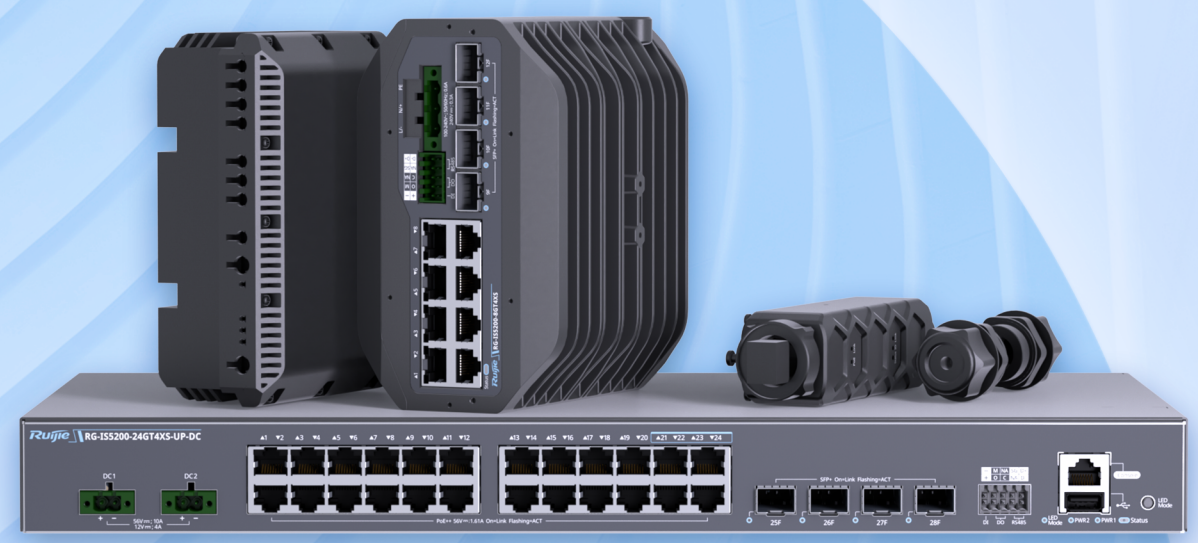
INNOVATION
Beyond Networks

RG-IS5200 Series

Industrial Ethernet Switches



Datasheet

01 Product Overview

The Ruijie RG-IS5200 series is the next-generation industrial Ethernet switch designed for harsh industrial environments. It offers flexible full-gigabit access as well as 10GE uplink ports, supporting a wide operating temperature range and surge protection. Compared with commercial switches, the RG-IS5200 series meets higher design and component standards, providing robust protections like fanless heat dissipation, resistance to vibration, extreme temperatures, dust, and lightning. The RG-IS5200 series also supports long-distance Power over Ethernet (PoE) power supplies, making it ideal for safe city solutions, intelligent transportation, and outdoor video surveillance.

02 Product Appearance

RG-IS5200-8GT4XS

RG-IS5200-8GT4XS-DC

RG-IS5200-8GT4XS-UP-DC

RG-IS5200-24GT4XS-UP-DC

PoE-REP

IS52-shield

03 Product Highlights

- **Diverse Ports Options:** Full 8GE or 24GE downlink, 4 x 10GE uplink ports, various connection options including RS-232 (console port), RS-485, DIDO, and USB port.
- **Ultra-wide Voltage Range Power supply:** 9.6 V DC to 60 V DC, 90 V AC to 264 V AC, 240 HV DC, with dual DC power modules (1+1) and hardware-based dual-boot backup.
- **Wide Operating Temperature:** –40°C to +75°C (–40°F to +167°F).
- **Industrial Hardware Protections:** Waterproof, dustproof, salt-air proof, and surge protection, as well as loop prevention and leading eco-friendly nano coatings. When the IS52-shield protection enclosure is installed, the IP rating reaches IP55. adapting to more harsh environments.
- **Various Software Protocols:** Static routing, Routing Information Protocol (RIP), Open Shortest Path First (OSPF), and Virtual Switching Unit (VSU).
- **Long-distance PoE:** PoE repeater, 1000M over 200 m (656.17 ft.), 100M over 400 m (1,312.33 ft.), all PoE ports supporting 90 W of power supply.
- **Flexible Mounting:** Flexible mounting options including DIN rail mounting, mounting in a 19-inch rack.

