



# Ruijie RG-IS2700G

## Industrial Ethernet Switch Series Datasheet

Ruijie Networks Co., Ltd.

For further information, please visit our website <http://www.ruijienetworks.com>

# Product Overview

Ruijie RG-IS2700G Industrial Ethernet Switch Series is designed to power various industrial applications. The RG-IS2700G Switch Series offers abundant routing, switching and security protocols and advanced features including vibration resistance, wide temperature range, dust proof, and lightning arrester to cope with harsh operating environments. Ethernet Ring Protection Switching (ERPS) is another highlight to improve network flexibility, resiliency and security. The RG-IS2700G Switch Series provides customers with a robust, highly secure and easy-to-use switching infrastructure.

Feature highlights of RG-IS2700G Industrial Switch Series:

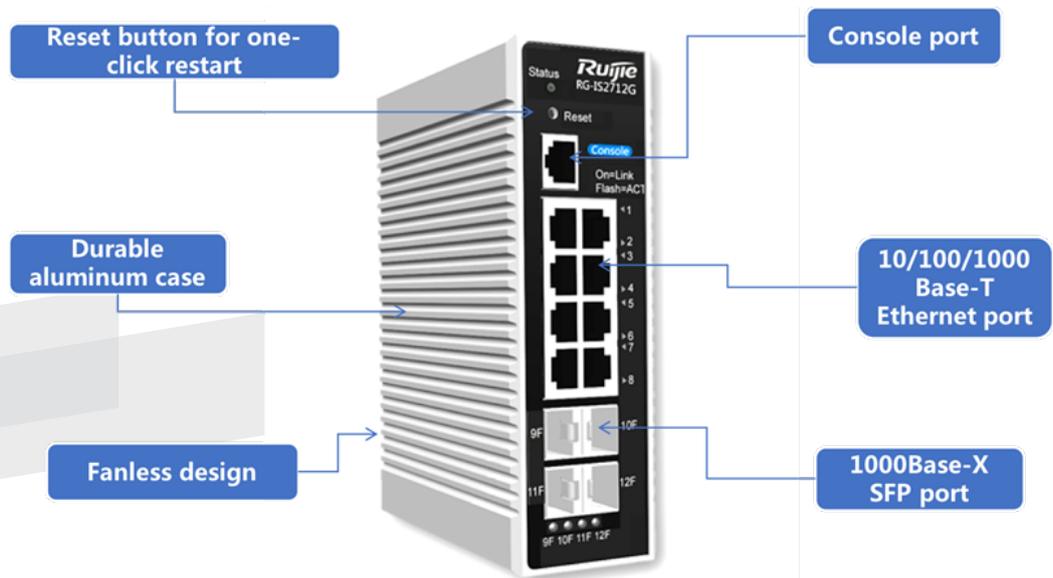
- Advanced Hardware Architecture
- Abundant Network and Security Features
- Flexible Deployment and Management

# Product Features

## Advanced Hardware Architecture

■ Advanced hardware design: The RG-IS2700G Switch Series embodies mainstream industrial chips, high-performance CPU, and industrial-grade power module in a durable aluminum case to meet the demanding requirements across industrial networks.

■ Robust design for industrial deployment: Support fanless cooling, -40 to 85°C operating temperature range, IP40 protection rating, lightning protection  $\geq 6KV$ , power supply with anti-vibration feature, level 4 electromagnetic interference standard, shock and vibration resistance.

