RGM
SYSTEMS

24-Port Gigabit Layer 2 Managed Switch with 12 Gigabit Ports
SRGM5700-12G-12F

- ✓ 12 10/100/1000Mbps RJ45 ports
- ✓ 12 Gigabit SFP
- ✓ 1 Console

- Supports: Management of Apollo cloud, port management, link aggregation, spanning tree, loop protection, multicast, and attack defense.

The SRGM5700-12G-12F is a full Gigabit Layer 2 managed switch designed to meet the needs of high-performance full Gigabit networking. It uses a new generation of high-performance hardware and software platforms to provide 12 Gigabit RJ45 ports and 12 Gigabit fiber interface groups.

The network is more flexible, supports a complete security protection mechanism, a complete ACL/QoS policy, and a rich VLAN function. It is easy to manage and maintain, and meets the user's easy-to-manage, high-security, low-cost networking requirements for network devices. It is suitable for campuses and hotels. And enterprise campus network access, aggregation, core multiple application scenarios. Support the management of Apollo cloud.

Product Introduction

- 12 10/100/1000Mbps RJ45 ports
- 12 Gigabit SFP
- 1 Console
- Support port management, link aggregation, spanning tree, loop protection, multicast, and attack defense

Support APOLLO Visual Cloud Management Operation and Maintenance-"139" mode

- 1: The equipment is centralized on one platform, namely the APOLLO platform, which manages operations and maintenance in a unified manner.
- 3: The device can be managed, operated, and maintained in three ways: mobile, PC, and local.
- 9: APOLLO platform can realize 9 core technical service sections——cloud topology, resource visualization, risk early warning, prevention before they occur, AI blessing intelligent scheduling, business analysis and decision-making support, real-world map, fast fault location, cloud Operation and maintenance, configuration, upgrade batch processing, multi-user, multi-dimensional authority, hierarchical management and control, open interfaces, and customer service import.

Powerful Multi-Service Processing Capabilities

- Supports IEEE 802.1Q VLANs, MAC VLANs, IP VLANs, and voice VLANs. You can flexibly assign VLANs according to different requirements.

– Supports GVRP to implement dynamic VLAN distribution, registration, and attribute propagation. This reduces manual configuration and ensures correct configuration.

– Supports the VLAN VPN function. The public network access device encapsulates the outer VLAN tag for the private network packets of the user, so that the packets carry two VLAN tags across the public network.

– Support QoS, support port-based, 802.1P-based and DSCP-based three priority modes and WFQ, SP, WRR, SP+WRR four queue scheduling algorithms.

– Supports ACLs by configuring matching rules, processing operations, and time permissions to filter packets and provide flexible security access control policies.

– Supports IGMP V1/V2 multicast protocol and supports IGMP Snooping to meet the requirements of multi-terminal HD video surveillance and video conference access.

– Support hardware watchdog, the device has a suspended animation state and automatically restarts to resume normal working state.

– Support IPV6 Ping, IPv6 Tracert, IPv6 Telnet IPV6 SSH IPv6 SSL.

Complete Security Protection Mechanism

– Supports IP address, MAC address, and port ternary binding to filter packets.

– Supports ARP protection, and protects against ARP spoofing and ARP flood attacks, such as gateway spoofing and man-in-the-middle attacks.

– Support IP source protection to prevent illegal address spoofing including MAC spoofing, IP spoofing, and MAC/IP spoofing.

– Supports DoS protection and supports attacks such as Land Attack, Scan SYNFIN, Xmascan, and Ping Flooding.

– Supports 802.1X authentication, provides authentication functions for LAN computers, and controls the authorization status of controlled ports based on the authentication results.

– Supports port security. When the port learns the maximum number of MAC addresses, it stops learning to prevent MAC address attacks and control port network traffic.

– Support DHCP Snooping to effectively prevent private DHCP servers and ensure the legality of the DHCP server.

Various Reliability Protection

– Support loop protection, automatically detect switch loop status, and block loop ports.

– Supports the STP/RSTP/MSTP spanning tree protocol to eliminate Layer 2 loops and implement link backup.

– Supports spanning tree security to prevent devices in the spanning tree network from being subjected to various forms of malicious attacks.

– Supports static aggregation and dynamic aggregation, which effectively increases link bandwidth, implements load balancing, link backup, and improves link reliability.

Easy Operation And Maintenance

– Supports various management and maintenance methods such as Web network management, CLI command line (Console, Telnet), and SNMP (V1/V2/V3).

– Supports encryption methods such as HTTPS, SSL V3, and SSHV1/V2 for more secure management.