04 Product Features

High-Quality Hardware Design, Stable Performance

The RG-IS5200 series industrial Ethernet switch features high-quality hardware design, adhering to industrial-grade standards. It utilizes industrial-grade components, power modules, and an aluminum alloy housing to ensure superior industrial-grade quality. The switch employs a fanless heat dissipation design, supporting a wide operating temperature range from –40°C to +75°C (–40°F to +167°F). With the high-quality components, the switch achieves the IP55 protection level, offers a surge protection capability of at least 10 kV, and features a shock and vibration-resistant power design. This ensures stable and reliable operation even in harsh environments.

High Reliability

The RG-IS5200 series industrial Ethernet switch supports STP (IEEE 802.1D), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s) to achieve fast convergence, improve fault tolerance, and ensure stable network operation and load balancing. It effectively utilizes network channels to improve utilization of redundant links.

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

With Rapid Link Detection Protocol (RLDP), the RG-IS5200 series can quickly detect link connectivity and unidirectional optical links. Through loop detection on a port, the RG-IS5200 series can prevent network failures caused by loops due to unauthorized connections between the port and hubs.

The RG-IS5200 series supports the Ethernet Ring Protection Switching (ERPS) technology, which is a Layer 2 link redundancy protocol designed for the core Ethernet. The networking method provides high redundancy and reliability, in the event of a node failure in a ring network, data can be forwarded from the other end. Therefore, loop elimination and service recovery time of ERPS is faster than that of STP. ERPS implements link restoration within milliseconds.

With Bidirectional Forwarding Detection (BFD), the RG-IS5200 series can detect links within milliseconds, and quickly converge routing and other services through association with upper-layer routing protocols, ensuring service continuity.

VSU

The RG-IS5200 series supports VSU that enables multiple physical devices to be connected through aggregate links and virtualized into one logical device. By using the same IP address, Telnet process, and CLI for management, along with automatic version check and configuration, network administrators can manage only one logical device, thereby enhancing O&M efficiency.

Simplified management: You can manage multiple switches in a unified manner without the need to connect to each switch for separate management.

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

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

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

Increase in return on investment (ROI): Aggregate links are used for connecting the VSU to peripheral devices, implementing link redundancy and load balancing. All network devices and bandwidth resources are fully leveraged. Any type of 10GE ports can be used to establish a VSU over any data transmission cable, without requiring additional cable or expansion card configurations. There are no limitations on the port or cable types used, which maximizes user investment protection.

Flexible Networking and Easy Management

The RG-IS5200 series allows you to configure the switch using the traditional CLI or the web graphical user interface (GUI). You do not need to understand complex command lines or terminal simulation programs, which enables simple and fast configuration and simplifies deployment.

Syslog facilitates unified collection, maintenance, analysis, fault location, and backup of various log information, and helps you conduct network maintenance and management.

The RG-IS5200 series supports routine network diagnostics and maintenance based on SNMP, Remote Network Monitoring (RMON), Syslog, and USB-based backup log and configuration. Network administrators can perform management and maintenance through CLI, web GUI, or Telnet.

Flexible Connections

- One-level repeater for a longer transmission distance, with a transmission rate of 1000M over a maximum transmission distance of 200 m (656.17 ft.), or of 100M over a maximum transmission distance of 400 m (1,312.34 ft.).
- PoE models support 90 W of power supply, supporting more diverse terminals.
- 4 x 10GE uplinks as standard.
- Flexible mounting methods.

05 Product Specifications

Hardware Specifications

Port Specifications

Port Specifications	RG-IS5200-8GT4XS	RG-IS5200-8GT4XS-DC	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
Fixed ports	8x10/100/1000BASE-T ports 4 x 1GE/10GE SFP+	8 x 10/100/1000BASE-T ports 4 x 1GE/10GE SFP+ ports	8 x 10/100/1000BASE-T ports, supporting PoE/PoE+/PoE++ 4 x 1GE/10GE SFP+ ports	24 x 10/100/1000BASE-T ports, supporting PoE/PoE+/PoE++ 4 x 1GE/10GE SFP+ ports
Fixed management port	1 x RJ45 console port			
RS-485 Port	1 x RS-485 port, supporting Modbus			
DIDO	1 x DI, 1 x DO			
USB	1 x USB 2.0 port			

Port Specifications	PoE-REP
Fixed ports	1 x 100/1000 BASE-T/LRE100-4 IN port, 1 x 10/100/1000BASE-T OUT port

System Specifications

System Specifications	RG-IS5200-8GT4XS	RG-IS5200-8GT4XS-DC	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
Packet forwarding rate	72Mpps	72Mpps	72Mpps	96 Mpps
Switching capacity	96 Gbps	96 Gbps	96 Gbps	128 Gbps
CPU	Two-core CPU, ARM Cortex™ A55, each core with the clock speed of 1.0GHz			
BootROM	16 MB (2 flash chips for 1+1 boot redundancy)			
Flash memory	512 MB			
Memory	1GB DDR4			