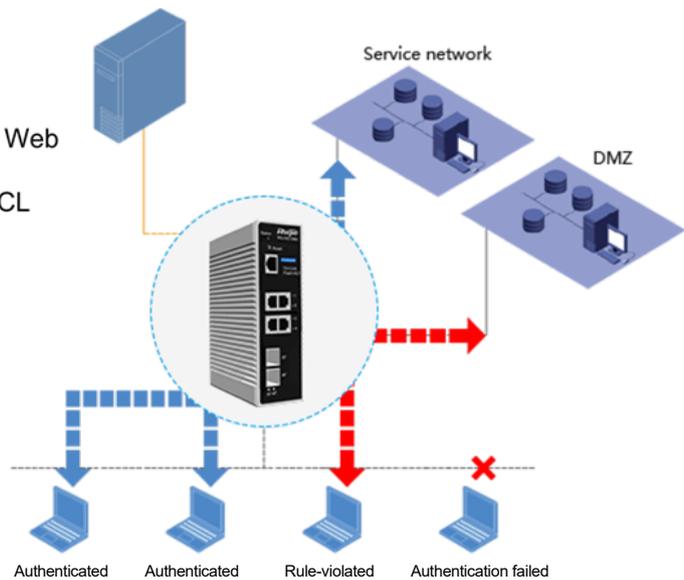


RG-IS2712G Overview

## Abundant Network and Security Features

- An extensive library of Layer 2 features: Support VLAN, ERPS, QoS, port security, broadcast storm suppression and offer Layer 3 features such as static routing.
- Advanced security protection: Support binding of static and dynamic ports, port isolation, multiple kinds of hardware ACL control, bandwidth speed limit based on data traffic, user access control, etc. The RG-IS2700G Series supports effective protection against virus attacks, network traffic attacks and rogue network access.
- High network stability: Network Foundation Protection Policy (NFPP) implements speed limit based on different packet categories (management, forwarding, protocol packets, etc.) and attack inspection. The RG-IS2700G Series fully protects the CPU and bandwidth resources from network attacks, ensuring normal forwarding and protocol operation.

- 802.1X authentication and Web authentication
- MAC authentication and ACL delivery < 20 ms
- MAC address + port + IP address binding
- ARP attack prevention
- CPP + NFPP



Secure Access, Isolating Risks Outside the Door

## Flexible Deployment and Management

- Best price-to-performance ratio: Support the traditional star network topology and also the Ethernet Ring Protection Switching (ERPS) technology. ERPS enables ring network topology with superior redundancy and reliability. Once a node in the ring network fails, data can be forwarded from the other end. The ERPS is more cost-effective as it minimizes the investment cost on optical fiber.
- Flexible network deployment: Support Gigabit copper and fiber (non-combo) deployment.
- Easy maintenance and management: Support Syslog which enables centralized log collection, maintenance, analysis, troubleshooting and backup.