– Support RMON, system log, and port traffic statistics for network optimization and transformation.

– Supports cable detection, ping detection, and Tracert detection operations to easily analyze failed network

nodes.

– Support LLDP to facilitate the network management system to query and judge the communication status of the link.

– Supports CPU monitoring, memory monitoring, ping detection, Tracert detection, and cable detection.

HARDWARE TECHNICAL SPECIFICATION	
Switch	**PSRGM2010G**
Network Standard	IEEE 802.3i IEEE 802.3u IEEE 802.3x IEEE 802.3ab IEEE 802.3z
Port	12 10/100/1000Mbps RJ45 port 12 gigabit SFP 1 Console
PoE	24个10/100/1000Mbps RJ45 port Support PoE + max 250W Single port max 46W
LEDs	24 Link/Act LEDs 1 SYS LED 1 Power LED
Performance	Forwarding mode: store and forward Bandwidth：48Gbps Packet forwarding rate：38.68Mpps 8K MAC address table
Lightning Protection	6KV
Input power	100-240V/50-60Hz
Environmental	Operating Temperature：0°~40°C Storage Temperature：-40~70°C Operating Humidity: 10%~90%, non-condensing Storage Humidity: 5%~95%, non-condensing
Dimensions	Size (LxWxH)：440mm×180mm×44mm

SOFTWARE TECHNICAL SPECIFICATION	
Switch	**PSRGM2010G**
Protocol Standard	IEEE 802.3: Ethernet Media Access Control (MAC) Protocol IEEE 802.3: Ethernet Media Access Control (MAC) Protocol IEEE 802.3u:100BASE-TX Fast Ethernet IEEE 802.3ab:1000BASE-T Gigabit Ethernet IEEE 802.3z:1000BASE-X Gigabit Ethernet (fiber) IEEE 802.3ad: Standard method for performing link aggregation IEEE 802.3x: flow control IEEE 802.1p: LAN Layer 2 Qos/Cos protocol for traffic priority (multicast filtering) IEEE 802.1q: VLAN IEEE 802.1d: STP Spanning tree IEEE 802.1s: MSTP Spanning tree IEEE 802.1w: RSTP Spanning tree
DHCP	Support DHCP Snooping
VLAN	Support 4K VLAN Support 802.1Q VLAN、MAC VLAN, IP VLAN Voice VLAN
MAC Address Table	Comply the IEEE 802.1d standard Support Support MAC address learning and aging automatically Static, dynamic, filter address table
Safety	Password protection

	Support based on the port number, IP address, MAC address restrictions on user access
	Support HTTPS、SSL V3、TLS V1、SSH V1/V2
	Support IP-MAC-PORT ternary binding
	Support ARP protection, IP source protection, DoS protection
	Support DHCP Snooping、DHCP attack protection
	Support 802.1X certificated、AAA
	Support port security, port isolation
	Support CPU protection
POE Management	Support POE power limit
	Support POE chip status view
	Support setting PoE port priority
	Support setting PoE power supply time period
Access Control (ACL)	Support L2 (Layer 2) ~ L4 (Layer 4) packet filtering
	Support port mirroring, port redirection, flow rate limiting, QoS re-marking
Quality of Service (QoS)	Support 8 port queue
	Support port priority, 802.1p priority, DSCP priority
	Support SP、RR、WRR、WFQ Priority scheduling algorithm
Spanning Tree	Support SP、RR、WRR、WFQ Priority scheduling algorithmSupport loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering
Multicast	Support IGMP v1/v2 Snooping
	Support fast leave mechanism
	Support multicast VLAN
	Supports multicast filtering, packet statistics, and unknown multicast discards.
Dimensions	Size (LxWxH)：440mm×180mm×44mm
Storm suppression	Support multicast suppression
	Support broadcast suppression
	Support unknown unicast suppression
Link aggregation	Support static aggregation
	Support dynamic aggregation
	Support IP, MAC, and hybrid load balancing modes
	Supports up to 32 aggregation groups
IPv6	Support IPv6 Ping、IPv6 Tracert、IPv6 Telnet Support IPv6 SSH 、IPv6 SSL
Management and Maintenance	Support WEB network management (HTTP, HTTPS, SSL V3)
	Support CLI (Telnet, SSH V1/V2, local serial port)
	Support SNMP V1/V2/V3
	Support LLDP、RMON
	Support ARP protection, IP source protection, DoS protection
	Support CPU monitoring, memory monitoring
	Support system log, grading warning
	Support Ping, Tracert detection, cable detection