System Specifications	PoE-REP
Switching capacity	4Gbps

Dimensions and Weight

Dimensions and Weight	RG-IS5200-8GT4XS	RG-IS5200-8GT4XS-DC	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
Unit dimensions (W x D x H)	150mm x 133mm x 86mm			442mm x 220mm x 43.6mm
Unit weight	1.49kg	1.5kg	1.53kg	2.85kg
installation method	Desktop mounting, DIN rail mounting, and wall mounting			Desktop mounting, rack mounting, and wall mounting

Dimensions and Weight	PoE-REP
Unit dimensions (W x D x H)	35 mm x 35 mm x 187 mm (1.38 in. x 1.38 in. x 7.36 in., with waterproof plugs) 35 mm x 35 mm x 131 mm (1.38 in. x 1.38 in. x 5.16 in., without waterproof plugs)

Power supply and Consumption

Power supply and Consumption	RG-IS5200-8GT4XS	RG-IS5200- 8GT4XS-DC
Power Supply	1 x fixed power supply	IPA60: 60W(12V5A) or external DC power supply
Power connector type	Terminal block	
Power module redundancy	Not Supported	1+1 redundancy

Power supply and Consumption	RG-IS5200-8GT4XS	RG-IS5200- 8GT4XS-DC
Power input	AC input: • Rated voltage: 100V~240V AC, 50/60Hz • Maximum voltage: 90V~264V AC, 50/60Hz • Rated current: 0.6A HVDC input: • Rated voltage: 240V DC • Maximum voltage: 204V~288V DC • Rated current: 0.3A	Dual redundant DC (DC1/DC2) input: • Rated voltage: 12 V DC to 48 V DC • Maximum voltage: 9.6 V DC to 60 V DC • Rated current: 2 A to 0.5 A
Maximum power consumption	110 V AC: 16.7W 220 V AC: 16.8W 240 V AC: 16.8W	12 V DC: 19.8W 48 V DC: 17.5W
Leakage current	≤3.5mA	N/A
Energy saving	Energy Efficient Ethernet (EEE)	

Power supply and Consumption	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
Power Supply	IPA240-P: 240 W (56 V/4.4 A) or external DC power supply	IPA60: 60 W (12 V/5 A), IPA240-P: 240 W (56 V/4.4 A) or external DC power supply
Power connector type	Terminal block	
Power module redundancy	1+1 redundancy	
Power input	Dual redundant DC (DC1/DC2) input: • Rated voltage: 56 V DC • Maximum voltage: PoE only: 48 V DC PoE/PoE+/PoE++: 54 V DC to 57 V DC • Rated current: 10 A	Dual redundant DC (DC1/DC2) input: • Rated voltage: 56V DC or 12V DC PoE not supported: 12 V DC PoE only: 48 V DC PoE/PoE+/PoE++: 54 V DC to 57 V DC • Maximum voltage: 9.6 V DC to 60 V DC • Rated current: 10A (56V DC) or 3A (12V DC)
Maximum power consumption	23.8W (Without PoE) 503.8W (full PoE load)	12V DC input: 36.8W 56V DC input: • 35.5W (Without PoE) • 515.5W (full PoE load)
PoE port	Ports 1 to 8 support PoE/PoE+/PoE++ (IEEE802.3af/at/bt) power supply	Ports 1 to 24 support PoE/PoE+/PoE++ (IEEE802.3af/at/bt) power supply
PoE power cable pairs	Four pairs (1-2, 3-6, 4-5, and 7-8 pairs)	
PoE output power	PoE budget: 480 W Maximum power output per PoE port: 15.4 W (PoE), 30 W (PoE+), 90 W (PoE++) Note: • The maximum number of powered devices supported by the switch is determined by the available power of the switch and the actual power consumption of each device. • By default, the maximum PoE output power of the switch is 210 W.	PoE budget: 480 W Maximum power output per PoE port: 15.4 W (PoE), 30 W (PoE+), 90 W (PoE++) Note: • The maximum number of powered devices supported by the switch is determined by the available power of the switch and the actual power consumption of each device. • By default, the maximum PoE output power of the switch is 200 W.