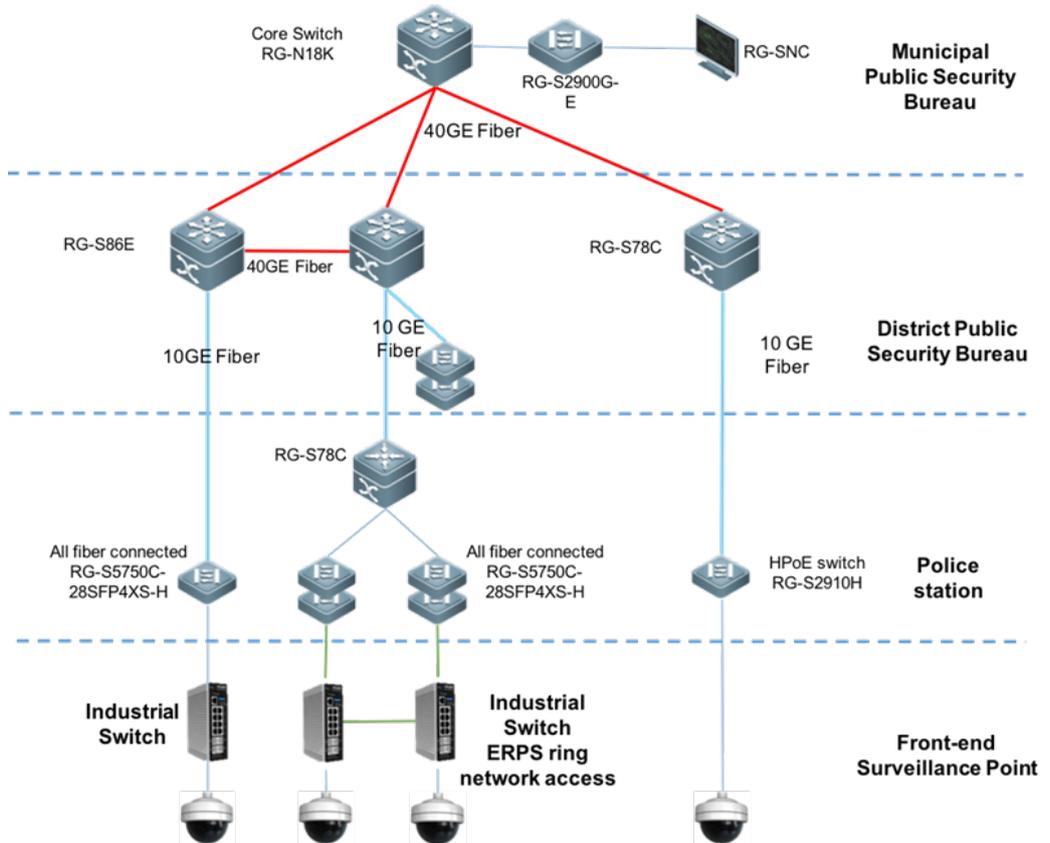
# Technical Specifications

Model	RG-IS2712G-DC	RG-IS2712G	RG-IS2706G
Fixed Ports	8 10/100/1000BASE-T ports 4 1000BASE-X SFP ports (100M not supported)		4 10/100/1000BASE-T ports 2 1000BASE-X SFP ports (100M not supported)
Management Port	1 console port		
Switching Capacity	36Gbps		18Gbps
Forwarding Rate	26.7Mpps		13.4Mpps
802.1q VLAN	4K		
Operating Temperature	-40 to 85°C		
Operating Humidity	5 to 95%RH		
Protection Rating	IP40		
MTBF	>30 years		
Electromagnetic Interference	ESD (IEC 61000-4-2) RS (IEC 61000-4-3) EFT (IEC 61000-4-4) CS (IEC 61000-4-6) PFMF (IEC 61000-4-8) Surge (IEC 61000-4-5) DIP (IEC 61000-4-11)	Level 4 (8K/15K) Level 3 (10V/m) Level 3 (1V/2V) Level 3 (10V/m) Level 4 (30A/m) Level 4+ (6KV/2KV) Level3 (10V)	
L2 Protocols	G.8032 (ERPS), IEEE802.1ag, IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3x, IEEE802.3ad, IEEE802.1p, IEEE802.1x, IEEE802.3ab, IEEE802.1Q, IEEE802.1d, IEEE802.1w, IEEE802.1s, IGMP Snooping v1/v2/v3		
ACL	Standard IP ACL (hardware ACL based on IP address) Extended IP ACL (hardware ACL based on IP address and TCP/UDP port number) Extended MAC ACL (hardware ACL based on source MAC address, destination MAC address and optional Ethernet type) Time-based ACL Expert ACL (hardware ACL based on flexible combination of VLAN number, Ethernet type, MAC address, IP address, TCP/UDP port number, protocol type, time, etc.)		
IPv6 ACL & QoS	Support IPv6 ACL and IPv6 QoS based on source/destination IPv6 address and port Priority queue: 8		

