288,000 (max.) • FA card: 80,000 • FB card: 96,000 Number of static MAC addresses • EB card: 4,000 • DA card: 10,000 • FA card: 4,000 • FB card: 40,000		
ARP table	EB card: 10,000 (default and recommended) DA card: underlay: 75,000; overlay: 0 (default and recommended) FA card: underlay: 30,000; overlay: 0 FB card: underlay: 50,000; overlay: 0 (default and recommended)		
Number of IPv4 unicast routes	EB card: 12,000 (default and recommended, shared with IPv6 routes) DA card: 12,000 (default and recommended, shared with IPv6 routes) FA card: 12,000 (default and recommended, shared with IPv6 routes) FB card: 134,000 (default and recommended, shared with IPv6 routes)		
Number of IPv4 multicast routes	EB card: 8,000 DA card: 16,000 FA card: 8,000 FB card: 16,000		
Number of IPv6 unicast routes	EB card: 6,000 (shared with IPv4 routes) DA card: 6,000 (shared with IPv4 routes) FA card: 6,000 (shared with IPv4 routes) FB card: 50,000 (shared with IPv4 routes)		
Number of IPv6 multicast routes	EB card: 4,000 DA card: 8,000 FA card: 4,000 FB card: 8,000		
Number of ACEs	Ingress • EB card: 3,500 • DA card: 8,000 • FA card: 5,000 • FB card: 4,500 Egress • EB card: 1,000 • DA card: 1,000 • FA card: 1,000 • FB card: 2,000		
Number of VSU members	2	2	2

*1 means the system's packet forwarding rate.
*2 means the system's switching capacity.

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C
Dimensions and Weight			
Unit dimensions (W x D x H)	442 mm x 451 mm x 175 mm (17.40 in. x 17.76 in. x 6.89 in.)	442 mm x 465mm x 441.7 mm (17.40 in. x 18.31 in. x 17.39 in.)	442.5 mm x 560 mm x 442 mm (17.42 in. x 22.05 in. x 17.40 in.)
Rack height	4 RU	10 RU	10 RU
Unit weight	12.42 kg (27.38 lbs) (empty chassis and fan modules)	35.6 kg (78.48 lbs) (empty chassis and fan modules)	43.6 kg (96.12 lbs) (empty chassis and fan modules)
Weight of power module	RG-PA300I-F: 0.85 kg (1.87 lbs) RG-PA460I-F: 0.9 kg (1.98 lbs)	RG-PA600I-F: 1.64 kg (3.62 lbs) RG-PA1600I-F: 2.04 kg (4.50 lbs)	RG-PA600I: 1.64 kg (3.62 lbs) RG-PA1600I: 2.04 kg (4.50 lbs)
Weight of fan module	M05C-FAN: 1.65 kg (3.64 lbs)	M08-FAN: 1.65 kg (3.64 lbs)	M10C-FAN: 2.5 kg (5.51 lbs)
Module weight	Supervisor module: M7805C-CM II: 0.86 kg (1.90 lbs) Line card: M7800C-48XS-FB: 3.85 kg (8.49 lbs) M7800C-8CQ-FB: 3.50 kg (7.72 lbs) M7800C-48GT-FA: 3.10 kg (6.83 lbs) M7800C-48SFP-FA: 3.20 kg (7.05 lbs) M7800C-32XS4QXS-DA: 3.40 kg (7.50 lbs) M7800C-24GT24SFP4XS-EB: 2.85 kg (6.28 lbs) M7800C-24SFP/12GT4XS-EB: 2.95 kg (6.50 lbs) M7800C-48GT4XS-EB: 2.85 kg (6.28 lbs) M7800C-48SFP4XS-EB: 3.10 kg (6.83 lbs)	Supervisor module: M7808C-CM II: 2.10 kg (4.63 lbs) Line card: M7800C-48XS-FB: 3.85 kg (8.49 lbs) M7800C-8CQ-FB: 3.50 kg (7.72 lbs) M7800C-48GT-FA: 3.10 kg (6.83 lbs) M7800C-48SFP-FA: 3.20 kg (7.05 lbs) M7800C-32XS4QXS-DA: 3.40 kg (7.50 lbs) M7800C-24GT24SFP4XS-EB: 2.85 kg (6.28 lbs) M7800C-24SFP/12GT4XS-EB: 2.95 kg (6.50 lbs) M7800C-48GT4XS-EB: 2.85 kg (6.28 lbs) M7800C-48SFP4XS-EB: 3.10 kg (6.83 lbs)	Supervisor module: M7810C-CM: 1.95 kg (4.30 lbs) M7810C-CM-F: 2.30 kg (5.07 lbs) Line card: M7800C-48XS-FB: 3.85 kg (8.49 lbs) M7800C-8CQ-FB: 3.50 kg (7.72 lbs) M7800C-48GT-FA: 3.10 kg (6.83 lbs) M7800C-48SFP-FA: 3.20 kg (7.05 lbs) M7800C-32XS4QXS-DA: 3.40 kg (7.50 lbs) M7800C-24GT24SFP4XS-EB: 2.85 kg (6.28 lbs) M7800C-24SFP/12GT4XS-EB: 2.95 kg (6.50 lbs) M7800C-48GT4XS-EB: 2.85 kg (6.28 lbs) M7800C-48SFP4XS-EB: 3.10 kg (6.83 lbs) Switch fabric module: M7810C-FE-D: 1.95 kg (4.30 lbs) M7810C-FE-F: 2.25 kg (4.96 lbs)
Power Supply and Consumption			
Power module redundancy	Supported	Supported	Supported

