

RG-S2600G-I Series Intelligent Security Access Switches Datasheet

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1 Product Pictures



Figure 1 RG-S2628G-I



Figure 2 RG-S2652G-I

2 Product Overview

RG-S2600G-I series is intelligent security devices introduced by Ruijie Networks to construct secure and stable networks that including RG-S2628G-I and RG-S2652G-I. Based on the new generation hardware architecture, these switches fully combine the high performance, high security, multi-service, and easy availability required in network development and incorporate IPv6 features to provide users with brand new technical features and solutions.

Based on the actual network operation environment, the RG-S2600G-I series switches adopt strict and flexible control over network users by supporting Web and 802.1x authentications at the same time. This effectively avoids illegal users from obtaining network resources and fully guarantees the entry of legal users. By determining attack packets, restricting their rates, and even isolating them, the RG-S2600G-I switches can easily handle attacks and keep themselves stable. In this manner, the stability of the entire network is ensured and applications can be continuously deployed on the network to deliver sustained values.

RG-S2600G-I series switch can provide complete end-to-end QoS for various types of network accesses, support flexible and diversified security policies and policy-based network management. They are the ideal access devices for applications on campus networks, administrative networks, and corporate networks and provide users with high-speed new access solutions in an efficient, secure and intelligent manner.

RG-S2600G-I series switches enable convenient network management and maintenance by offering flexible configuration modes including SNMP, Telnet, Web and Console, and provide flexible and perfect port combinations to facilitate users to select desired uplink interface modes based on cabling requirements.

3 Product Features

Flexible and Complete Security Control Policies

- Adopt several internal security mechanisms to effectively avoid and control virus spreading and network traffic attacks. In this manner, the switches can prevent illegal users from using the network and meanwhile, guarantee the rational utilization of networks by legal users. The mechanisms include the static and dynamic security binding of ports, port isolation, various hardware ACL controls, bandwidth rate restriction based on data streams, and binding multiple of information in user access control. In this manner, the switches meet the requirements of corporate and campus networks to strengthen the control on visitors and communication restriction of unauthorized users.
- Isolate the users' communication information from each other by setting ports to protected ports to ensure information security without occupying VLAN resources
- Effectively curb the ARP gateway spoofing and ARP host spoofing that become increasingly rampant on the network by adopting the dedicated hardware-based anti-ARP spoofing function and ensure normal network access
- Permit the DHCP response of only the trusted ports by leveraging the DHCP snooping feature to prevent unauthorized setup of the DHCP Servers from disturbing the IP address allocation and management and impacting normal network use. Furthermore, underpinned by the powerful DHCP snooping, the The RG-S2600G-I series switches can effectively prevent ARP host spoofing and source IP address spoofing in cases where DHCP provides dynamic IP address assignment by dynamically monitoring ARP and checking source IP addresses.
- Web and Telnet access control based on the source IP address prevents illegal personnel and hackers from attacking and controlling devices to strengthen the security of devices.
- Encrypting management information in the process of Telnet and SNMP by using Secure Shell (SSH) and SNMPv3 ensures the security of management information and prevents hackers from launching attacks and controlling devices and protect the network against interference and sniffing.
- With multiple inherent security mechanisms including the static and dynamic port binding, port isolation, multiple types of hardware ACL (for example, expert-level ACL, time-based ACL), traffic-based bandwidth rate limiting, and multi-element binding of user secure access control, the RG-S2600G-I series switches prevent virus spreading and network traffic attacks and controls unauthorized network use.

High Reliability

- The Network Foundation Protection Policy (NFPP) classifies packets (management, forwarding, and protocol), restricts their rates, and monitors their attacks to support double protection of the CPU and channel bandwidth against

attacks. In this manner, the switches can ensure the normal forwarding of packets and the normal status of protocols, keeping network stability.

- The spanning tree protocols 802.1D, 802.1w, and 802.1s support rapid convergence, enhance fault tolerance capability, and ensure the normal operation of networks and load balancing of links that properly utilize network channels and provide redundant links. The PortFast function greatly shortens the standard convergence time of spanning tree protocols which ranges from 30 to 50 seconds. The BPDU guard function avoids loops in the spanning tree protocols.

Multi-Service Support

- With more and more services on the network, bandwidth guarantee becomes increasingly important. To avoid non-emergent services from occupying the bandwidth of emergent services, the RG-S2600G-I adopts complete QoS mechanisms to deploy multiple services.
- Support QoS policies of 802.1P, DSCP, IP TOS, and flow filtering at Layers 2 through 7 and provide traffic classification and flow control for MAC, IP, and application streams. The switches also support flow policies based on bandwidth control and forwarding priorities and allow networks to provide different qualities of services for different applications as required.
- Support IPv6-based QoS guarantee. The switches can identify different applications in the IPv6 environment and provide different qualities of services to ensure the bandwidth of key services.
- Each port supports the outgoing queues of eight priorities. This allows network administrators to allocate bandwidth to applications in a fine manner and better ensures the deployment of services. The switches support SP, WRR, and DRR mechanisms to determine the sequence to handle packets. For example, SP ensures the preferred transmission of services in a certain queue whereas WRR grants equal opportunity to the services in all queues.
- Support the flexible bandwidth control based on the combinations of switch ports, MAC addresses, IP addresses, VLAN IDs, protocols, and applications. The rate restriction granularity reaches 64 kbps. Based on network security requirements, you can set the bandwidth for different service applications as required.