Power supply and Consumption	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
PoE distance	PoE-REP not used: 100 m (328.08 ft.) PoE-REP used: Ports 1 to 4: 200 m (100 m [328.08 ft.] + 100 m [328.08 ft.] = 200 m [656.16 ft.]) Maximum output power of PoE-REP: 60 W Ports 5 to 8: ● 200 m (100 m [328.08 ft.] + 100 m [328.08 ft.] = 200 m [656.16 ft.]). Maximum output power of PoE-REP: 60 W ● 400 m (300 m [984.25 ft.] + 100 m [328.08 ft.] = 400 m [1,312.33 ft.]) (Distance from RG-IS5200 to PoE-REP + Distance from PoE-REP to powered devices). Maximum output power of PoE-REP: 30 W	PoE-REP not used: 100 m (328.08 ft.) PoE-REP used: Ports 1 to 20: 200 m (100 m [328.08 ft.] + 100 m [328.08 ft.] = 200 m [656.16 ft.]) Maximum output power of PoE-REP: 60 W Ports 21 to 24: ● 200 m (100 m [328.08 ft.] + 100 m [328.08 ft.] = 200 m [656.16 ft.]). Maximum output power of PoE-REP: 60 W ● 400 m (300 m [984.25 ft.] + 100 m [328.08 ft.] = 400 m [1,312.33 ft.]) (Distance from RG-IS5200 to PoE-REP + Distance from PoE-REP to powered devices). Maximum output power of PoE-REP: 30 W
Energy saving	Energy Efficient Ethernet (EEE)	

Power supply and Consumption	PoE-REP
PoE Powered (Input)	Support PoE/PoE+/PoE++ (IEEE802.3af/at/bt)
PoE power (output)	Support PoE/PoE+/PoE++ (IEEE802.3af/at/bt) (limited to 100 m)

Environment and Reliability

Environment and Reliability	RG-IS5200-8GT4XS	RG-IS5200-8GT4XS-DC	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
Operating temperature	Operating temperature: (at an altitude below 1,800 m [5,905.51 ft.], with industrial optical transceivers installed) ● –40°C to +65°C (–40°F to +149°F) (installed in an enclosed cabinet) ● –40°C to +70°C (–40°F to +158°F) (installed in a ventilated cabinet with a minimum air velocity of 80 Line Feet Minute [LFM]) ● –40°C to +75°C (–40°F to +167°F) (installed in a fan-equipped cabinet with a minimum air velocity of 200 LFM) Note: At an altitude between 1,800 m (5,905.51 ft.) and 5,000 m (16,404.20 ft.), every time the altitude increases by 220 m (721.78 ft.), the maximum temperature decreases by 1°C (1.8°F).		Operating temperature: (at an altitude below 1,800 m [5,905.51 ft.], with industrial optical transceivers installed) ● –40°C to +60°C (–40°F to +140°F) (installed in an enclosed cabinet) ● –40°C to +70°C (–40°F to +158°F) (installed in a ventilated cabinet with a minimum air velocity of 80 Line Feet Minute [LFM]) ● –40°C to +75°C (–40°F to +167°F) (installed in a fan-equipped cabinet with a minimum air velocity of 200 LFM) Note: At an altitude between 1,800 m (5,905.51 ft.) and 5,000 m (16,404.20 ft.), every time the altitude increases by 220 m (721.78 ft.), the maximum temperature decreases by 1°C (1.8°F).	Operating temperature: (at an altitude below 1,800 m [5,905.51 ft.], with industrial optical transceivers installed) ● –40°C to +65°C (–40°F to +149°F) (installed in an enclosed cabinet) ● –40°C to +70°C (–40°F to +158°F) (installed in a ventilated cabinet with a minimum air velocity of 80 Line Feet Minute [LFM]) ● –40°C to +75°C (–40°F to +167°F) (installed in a fan-equipped cabinet with a minimum air velocity of 200 LFM) Note: At an altitude between 1,800 m (5,905.51 ft.) and 5,000 m (16,404.20 ft.), every time the altitude increases by 220 m (721.78 ft.), the maximum temperature decreases by 1°C (1.8°F).