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C
Power module hot swapping	Supported	Supported	Supported
Power input	RG-PA300I-F (AC input): • Rated voltage: 100 V AC to 120 V AC, 200 V AC to 240 V AC; 50 Hz to 60 Hz • Maximum voltage: 90 V AC to 264 V AC; 47 Hz to 63 Hz RG-PA460I-F (AC input): • Rated voltage: 100 V AC to 120 V AC, 200 V AC to 240 V AC; 50 Hz to 60 Hz • Maximum voltage: 90 V AC to 290 V AC; 45 Hz to 65 Hz	RG-PA600I-F (AC input): • Rated voltage: 100 V AC to 120 V AC, 200 V AC to 240 V AC; 50 Hz to 60 Hz • Maximum voltage: 90 V AC to 264 V AC; 47 Hz to 63 Hz RG-PA1600I-F (AC input): • Rated voltage: 100 V AC to 120 V AC, 200 V AC to 240 V AC; 50 Hz to 60 Hz • Maximum voltage: 90 V AC to 264 V AC; 47 Hz to 63 Hz	RG-PA600I (AC input): • Rated voltage: 100 V AC to 120 V AC, 200 V AC to 240 V AC; 50 Hz to 60 Hz • Maximum voltage: 90 V AC to 264 V AC; 47 Hz to 63 Hz RG-PA1600I-F (AC input): • Rated voltage: 100 V AC to 120 V AC, 200 V AC to 240 V AC; 50 Hz to 60 Hz • Maximum voltage: 90 V AC to 264 V AC; 47 Hz to 63 Hz
Maximum output power	RG-PA300I-F: 300 W RG-PA460I-F: 460 W	RG-PA600I-F: 600 W RG-PA1600I-F: • 90 V AC to 180 V AC: 12,00 W • 180 V AC to 264 V AC: 1,600 W	RG-PA600I: 600 W RG-PA1600I: • 90 V AC to 180 V AC: 1,200 W • 180 V AC to 264 V AC: 1,600 W
Module power consumption	Chassis RG-S7805C: < 80 W Supervisor module: M7805C-CM II: < 21 W Service module: M7800C-48XS-FB: < 160 W M7800C-8CQ-FB: < 130 W M7800C-48GT-FA: < 75 W M7800C-48SFP-FA: < 95 W M7800C-32XS4QXS-DA: < 210 W M7800C-24GT24SFP4XS-EB: < 88 W M7800C-24SFP/12GT4XS-EB: < 85 W M7800C-48GT4XS-EB: < 70 W M7800C-48SFP4XS-EB: < 101 W	Chassis RG-S7808C: < 176 W Supervisor module: M7808C-CM II: < 50 W Service module: M7800C-48XS-FB: < 160 W M7800C-8CQ-FB: < 130 W M7800C-48GT-FA: < 75 W M7800C-48SFP-FA: < 95 W M7800C-32XS4QXS-DA: < 210 W M7800C-24GT24SFP4XS-EB: < 88 W M7800C-24SFP/12GT4XS-EB: < 85 W M7800C-48GT4XS-EB: < 70 W M7800C-48SFP4XS-EB: < 101 W	Chassis RG-S7810C: < 432 W Supervisor module: M7810C-CM: < 50 W M7810C-CM-F: < 110 W Service module: M7800C-48XS-FB: < 160 W M7800C-8CQ-FB: < 130 W M7800C-48GT-FA: < 75 W M7800C-48SFP-FA: < 95 W M7800C-32XS4QXS-DA: < 210 W M7800C-24GT24SFP4XS-EB: < 88 W M7800C-24SFP/12GT4XS-EB: < 85 W M7800C-48GT4XS-EB: < 70 W M7800C-48SFP4XS-EB: < 101 W
Environment and Reliability			
Temperature	Operating temperature: 0°C to 50°C (32°F to 122°F) Storage temperature: –40°C to +70°C (–40°F to +158°F)	Operating temperature: 0°C to 50°C (32°F to 122°F) Storage temperature: –40°C to +70°C (–40°F to +158°F)	Operating temperature: 0°C to 50°C (32°F to 122°F) Storage temperature: –40°C to +70°C (–40°F to +158°F)
Humidity	Operating humidity: 10% to 90% RH (non-condensing) Storage humidity: 5% to 95% RH (non-condensing)	Operating humidity: 10% to 90% RH (non-condensing) Storage humidity: 5% to 95% RH (non-condensing)	Operating humidity: 10% to 90% RH (non-condensing) Storage humidity: 5% to 95% RH (non-condensing)
Altitude	Storage altitude: 5,000 m (16,404.20 ft.) max Operating altitude: 5,000 m (16,404.20 ft.) max	Storage altitude: 5,000 m (16,404.20 ft.) max Operating altitude: 5,000 m (16,404.20 ft.) max	Storage altitude: 5,000 m (16,404.20 ft.) max Operating altitude: 5,000 m (16,404.20 ft.) max