Model	RG-IS2712G-DC	RG-IS2712G	RG-IS2706G
Security	Binding of IP, MAC and port Binding of IPv6, MAC and port Filter rogue MAC address MAC-based and port-based 802.1x Web authentication and concurrent 802.1x, ARP-Check and ACL ARP-Check, DAI Speed limit on packet transmission Broadcast storm suppression Administrator hierarchy and password protection AAA authentication for device login management (IPv4/IPv6) SSH, BPDU Guard		
IP Routing	Default routing, static routing between host and directly connected network segments		
IPv6 Protocols	IPv6 address assignment, Neighbor Discovery (ND), ICMPv6, IPv6 Ping, IPv6 Tracert		
Management	SNMPv1/v2c/v3, CLI (Telnet/Console), RMON (1, 2, 3, 9), SSH, Syslog, NTP/SNTP, web		
Dimensions (W×H×D) (mm)	52 x 115 x 160		
Installation Mode	DIN rail-mounted		
Power Supply	DC input: Rated voltage: 24VDC, 48VDC Maximum voltage range: 18VDC to 72VDC Maximum current: 1.0A Two power supplies are supported for 1+1 power redundancy.	AC Input: Nominal voltage range: 100-240V Max voltage range: 90-264V Frequency: 50-60Hz Rated current: 0.4A HVDC input: Rated voltage range: 140VDC to 340VDC Maximum voltage range: 130VDC to 370VDC Rated current: 0.4A	
Power Consumption	≤12W		≤8W
Heat Dissipation	Fanless design with high-efficiency heat sink		
Safety Standards	NA	IEC 60950-1, EN60950-1	
Emission Standards	EN 300 386, EN 55032, EN 61000-3-2, EN 61000-3-3, EN 55024, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11		

# Typical Application

RG-IS2700G Industrial Switch Series is dedicated for the Citywide IP Surveillance Integrated Network and Monitoring Solution with up to 8 10/100/1000M copper ports, up to 4 1000BASE-X SFP ports, operating temperature from -40 to 85°C and power consumption of ≤12 W. The switch supports Ethernet Ring Protection Switching (ERPS) which enhances network stability and flexibility to fully meet the requirements of City-wide IP Surveillance, intelligent transportation outdoor surveillance, and surveillance deployment in harsh environment.



## Ordering Information

Model	Description
RG-IS2712G-DC	8-port 10/100/1000BASE-T, 4-port 1000BASE-X SFP (non-combo), built-in power supply, fanless design, aluminum case, support rail mount installation, DC input.
RG-IS2712G	8-port 10/100/1000BASE-T, 4-port 1000BASE-X SFP (non-combo), built-in power supply, fanless design, aluminum case, support rail mount installation, AC input.
RG-IS2706G	4-port 10/100/1000BASE-T, 2-port 1000BASE-X SFP (non-combo), built-in power supply, fanless design, aluminum case, support rail mount installation, AC input.

Optional Accessories	
GE-SFP-LX20-SM1310-BIDI	SFP Gigabit BIDI optical module, TX1310/RX1550 (20km, LC)
GE-SFP-LX20-SM1550-BIDI	SFP Gigabit BIDI optical module, TX1550/RX1310 (20km, LC)
GE-SFP-LH40-SM1310-BIDI	SFP Gigabit BIDI optical module, TX1310/RX1550 (40km, LC)
GE-SFP-LH40-SM1550-BIDI	SFP Gigabit BIDI optical module, TX1550/RX1310 (40km, LC)
Mini-GBIC-GT	1000BASE-TX, SFP Transceiver (100m)
Mini-GBIC-SX-MM850	1000BASE-SX mini GBIC Transceiver (850nm)
Mini-GBIC-LX-SM1310	1000BASE-LX mini GBIC Transceiver (1310nm)
Mini-GBIC-LH40-SM1310	1000BASE-LH mini GBIC Transceiver (1310nm, 40km)
Mini-GBIC-ZX50-SM1550	1000BASE-ZX mini GBIC Transceiver (1550nm, 50km)
Mini-GBIC-ZX80-SM1550	1000BASE-ZX mini GBIC Transceiver (1550nm, 80km)
Mini-GBIC-ZX100-SM1550	1000BASE-ZX mini GBIC Transceiver (1550nm, 100km)
CON-DB9/RJ45-2M	Ruijie Console Cable RJ45-to-DB9 (2m)



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