Environment and Reliability	RG-IS5200-8GT4XS	RG-IS5200-8GT4XS-DC	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
Operating temperature	Storage temperature: –40°C to +85°C (–40°F to +185°F)		Storage temperature: –40°C to +85°C (–40°F to +185°F)	Storage temperature: –40°C to +85°C (–40°F to +185°F)
Humidity	Operating humidity: 5% to 95% RH, Non-condensing Storage humidity: 5% to 95% RH			
Altitude	Storage altitude: 0 m to 5,000 m (0 ft. to 16,404.20 ft.) Operating altitude: 0 m to 5,000 m (0 ft. to 16,404.20 ft.)			
Mean time between failures (MTBF)	Below 40°C (104°F): at least 300,000 hours (about 34 years)			
Fan	Fanless design, natural cooling			
Temperature monitoring	Temperature monitoring, over-temperature alarming If the ambient temperature exceeds a certain value, the device will be reset.			
IP rating	IP41 by default. When the IS52-shield protection enclosure is installed, the IP rating reaches IP55. Note: Without any protection enclosure, the front panel of the switch should not be installed upward to meet the IP41 protection requirements.			IP40 Note: For bare metal servers, the front panel port should not be installed upward to meet IP40 requirements.
ESD	ESD contact/air discharge: 6 kV/8 kV ESD susceptibility contact/air discharge: 8 kV/15 kV			
Surge protection	AC power port: Common mode: 6 kV/ Differential mode: 6 kV, 1.2/50, criterion B Service ports: • Common mode: 10 kV (1.2/50), criterion R • Common mode: 6 kV (1.2/50), criterion B • Differential mode: 500 V (between positive and negative ends, 1.2/50, criterion R) DI/DO/RS-485 port: • Common mode: 4 kV (1.2/50), criterion B • Differential mode: 1 kV (1.2/50), criterion B	AC power port (power adapter): Common mode: 6 kV/Differential mode: 6 kV, 1.2/50, criterion B Service ports: • Common mode: 10 kV (1.2/50), criterion R • Common mode: 6 kV (1.2/50), criterion B • Differential mode: 500 V (between positive and negative ends, 1.2/50, criterion R) DI/DO/RS-485 port: • Common mode: 4 kV (1.2/50), criterion B • Differential mode: 1 kV (1.2/50), criterion B		

Environment and Reliability	RG-IS5200-8GT4XS	RG-IS5200-8GT4XS-DC	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
Conducted immunity	Performance criterion: A Spectrum scanning range: 0.15 MHz to 80 MHz Modulation: 80% AM, 1 kHz sine wave AC power port: 3 V Service port: 3 V DI/DO/RS-485 port: 3 V	Performance criterion: A Spectrum scanning range: 0.15 MHz to 80 MHz Modulation: 80% AM, 1 kHz sine wave AC power port: 3 V Service port: 3 V DI/DO/RS-485 port: 3 V		
Power frequency magnetic field immunity	Continuous magnetic field: 30 A/m Short-term magnetic field: 300 A/m			
Voltage dip	AC power port: • 70% voltage remained for 25 cycles (criterion B). • 0% voltage remained for 0.5 cycle (criterion B). • 0% voltage remained for 1 cycle (criterion B). • 0% voltage remained for 250 cycles (criterion C)	AC power port (power adapter): • 70% voltage remained for 25 cycles (criterion B). • 0% voltage remained for 0.5 cycle (criterion B). • 0% voltage remained for 1 cycle (criterion B). • 0% voltage remained for 250 cycles (criterion C)		
Vibration	Based on IEC 61000-3-2 and GB 17625.1, the switch meets the requirements of category A equipment.			
Shock	IEC61000-3-3, GB17625.2 European Limits			

Environment and Reliability	PoE-REP
Operating temperature	Operating temperature: –40°C to +65°C (–40°F to +149°F) (installed in an enclosed cabinet) • –40°C to +65°C (–40°F to +149°F) (installed in an enclosed cabinet) • –40°C to +70°C (–40°F to +158°F) (installed in a ventilated cabinet with a minimum air velocity of 80 Line Feet Minute [LFM]) • –40°C to +75°C (–40°F to +167°F) (installed in a fan-equipped cabinet with a minimum air velocity of 200 LFM) Storage temperature: –40°C to +85°C (–40°F to +185°F)
Humidity	Operating humidity: 5% to 90% RH Storage humidity: 5% to 95% RH
IP rating	IP56 (standard waterproof cap)
Surge protection	10 kV

Certifications and regulatory compliance

Environment and Reliability	RG-IS5200-8GT4XS	RG-IS5200-8GT4XS-DC	RG-IS5200-8GT4XS-UP-DC	RG-IS5200-24GT4XS-UP-DC
Safety regulation	EN 62368-1, BS EN 62368-1, IEC 62368-1			
EMC regulation	EN 55032, EN 55035, EN 300386, BS EN 55032, BS EN 55035			

Software Specifications

Performance and Capacity

Performance and Capacity	RG-IS5200 Series
Maximum number of VSU members	8
VSU bandwidth	40 Gbps
Maximum number of SVIs	990
Maximum number of MAC address entries	16000
Maximum number of ARP address entries	4000
Maximum number of ND entries	4000
Maximum number of IPv4 unicast routes	6000
Maximum number of IPv6 unicast routes	2000
Maximum number of IPv4 multicast routes	1000
Maximum number of IPv6 multicast routes	750
Maximum number of IGMP groups	1000
Maximum number of MLD groups	750
Maximum number of VRF instances	255
Maximum number of ACEs	In: 1750, Out: 800