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C
Mean time between failure (MTBF)	216,000 hours (24 years)	216,000 hours (24 years)	342,000 hours (39 years)
Heat dissipation	Supervisor module: right-to-left airflow Service module: right-to-rear airflow Power module: built-in fan modules drawing air outward, front-to-rear airflow	Supervisor module/Service module: right-to-rear airflow Power module: front-to-rear airflow	Line card: side-to-rear airflow Supervisor module/FE card: front-to-rear airflow
Acoustic noise	70 dB at normal temperature Max Noise: 77dB	70 dB at normal temperature Max Noise: 77dB	70 dB at normal temperature Max Noise: 77dB
Power supply monitoring	Monitoring of the model, temperature, power, and voltage of the power supply module Power supply failure alarming Control of line card power-on based on the power supply status	Monitoring of the model, temperature, power, and voltage of the power supply module Power supply failure alarming Control of line card power-on based on the power supply status	Monitoring of the model, temperature, power, and voltage of the power supply module Power supply failure alarming Control of line card power-on based on the power supply status
Fan monitoring	Fan speed adjustment: 256 levels Fan failure alarming	Fan speed adjustment: 256 levels Fan failure alarming	Fan speed adjustment: 256 levels Fan failure alarming
Temperature monitoring	Over-temperature alarming Default settings: Alarm temperature: The device generates alarms when the temperature of the air inlet is higher than 56°C (132.8°F). You can configure the alarm temperature. Power-off temperature: By default, when the temperature of the CPU or media access controller (MAC) chip is higher than 100°C (212°F), the switch will be powered off. You can configure the power-off temperature. When the temperature is higher than 100°C (212°F) twice, the line cards will be powered off. The supervisor module will not be powered off.		
IP rating	IP31, no dust filters for factory delivery	IP31, no dust filters for factory delivery	IP31, no dust filters for factory delivery
Seismic level	8 degrees	8 degrees	8 degrees
ESD	ESD susceptibility contact/air discharge: 8 kV/15 kV	ESD contact/air discharge: 6 kV/8 kV ESD susceptibility contact/air discharge: 8 kV/15 kV	ESD contact/air discharge: 6 kV/8 kV ESD susceptibility contact/air discharge: 8 kV/15 kV
Surge protection	Ethernt port: common mode 4 kV, differential mode 1 kV	MGMT port: 4 kV Service port: 4 kV Power port: 6 kV	MGMT port: 4 kV Service port: 4 kV Power port: 6 kV
Certifications and regulatory compliance			
Safety regulation	GB 4943.1		

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C
EMC regulation	GB/T 9254.1		

Hardware Specifications (Working with -X Series Supervisor Module)

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
Interface Specifications			
Power module	2	4	4
Supervisor module slot	2	2	2
Line card slot	3	6	8
Switch fabric module slot	-	-	4
System Specifications			
Switching Capacity	6 Tbps	12 Tbps	19.2 Tbps
Packet Forwarding Rate	4500 Mpps	9000 Mpps	14300 Mpps
MAC address	• M7800C-8SFX-XB: 256000 • M7800C-8SFG-XB: 256000 • XA card: 96000 • XB card: 256000		
ARP table	• M7800C-8SFX-XB: 9600 • M7800C-8SFG-XB: 9600 • XA card: 4000 • XB card: 9600		
Number of IPv4 unicast routes	• M7800C-8SFX-XB: 350000 (shared with IPv4 routes) • M7800C-8SFG-XB:350000 (shared with IPv4 routes) • XA card:64000 (shared with IPv4 routes) • XB card: 350000 (shared with IPv4 routes)		
Number of IPv4 multicast routes	4000		
Number of IPv6 unicast routes	• M7800C-8SFX-XB: 65000 (shared with IPv4 routes) • M7800C-8SFG-XB:15000 (shared with IPv4 routes) • XA card: 65000 (shared with IPv4 routes) • XB card: 65000 (shared with IPv4 routes)		
Number of IPv6 multicast routes	2000		

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
Number of ACEs	• Ingress M7800C-8SFX-XB: 2800 M7800C-8SFG-XB: 2800 XA card: 7000 XB card: 2800 • Egress M7800C-8SFX-XB: 4000 M7800C-8SFG-XB: 4000 XA card: 1500 XB card: 4000		
Number of VSU members	2	2	2
Dimensions and Weight			
Dimensions (W x D x H)	442 mm × 451 mm × 175 mm (17.40 in. x 17.76 in. x 6.89 in.)	442 mm × 465 mm × 441.7 mm (17.40 in. x 18.31 in. x 17.39 in.)	442.5 mm × 560 mm × 442 mm (17.42 in. x 22.05 in. x 17.40 in.)
Weight (empty chassis and fan modules)	32.35 kg	35.6 kg	43.55 kg
Rack Size	4 RU	10 RU	10 RU
CPU and Storage			
CPU	2.2 GHz quad-core processor	2.2 GHz quad-core processor	2.2 GHz quad-core processor
Storage	Flash Memory: 8 GB SDRAM: DDR4 4 GB	Flash Memory: 8 GB SDRAM: DDR4 4 GB	Flash Memory: 8 GB SDRAM: DDR4 4 GB
Power Supply and Consumption			
Max. Output Power	• RG-PA300I-F: 90 V AC to 180 V AC; Power: 300 W 180 V AC to 264 V AC; Power: 300 W • RG-PA460I-F: 90 V AC to 180 V AC; Power: 460 W 180 V AC to 264 V AC; Power: 460 W • RG-PA1000I-F: 90 V AC to 176 V AC; Power: 800 W 176 V AC to 264 V AC; Power: 1000 W	• RG-PA600I-F: 90 V AC to 180 V AC; Power: 600 W 180 V AC to 264 V AC; Power: 600 W • RG-PA1600I-F: 90 V AC to 180 V AC; Power: 1200 W 180 V AC to 264 V AC; Power: 1600 W	• RG-PA1600I: 90 V AC to 180 V AC; Power: 1200 W 180 V AC to 264 V AC; Power: 1600 W • RG-PA600I: 90 V AC to 180 V AC; Power: 600 W 180 V AC to 264 V AC; Power: 600 W • RG-PD600I: –40 V DC to –75 V DC; Power: 600 W • RG-PA1600I-PL: 90 V AC to 176 V AC; Power: 1200 W 176 V AC to 264 V AC; Power: 1600 W