Convenient and Easy Utilization and Management

- Adopt flexible Gigabit RJ-45 interfaces and Gigabit fiber port . You can choose connection methods based on the network architecture.
- Support the mixed stacking of devices. The stacking allows unified management and utilization of devices, decreases the management cost, and meanwhile, supports the flexible combination and extension of ports to seamlessly expand capacities. In this manner, the network is highly flexible and scalable and the network management becomes simpler.
- Support synchronous monitoring on several ports. You can use one port to monitor the data streams of several ports at the same time. You can also monitor only the incoming frames, outgoing frames, or frames in both directions to enhance the maintenance efficiency.
- Support the network time protocol (NTP) and simple network time protocol

(SNTP) to ensure the accuracy of time on the switches. The protocols also ensure the time consistency with servers on the network, facilitating the analysis and fault diagnosis of log and traffic information.

- The Syslog allows the unified collection, maintenance, analysis, fault location, and backup of various log information and makes easier for network administrators to maintain and manage networks.

Green Energy Conservation Design

- The S2628G-I series switches are designed with turbine variable-speed fans that automatically reduce their rotations at low-temperature reduce power consumption and noises.

4 Technical Parameters

Product	RG-S2628G-I	RG-S2652G-I
Technical Specification		
Product Description	24-Port 10/100Base-T, 2-Port 1000base-T, 2 GE Ports SFP(No-combo)	48-Port 10/100Base-T, 2-Port 1000base-T, 2 GE Ports SFP(No-combo)
Available Module	Single-port 1000BASE-SX mini GBIC conversion module (LC Interface) Single-port 1000BASE-LX mini GBIC conversion module (LC Interface) Single-port 1000BASE-LH mini GBIC conversion module (LC Interface), 40km Single-port 1000BASE-ZX mini GBIC conversion module (LC Interface), 50km Single-port 1000BASE-ZX mini GBIC conversion module (LC Interface), 80km Single-port 1000BASE-ZX mini GBIC conversion module (LC Interface), 100km	
Switching Capacity	32G	32G
Forwarding Rate	14.0Mpps	17.6Mpps
Layer-2 Features		
802.1Q VLAN	4K 802.1Q VLAN Protocol Based VLAN Private VLAN Voice VLAN Guest VLAN QinQ GVRP	
MAC	16K	
ACL	Standard IP ACL (IP-based hardware ACL) extended IP ACL (Hardware ACL based on the IP address and TCP/UDP port number) MAC extended ACL (Hardware ACL based on the source/destination MAC address and optional Ethernet type, time-based ACL) expert-level ACL (Hardware ACL based on the flexible combinations of VLAN number, Ethernet type, MAC address, IP address, TCP/UDP port number, protocol type and time)	
IPv6 ACL&QoS	Support hardware IPv6 ACL and QoS based on the source/destination IPv6 address and source/destination port.	
L2 protocol	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	
Layer-3 Features		

Product	RG-S2628G-I	RG-S2652G-I
Layer-3 Features	IPv4 static routing , IPv6 static routing	
IPv6 protocol	IPv6 host management related information	
Physical Features		
Management Features	SNMPv1/v2/v3, CLI(Telnet/Console), RMON(1, 2, 3, 9), SSH, Syslog, NTP/SNTP, Web	
Dimension (W*D*H)	440*200*44mm	440*260*44mm
Power	90-264V, 50-60Hz, 2A	
Power Consumption	17W	28W
Temperature	Working temperature: 0 to 45 °C Storage temperature: -40 to 70 °C	
Humidity	Working humidity: 10% to 90% RH Storage humidity: 5% to 90% RH	

5 Ordering Information

Model	Description
RG-S2628G-I	24-Port 10/100Base-T, 2-Port 1000base-T, 2 GE Ports SFP(No-combo)
RG-S2652G-I	48-Port 10/100Base-T, 2-Port 1000base-T, 2 GE Ports SFP(No-combo)
Mini-GBIC-SX	Single-port 1000BASE-SX mini GBIC conversion module (LC Interface)
Mini-GBIC-LX	Single-port 1000BASE-LX mini GBIC conversion module (LC Interface)
Mini-GBIC-LH40	Single-port 1000BASE-LH mini GBIC conversion module (LC Interface), 40km
Mini-GBIC-ZX50	Single-port 1000BASE-ZX mini GBIC conversion module (LC Interface), 50km
Mini-GBIC-ZX80	Single-port 1000BASE-ZX mini GBIC conversion module (LC Interface), 80km
Mini-GBIC-ZX100	1000BASE-ZX mini GBIC conversion module, 100km

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