Function

RG-IS5200 Series	
Feature	**Description**
Ethernet switching	Jumbo frame (maximum length: 9,216 bytes)
	IEEE 802.3az EEE
	IEEE 802.1Q (4K VLANs)
	Voice VLAN
	Super-VLAN and private VLAN
	MAC address-based VLAN, interface-based VLAN, protocol-based VLAN, and IP subnet-based VLAN
	GVRP
	Basic QinQ Selective QinQ
	STP, RSTP, and MSTP
	ERPS (G.8032)
	LLDP/LLDP-MED
IP service	ARP
	DHCP client, DHCP relay, and DHCP server
	DHCP snooping
	DNS
	DHCPv6 client, DHCPv6 relay, and DHCPv6 server
	DHCPv6 snooping
	ND and ND snooping

RG-IS5200 Series	
Feature	**Description**
IP routing	Static routing
	RIP and RIPng
	OSPFv2 and OSPFv3
ACL and QoS	Standard IP ACLs Extended IP ACLs Extended MAC ACLs Time-based ACLs Expert-level ACLs ACL80
	ACL redirection
	Traffic rate limiting on an interface
	Congestion management: RR, SP, WRR, DRR, WFQ, SP+WRR, SP+DRR, and SP+WFQ
	Congestion prevention: tail drop
	802.1p/DSCP/ToS traffic classification Eight priority queues per interface
Security	Multiple AAA modes
	RADIUS and TACACS+
	Interface-based and MAC address-based 802.1X authentication
	Web authentication
	HTTPS
	SSHv1 and SSHv2
	Global IP-MAC binding
	Port isolation and port security
	IP source guard
	CPP and NFPP
Reliability	REUP, RLDP, and DLDP
	IPv4 VRRP v2/v3 and IPv6 VRRP
	BFD
	Link tracing, fault notification, and remote loopback based on 802.3ah (EFM)
	Dual-boot redundancy
	Fan speed adjustment Fan fault alarming
Virtualization	VSU
Network management and monitoring	SPAN, RSPAN
	sFlow
	NTP and SNTP
	FTP and TFTP
	SNMPv1/v2/v3
	RMON (groups 1, 2, 3, and 9)
	CWMP (TR-069)
	gRPC

06 Protocol Compliance

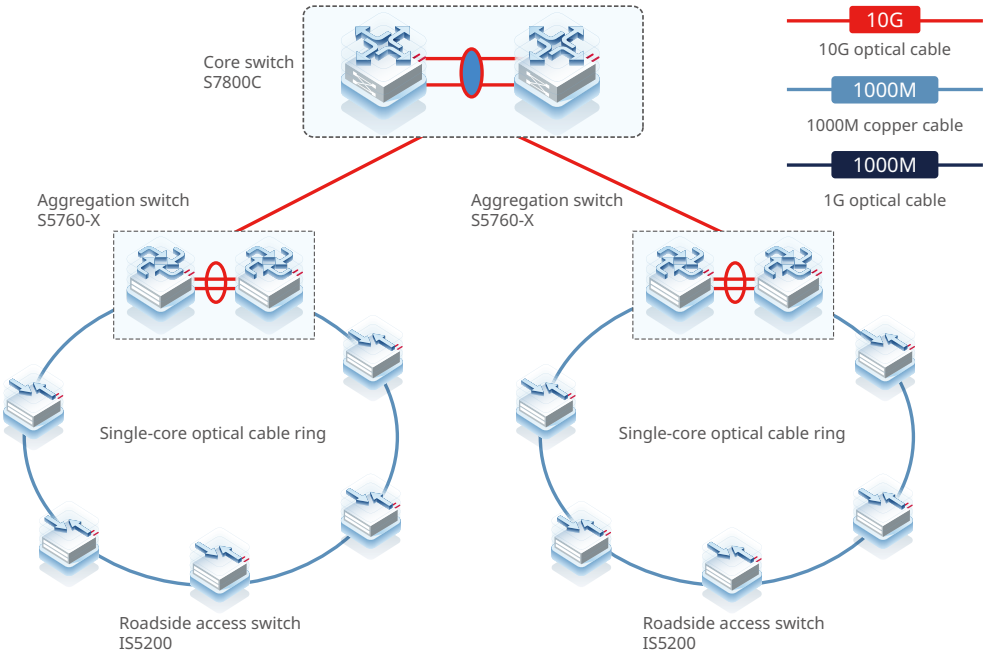
RG-IS5200 Series	
Organization	**Standards and Protocol**
IETF	RFC 1157 A Simple Network Management Protocol (SNMP) RFC 1305 Network Time Protocol Version 3 (NTP) RFC 1349 Internet Protocol (IP) RFC 1350 TFTP Protocol (revision 2) RFC 1519 CIDR RFC 1591 Domain Name System Structure and Delegation RFC 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 SNMPv2 RFC 1918 Address Allocation for Private Internet RFC 2131 Dynamic Host Configuration Protocol (DHCP) RFC 2132 DHCP Options and BOOTP Vendor Extensions RFC 2571 SNMP Management Frameworks RFC 2863 The Interfaces Group MIB RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only) RFC 3046 DHCP Option82 RFC 3417 (SNMP Transport Mappings) RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP) RFC 4022 MIB for TCP RFC 768 User Datagram Protocol (UDP) RFC 783 TFTP Protocol (revision 2) RFC 792 Internet Control Message Protocol (ICMP) RFC 793 Transmission Control Protocol (TCP) RFC 813 Window and Acknowledgement Strategy in TCP RFC 815 IP datagram reassembly algorithms RFC 826 Ethernet Address Resolution Protocol (ARP) RFC 854 Telnet Protocol RFC 959 File Transfer Protocol (FTP) RFC 2865 Remote Authentication Dial In User Service (RADIUS) RFC 3575 IANA Considerations for RADIUS RFC 3579 RADIUS Support For EAP RFC 1058 Routing Information Protocol (RIP) RFC 1583 OSPF Version 2 RFC 1981 Path MTU Discovery for IP version 6 RFC 2236 IGMP RFC 2328 OSPF Version 2 RFC 2460 Internet Protocol, Version 6 (IPv6) RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) RFC 2462 IPv6 Stateless Address Auto configuration RFC 2463 Internet Control Message Protocol for IPv6 (ICMPv6) RFC 2711 IPv6 Router Alert Option RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol RFC 2934 Protocol Independent Multicast MIB for IPv4 RFC 3101 OSPF Not so stubby area option RFC 3137 OSPF Stub Router Advertisement sFlow RFC 3509 Alternative Implementations of OSPF Area Border Routers RFC 3513 IP Version 6 Addressing Architecture RFC 3623 Graceful OSPF Restart RFC 3768 VRRP RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6 RFC 3973 PIM Dense Mode RFC 4552 Authentication/Confidentiality for OSPFv3