Hareware Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
Maximum output power	• M7805C-CM-X: < 40 W • M7800C-12CQ-XB: < 240 W • M7800C-24GT8SFP8XS-XA: < 95 W • M7800C-32XS-XA: < 149 W • M7800C-48XT-P-XB: < 300 W • M7800C-48GT4XS-XA: < 85 W • M7800C-48SFP4XS-XA: < 117 W • M7800C-52XS-XB: < 250 W • M7800C-8SFG-XB: < 250 W • M7800C-8SFX-XB: < 250 W	• M7808C-CM-X: < 62 W • M7800C-12CQ-XB: < 240 W • M7800C-24GT8SFP8XS-XA: < 95 W • M7800C-32XS-XA: < 149 W • M7800C-48XT-P-XB: < 300 W • M7800C-48GT4XS-XA: < 85 W • M7800C-48SFP4XS-XA: < 117 W • M7800C-52XS-XB: < 250 W • M7800C-8SFG-XB: < 250 W • M7800C-8SFX-XB: < 250 W	• M7810C-CM-X: < 60 W • M7800C-12CQ-XB: < 240 W • M7800C-24GT8SFP8XS-XA: < 95 W • M7800C-32XS-XA: < 149 W • M7800C-48XT-P-XB: < 300 W • M7800C-48GT4XS-XA: < 85 W • M7800C-48SFP4XS-XA: < 117 W • M7800C-52XS-XB: < 250 W • M7800C-8SFG-XB: < 250 W • M7800C-8SFX-XB: < 250 W • M7810C-FE-X I: < 50 W • M7810C-FE-X II: < 160 W
Environment and Reliability			
MTBF	> 200,000 hours		
Primary Airflow	• Supervisor module: air intake from the right and exhaust from back • Service module: air intake from the right and exhaust from back • System power module: drawing air outward with built-in fans, air intake from the front panel and exhaust from back	• Supervisor module /Service module: air intake from the right and exhaust from back, drawing air outward to form convection for heat dissipation • System power module: air intake from the front panel and exhaust from back, drawing air inward to form convection for heat dissipation	• Line card: air intake from the side and exhaust from back • Supervisor module/Switch fabric module: air intake from the front panel and exhaust from back
Operating Temperature	0°C to 50°C (32°F to 122°F)		
Storage Temperature	–40°C to +70°C (–40°F to +158°F)		
Operating Humidity	10% to 90% RH (non-condensing)		
Storage Humidity	5% to 95% RH		
Operating Altitude	–500 m to +5000 m (–1,640.41 ft. to +16,404.20 ft.)		
Surge Protection of Communication Ports	6 kV		

Software Specifications (Working with -CM Series Supervisor Module)

Feature	Description
Ethernet switching	Jumbo frame (maximum length: 9,216 bytes)
	802.3az EEE
	Maximum number of VLANs that can be created: 4,094
	Voice VLAN
	Super-VLAN and private VLAN
	MAC address-based, port-based, protocol-based, and IP subnet-based VLAN assignment
	GVRP
	Basic QinQ and 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
	DHCP client
	DHCP relay
	DHCP server
	DHCP snooping
	DNS
	DHCPv6 client, DHCPv6 relay, and DHCPv6 snooping
	Neighbor Discovery (ND) and ND snooping
	Manual tunnel, automatic tunnel, and ISATAP tunnel for IPv6
	GRE tunnel
IP routing	Static routing
	RIP and RIPng
	OSPFv2 and OSPFv3

Feature	Description
IP routing	GR
	IPv4/IPv6 IS-IS
	BGP4 and BGP4+
	EVPN
	IPv4/IPv6 VRF
	Policy-based routing (PBR)
	IPv4 and IPv6 ECMP
Multicast	IGMP v1/v2/v3
	IGMP snooping v1/v2/v3
	IGMP proxy
	IGMP fast leave
	PIM-DM, PIM-SM, and PIM-SSM
	PIM-SSM for IPv4 and IPv6
	MSDP to achieve inter-domain multicast
	MLDv1 and MLDv2
	Multicast static routing
	MLD v1/v2 snooping
	PIM-SMv6
	Multicast source IP address check Multicast source port check
MPLS	MPLS IPv6
	MPLS L3VPN
	MPLS 6VPE
	MPLS MIB (RFC 1273, RFC 4265, and RFC 4382)
ACL and QoS	Standard IP ACLs (hardware ACLs based on IP addresses)
	Extended IP ACLs (hardware ACLs based on IP addresses or TCP/UDP port numbers)

Feature	Description
ACL and QoS	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)
	ACL80 and IPv6 ACL
	Applying ACLs globally (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)
	ACL redirection
	Port traffic identification
	Port-based rate limiting
	802.1p
	Traffic classification based on 802.1p priorities, DSCP priorities, and IP precedences
	CAR
	Congestion management: SP, WRR, DRR, WFQ, SP+WRR, SP+DRR, and SP+WFQ
	Congestion avoidance: tail drop, RED, and WRED
	Eight queues on each port
Security	AAA
	RADIUS authorization and accounting
	TACACS+
	Portal authentication, RADIUS, and TACACS+ login authentication
	IEEE802.1X authentication, MAC address bypass (MAB) authentication, and interface-based and MAC address-based 802.1X authentication
	Web authentication
	Hypertext Transfer Protocol Secure (HTTPS)
	SSHv1 and SSHv2
	Global IP-MAC binding
	ICMP
	Port security

Feature	Description
Security	IP source guard
	DAI
	SAVI
	ARP spoofing prevention
	CPU Protect Policy (CPP) and NFPP
	Various attack defense functions, including NFPP and ARP anti-attack
	uRPF Login authentication and password security Unknown multicast packets are not sent to the CPU, and unknown unicast packets can be suppressed.
Reliability	Rapid Ethernet Uplink Protection (REUP)
	Rapid Link Detection Protocol (RLDP), Layer 2 link connectivity detection, unidirectional link detection, and VLAN-based loop control
	Data Link Detection Protocol (DLDP)
	IPv4 VRRP v2/v3 and IPv6 VRRP
	VRRP for the super-VLAN
	BFD
	1+1 redundancy for supervisor modules and fan modules, and N+M redundancy for power modules
	Hot swapping of components
	Hot patch and online installation of patches
	GR for OSPF/IS-IS/BGP
	BFD for VRRP/OSPF/BGP4/ISIS/ISISv6/static routing
Device virtualization	VSU
NMS and maintenance	SPAN, RSPAN, and ERSPAN
	sFlow
	NTP
	SNTP

Feature	Description
NMS and maintenance	FTP, TFTP, and Xmodem
	SNMP v1/v2c/v3
	RMON (1, 2, 3, 9)
	NETCONF
	CWMP
	gRPC
	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
	Web-based NMS
	Console/Telnet/SSH2.0 CLI configuration Fault alarms and auto-recovery System operation logging
VXLAN	Layer 2 and Layer 3 VXLAN gateways

Note: The item marked with the asterisk (*) will be available in the future.

Software Specifications (Working with -CM Series Supervisor Module)

Software Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
Ethernet switching	Jumbo frame (maximum length: 9,216 bytes)		
	802.3az EEE		
	Maximum number of VLANs that can be created: 4,094		
	Voice VLAN		
	GVRP		
	IP subnet-based VLAN		
	MAC VLAN		
	Port-based VLAN		
	Private VLAN		

Software Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
Ethernet switching	protocol-based VLAN		
	Super-VLAN		
	Basic QinQ and selective QinQ		
	STP (IEEE 802.1.d)		
	RSTP (IEEE 802.1w)		
	MSTP (IEEE 802.1s)		
	ERPS (G.8032)		
	LLDP/LLDP-MED		
Device Virtualization	VSU		
SDN	OpenFlow 1.3 NETCONF		
IP service	Static and dynamic ARP		
	DHCP client		
	DHCP relay		
	DHCP server		
	DHCP snooping		
	DNS		
	DHCPv6 client		
	DHCPv6 relay		
	DHCPv6 snooping		
	Neighbor Discovery (ND) and ND snooping		
	FTP Server		
	FTP Client		
	NTP server		
	NTP Client		
	SNTP Client		

Software Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
IP service	TFTP Client		
	TFTP Server		
IP routing	Static routing		
	BGP4		
	BGP4+		
	IS-ISv4		
	IS-ISv6		
	OSPFv2		
	OSPFv3		
	RIP		
	RIPng		
	GR		
	Routing Policy		
	ECMP		
	IPv4/IPv6 VRF		
	Policy-based routing (PBR)		
Multicast	IGMP v1/v2/v3		
	IGMP snooping v1/v2		
	IGMP proxy		
	IGMP fast leave		
	PIM-DM		
	PIM-SM		
	PIM-SSM for IPv4 and IPv6		
	MSDP to achieve inter-domain multicast		
	MLDv1 and MLDv2		

Software Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
Multicast	Multicast static routing		
	MLD v1/v2 snooping		
	PIM-SMv6		
	Multicast source IP address check		
	Multicast source port check		
MPLS	MPLS L3VPN		
	MPLS 6VPE		
	MPLS IPv6		
	MPLS forwarding		
	LDP		
	LSP		
VXLAN	VXLAN Layer 2 bridge		
	VXLAN Layer 3 gateway		
	EVPN VXLAN		
ACL and QoS	Standard IP ACL		
	extended IP ACL		
	extended MAC ACL		
	Layer 2 and Layer 3 port ACL		
	VLAN ACL		
	Expert-level ACL		
	ACL 80		
	IPv6 ACL		
	Applying ACLs globally		
	ACL COUNTER		
	ACL LOGGING		

Software Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
ACL and QoS	ACL REMARK		
	802.1P		
	SP		
	WRR		
	SP+WFR		
	other queue scheduling mechanisms		
	RED/WRED		
	Rate limiting based on the inbound or outbound interface		
	MPLS QOS		
Reliability	1+1 redundancy for supervisor modules	1+1 redundancy for supervisor modules	
	Hot swapping of all components	N+M redundancy for power supply	
	-	1+1 fan redundancy	
	-	Hot swapping of all components	
	Hot patching function for online patch upgrade		
	GR		
	BFD		
	VRRP		
	VRRP+		
	Faulty optical port isolation		
	Dual physical chips for boot systems		
Security	NFPP		
	CPP		
	DAI		
	port security		