RG-IS5200 Series	
Organization	**Standards and Protocol**
IETF	RFC 4750 OSPFv2 MIB partial support no SetMIB RFC 4940 IANA Considerations for OSPF RFC 5187 OSPFv3 Graceful Restart RFC 5340 OSPFv3 for IPv6 RFC 6620 FCFS SAVI
IEEE	IEEE 802.2 Logical Link Control IEEE 802.1ab Link Layer Discovery Protocol IEEE 802.1ad Provider Bridges IEEE 802.1ax/IEEE802.3ad Link Aggregation IEEE 802.1D Media Access Control (MAC) Bridges IEEE 802.1D Spanning Tree Protocol IEEE 802.1Q Virtual Bridged Local Area Networks (VLAN) IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE Std 802.3x Full Duplex and flow control

07 Typical Applications

Outdoor Video Surveillance

Industrial switches are essential in outdoor video surveillance. They are typically used to connect and manage a large number of surveillance cameras, ensuring real-time transmission and storage of video data. Given the harsh outdoor environments, industrial switches are designed to withstand high or low temperatures, dust, and water, allowing them to operate reliably under extreme weather conditions. Additionally, industrial switches support PoE, which allows them to power cameras through Ethernet cables, simplifying cabling and reducing installation and maintenance costs.



Intelligent Transportation

In intelligent transportation systems, industrial switches connect various traffic control devices, such as traffic lights, surveillance equipment, and display boards, forming a high-speed, stable, and reliable traffic management network. Through industrial switches, traffic management centers can monitor intelligent transportation systems, industrial switches connect various traffic devices, such as traffic signals, electronic monitoring equipment, and information display boards, forming a high-speed, stable, and reliable traffic management network. Through industrial switches, traffic management centers can monitor and control traffic flow in real-time, collect and analyze traffic data, optimize traffic signals, improve traffic efficiency, and reduce congestion. The high reliability and rapid fault recovery capabilities of industrial switches ensure the continuous and stable operation of traffic systems.

08 Ordering Guide

Follow the steps to order the RG-IS5200 series switches.

- Select a model of the RG-IS5200 series switches and its expansion modules based on port requirements.
- Select optical transceivers based on port requirements.

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

09 Ordering Information

Switches and Power Modules

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

Model	Description
RG-IS5200-8GT4XS	8 x 10/100/1000BASE-T ports, 4 x 1GE/10GE SFP+ ports Built-in AC power supply, single AC power input, fanless design, IP41 (supporting upgrade to IP55), DIN rail mounting
RG-IS5200-8GT4XS-DC	8 x 10/100/1000BASE-T ports, 4 x 1GE/10GE SFP+ ports Dual DC power supplies, supporting 60 W power input through the IPA60 power adapter, fanless design, IP41 (supporting upgrade to IP55), DIN rail mounting
RG-IS5200-8GT4XS-UP-DC	8 x 10/100/1000BASE-T ports, PoE/PoE+/PoE++ power supply, 4 x 1GE/10GE SFP+ ports Dual DC power supplies, supporting 240 W power input through the IPA240-P power adapter, fanless design, IP41 (supporting upgrade to IP55), DIN rail mounting The first 4 Ethernet ports can be connected to PoE-REP, with a transmission rate of 1000M/100M/10M over a maximum transmission distance of 200 m (656.17 ft.). The last 4 Ethernet ports can be connected to PoE-REP, with a transmission rate of 1000M/100/10M over a maximum transmission distance of 200 m (656.17 ft.), or of 100M over a maximum transmission distance of 400 m (1,312.34 ft.).
RG-IS5200-24GT4XS-UP-DC	24 x 10/100/1000BASE-T ports, PoE/PoE+/PoE++, 4 x 1GE/10GE SFP+ ports Dual DC power supplies, supporting 60 W power input (without PoE) through the IPA60 power adapter or 240 W power input (with PoE) through the IPA240-P power adapter, fanless design, IP40, mounting in a 19-inch rack The first 20 Ethernet ports can be connected to PoE-REP, with a transmission rate of 1000M/100M/10M over a maximum transmission distance of 200 m (656.17 ft.). The last 4 Ethernet ports can be connected to PoE-REP, with a transmission rate of 1000M/100M/10M over a maximum transmission distance of 200 m (656.17 ft.), or of 100M over a maximum transmission distance of 400 m (1,312.34 ft.).

Model	Description
IPA240-P	240 W AC PoE power module, applicable to RG-IS5200-8GT4XS-UP-DC and RG-IS5200-24GT4XS-UP-DC (PoE scenarios), supporting 1:1 hot standby (not simultaneous power supply), IP40, DIN rail mounting
IPA60	60 W AC power module, applicable to RG-IS5200-8GT4XS-DC and RG-IS5200-24GT4XS-UP-DC (non-PoE scenarios), supporting 1:1 hot standby (not simultaneous power supply), IP40, DIN rail mounting

Accessories

Model	Description
PoE-REP	PoE repeater. The IN port supports 100/1000BASE-T and LRE100-4. The OUT port supports 10/100/1000BASE-T. The IN port supports PoE++ (PD Class 8) input while the OUT port supports PoE++ output and IP56
IS52-shield	IP55 protective enclosure, applicable to RG-IS5200-8GT4XS, RG-IS5200-8GT4XS-DC, and RG-IS5200-8GT4XS-UP-DC

Optical Transceivers and Cables

1GE

Model	Description
GE-SFP-SR-MM850-I	1000BASE-SR, industrial SFP transceiver, 850 nm, Duplex LC, 550 m over MMF
GE-SFP-LR-SM1310-I	1000BASE-LR, industrial SFP transceiver, 1310 nm, Duplex LC, 10 km over SMF

10GE

Model	Description
XG-SFP-SR-MM850-I	10GBASE-SR, Industrial SFP+ transceiver, 850nm, Duplex LC, 300 m over MMF
XG-SFP-LR-SM1310-I	10GBASE-LR, Industrial SFP+ transceiver, 1310nm, Duplex LC, 10 km over SMF

10 Package Contents

RG-IS5200-8GT4XS/RG-IS5200-8GT4XS-DC/RG-IS5200-8GT4XS-UP-DC

Item	Quantity
Switch	1
Rail clip	1
Rail	1
M3x5 mm screw	2
PWA4.2x20 mm tapping screw	2
φ6.0x25 mm expansion anchor	2
Power terminal connector	1
10-Pin terminal block	1

Item	Quantity
Grounding cable	1
Installation Manual	1
Safety Label and Certification Information Description	1
Ruijie Networks product management software	1

RG-IS5200-24GT4XS-UP-DC

Item	Quantity
Switch	1
M4x7 mm screw	8
2-Pin terminal block	2
10-Pin terminal block	1
Mounting bracket	2
Grounding cable	1
Installation Manual	1
Safety Label and Certification Information Description	1
Ruijie Networks product management software (Pre-installed)	1

11 Warranty

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

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

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

12 More Information

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

Ruijie Networks Co., Ltd.

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