Software Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
Security	IP source guard		
	802.1X authentication		
	MAC address-based authentication		
	Portal authentication		
	RADIUS		
	TACACS+ login authentication		
	uRPF		
	SSHv2		
	IPv6 SAVI		
	Login authentication and password security		
	providing encrypted security channels for user login		
	Unknown multicast packets are not sent to the CPU, and unknown unicast packets can be suppressed.		
NMS and maintenance	Console/AUX Modem/Telnet/SSH2.0 CLI configuration		
	File upload and download management using FTP, TFTP, and Xmodem		
	SNMP V1/V2c/V3		
	RMON		
	CWMP		
	GRPC		
	Fault alarm and auto-recovery		
	System operation logging		
	sFlow		
	SPAN		
	RSPAN		
	ERSPAN		
	VLAN mirroring		

Software Specifications	RG-S7805C	RG-S7808C	RG-S7810C-X
NMS and maintenance	Web-based NMS		
Energy-Saving Design	IEEE 802.3az Energy Efficient Ethernet		

Note: The item marked with the asterisk (*) will be available in the future.

Protocol Compliance

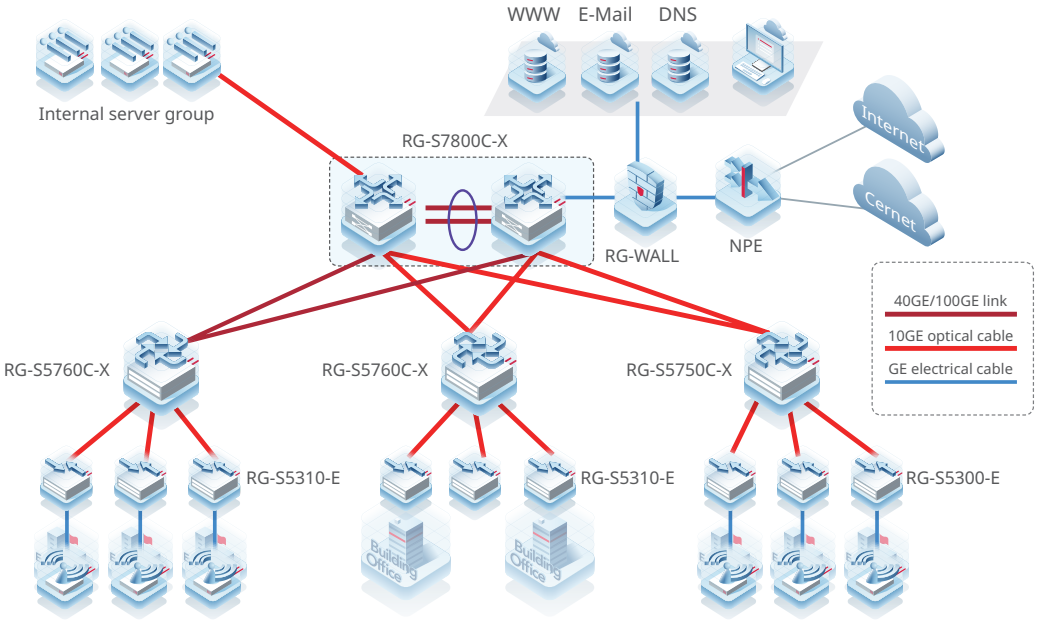
Organization	Standards and Protocol
IETF	RFC 1157 A Simple Network Management Protocol (SNMP) RFC 1305 Network Time Protocol Version 3 (NTP) RFC 1349 Internet Protocol (IP) RFC 1350 TFTP Protocol (revision 2) RFC 1519 CIDR RFC 1591 Domain Name System Structure and Delegation RFC 1643 Ethernet Interface MIB RFC 1757 Remote Network Monitoring (RMON) RFC 1812 Requirements for IP Version 4 Router RFC 1901 Introduction to Community-based SNMPv2 RFC 1902-1907 SNMP v2 RFC 1918 Address Allocation for Private Internet RFC 2131 Dynamic Host Configuration Protocol (DHCP) RFC 2132 DHCP Options and BOOTP Vendor Extensions RFC 2571 SNMP Management Frameworks RFC 2863 The Interfaces Group MIB RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only) RFC 3046 DHCP Option82 RFC 3417 (SNMP Transport Mappings) RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP) RFC 4022 MIB for TCP RFC 768 User Datagram Protocol (UDP) RFC 783 TFTP Protocol (revision 2) RFC 792 Internet Control Message Protocol (ICMP) RFC 793 Transmission Control Protocol (TCP) RFC 813 Window and Acknowledgement Strategy in TCP RFC 815 IP datagram reassembly algorithms RFC 826 Ethernet Address Resolution Protocol (ARP) RFC 854 Telnet Protocol RFC 959 File Transfer Protocol (FTP) RFC 1058 Routing Information Protocol (RIP) RFC 1583 OSPF Version 2 RFC 1981 Path MTU Discovery for IP version 6 RFC 1997 BGP Communities Attribute RFC 2236 IGMP

Organization	Standards and Protocol
IETF	RFC 2328 OSPF Version 2 RFC 2385 Protection of BGP Sessions via the TCP MD5 Signature Option RFC 2439 BGP Route Flap Damping 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 2545 Use of BGP 4 Multiprotocol Extensions for IPv6 Inter Domain Routing RFC 2711 IPv6 Router Alert Option RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol RFC 2865 Remote Authentication Dial In User Service (RADIUS) RFC 2918 Route Refresh Capability for BGP 4 RFC 2934 Protocol Independent Multicast MIB for IPv4 RFC 3065 Autonomous System Confederation for BGP 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 3575 IANA Considerations for RADIUS 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 4271 A Border Gateway Protocol 4 (BGP 4) RFC 4273 Definitions of Managed Objects for BGP 4 RFC 4360 BGP Extended Communities Attribute RFC 4456 BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP) RFC 4486 Subcodes for BGP Cease Notification Message RFC 4552 Authentication/Confidentiality for OSPFv3 RFC 4724 Graceful Restart Mechanism for BGP RFC 4750 OSPFv2 MIB partial support no SetMIB RFC 4760 Multiprotocol Extensions for BGP 4 RFC 4940 IANA Considerations for OSPF RFC 5065 Autonomous System Confederation for BGP RFC 5187 OSPFv3 Graceful Restart RFC 5340 OSPFv3 for IPv6 RFC 5492 Capabilities Advertisement with BGP 4 RFC 6620 FCFS SAVI
IEEE	IEEE 802.1D Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol 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 802.1Q Virtual Bridged Local Area Networks (VLAN) IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE Std 802.3x Full Duplex and flow control

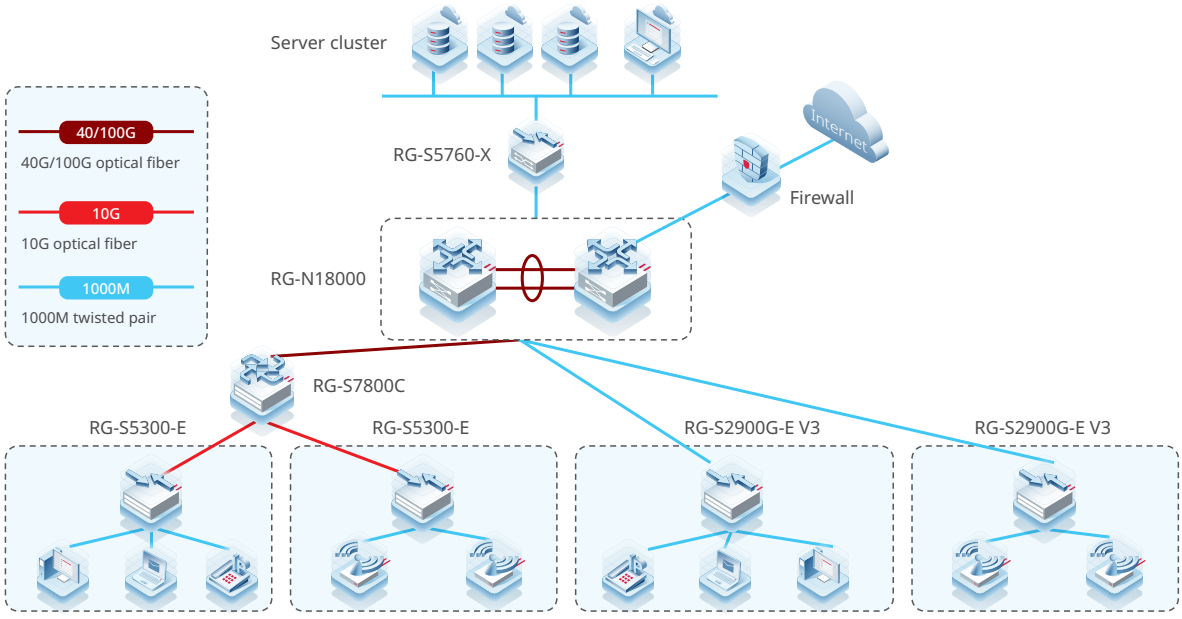
Typical Applications

The RG-S7800C and RG-S7800C-X series switches serve as core devices on a small- or medium-sized network and aggregation devices on a large-sized network.

Serving as Core Devices on a Small- or Medium-sized Network



Serving as Aggregation Devices on a Large-Sized Network



Ordering Guide

Follow the steps to order the RG-S7800C and RG-S7800C-X series switches:

- Select the switch and supervisor module based on the specific product model.
- Select the power module based on power supply requirements. At least one power module must be selected.
- Select the switch fabric module based on service requirements.
- Select the line card based on service requirements. Before ordering a line card, contact the online customer service personnel for the details about the line card.

The item marked with the asterisk (*) in Ordering Information will be available in the future.

Ordering Information

Switches and Supervisor Modules

Model	Description
RG-S7805C	RG-S7805C switch, which can accommodate three line cards and two supervisor modules (supporting -CM series and -X series supervisor modules)
RG-S7808C	RG-S7808C switch, which can accommodate six line cards and two supervisor modules (supporting -CM series and -X series supervisor modules)
RG-S7810C	RG-S7810C switch, which can accommodate eight service cards, two supervisor modules, and two switch fabric modules (supporting -CM series supervisor modules)
RG-S7810C-X	RG-S7810C-X switch, which can accommodate eight line cards, two supervisor modules, and four switch fabric modules (supporting -X series supervisor modules)
M7805C-CM II	S7805C high-performance 2nd-generation supervisor module
M7808C-CM II	S7808C high-performance 2nd-generation supervisor module
M7810C-CM	S7810C high-performance 1st-generation supervisor module
M7810C-CM-F	S7810C high-performance 2nd-generation supervisor module
M7805C-CM-X	RG-S7805C high-performance supervisor module
M7808C-CM-X	RG-S7808C high-performance supervisor module
M7810C-CM-X	RG-S7810C-X high-performance supervisor module

Notes:

- Different models cannot be interchanged.
- Mandatory item, 1+1 redundancy supported, and at least one supervisor module must be configured.

Power Modules and Fan Modules

Model	Description
RG-PA300I-F	S7805C power module (AC, 300 W, 10 A)
RG-PA460I-F	S7805C power module (available for redundancy, AC, 460 W, 10 A)
RG-PA600I-F	S7808C power module (available for redundancy, AC, 600 W, 10 A)
RG-PA1000I-F	S7805C Power module (support redundancy, AC, 1000W,10 A)
RG-PA1600I-F	S7808C power module (available for redundancy, AC, 1600 W, 16 A)
RG-PA600I	S7810C & S7810C-X power module (available for redundancy, AC, 600 W, 10 A)
RG-PA1600I	S7810C & S7810C-X power module (available for redundancy, AC, 1600 W, 16 A)
RG-PD600I	S7810C-X power module (available for redundancy, DC, 600 W, 20 A)
M78-PSE-X	PoE power chassis, used together with RG-PA1600I-PL (Working with -X series supervisor module. If the PoE function is used, you need to separately configure the PoE power chassis M78-PSE-XL and the power module RG-PA1600I-P for M7800C-48XT-P-XB.)
RG-PA1600I-PL	PoE power module (available for redundancy, AC, 1600 W, 16 A) used together with M78-PSE-X (Working with -X series supervisor module. If the PoE function is used, you need to separately configure the PoE power chassis M78-PSE-XL and the power module RG-PA1600I-P for M7800C-48XT-P-XB.))

Switch Fabric Modules

Model	Description
M7810C-FE-D I	RG-S7810C switch fabric module I
M7810C-FE-F I	RG-S7810C 2nd-generation switch fabric module
M7810C-FE-X I	RG-S7810C-X 1st-generation switch fabric module
M7810C-FE-X II	RG-S7810C-X 2nd-generation switch fabric module

Line Cards

Model	Description
Working with -CM series supervisor module	
M7800C-48XS-FB	48 x 10GE optical ports (SFP+ and LC)
M7800C-8CQ-FB	8 x 100G Ethernet optical ports (QSFP28 and LC)
M7800C-48GT-FA	48 x GE RJ45 ports
M7800C-48SFP-FA	48 x GE optical ports (SFP+ and LC)
M7800C-32XS4QXS-DA	32 x 10GE optical ports (SFP+ and LC) + 4 x 40G Ethernet optical ports (QSFP+ and MPO)
M7800C-24GT24SFP4XS-EB	24 x GE RJ45 ports + 24 x GE optical ports (SFP and LC) + 4 x 10GE optical ports (SFP+ and LC)
M7800C-24SFP/12GT4XS-EB	24 x GE optical ports (SFP and LC) + 12 x GE combo ports (RJ45) + 4 x 10GE optical ports (SFP+ and LC)
M7800C-48GT4XS-EB	48 x GE RJ45 ports + 4 x 10GE optical ports (SFP+ and LC)
M7800C-48SFP4XS-EB	48 x GE optical ports (SFP and LC) + 4 x 10GE optical ports (SFP+ and LC)
Working with -X series supervisor module	
M7800C-32XS-XA	32 x 10GE optical ports (SFP+ and LC connector)
M7800C-24GT8SFP8XS-XA	24 x GE electrical ports (RJ45), 8 x GE optical ports (SFP and LC connector), and 8 x 10GE optical ports (SFP+ and LC connector)
M7800C-48GT4XS-XA	48 x GE electrical ports (RJ45) and 4 x 10GE optical ports (SFP+ and LC connector)
M7800C-48SFP4XS-XA	48 x GE optical ports (SFP and LC connector) and 4 x 10GE optical ports (SFP+ and LC connector)
M7800C-52XS-XB	52 x 10GE optical ports (SFP+ and LC connector)
M7800C-12CQ-XB	12 x 100GE/40GE optical ports (QSFP+ and MPO/LC connector)
M7800C-48XT-P-XB	48 x 100M/GE/2.5GE/5GE/10GE electrical ports (RJ45 and PoE/PoE+)
M7800C-8SFG-XB	CWDM line card for RG-S7810C-X and RG-S7808C (used with the M7808C-CM-X supervisor module) series switches, supporting eight SFG GE ports
M7800C-8SFX-XB	CWDM line card for RG-S7810C-X and RG-S7808C (used with the M7808C-CM-X supervisor module) series core switches, supporting eight SFX 10GE ports with each port backward compatible with the Gigabit rate

Notes:

- EB series line card only interchanged with D series line cards.
- D series line card only interchanged with EB series line cards.
- F series line card cannot be interchanged with other line cards.

Warranty

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

- Warranty terms: https://www.ruijienetworks.com/support/servicepolicy
- Warranty period: https://www.ruijienetworks.com/support/servicepolicy/Service-Support-Summany/

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

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.ruijienetworks.com/
- Online support: https://www.ruijienetworks.com/support
- Hotline support: https://www.ruijienetworks.com/support/hotline
- Email support: service_rj@ruijienetworks.com

Ruijie Networks Co., Ltd.

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