

24 Port Gigabit Layer2 Managed Switch S5700-12G-12F

Product brochure

Shenzhen Fengrunda Technology Co., Ltd



Product introduction

S5700-12G-12F is a full-gigabit Layer 2 managed switch specially designed for building high-performance full-gigabit networks. The product adopts a new generation of high-performance hardware and software platforms to provide flexible and cost-effective full-gigabit RJ45 ports. It integrates with SFP ports, supports Layer 2 management functions, has a complete security protection mechanism, complete ACL/QoS policies and rich VLAN functions, which are easy to manage and maintain, and meet users' requirements for easy management, high security, and low cost of network equipment. Network requirements, suitable for campus, hotel and enterprise campus network access, aggregation, core multiple application scenarios.





Main features

Port 6KV lightning protection

• All ports support 6KV lightning protection

Powerful business processing capabilities

- Support 802.1Q VLAN, MAC VLAN, IP VLAN, users can flexibly divide VLAN as needed.
- Support QoS, 8 port queues, support port priority, 802.1P priority, DSCP priority, support SP, WRR, SP+WRR, WFQ priority scheduling algorithm.
- Support ACL, support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function, provide flexible and secure access control policy.
- Support IGMP v1/v2/v3 Snooping, MLD v1/v2 Snooping, to meet the requirements of multi-terminal HD video surveillance or video conference.
- Supports the fast leave mechanism and querier of Layer 2 multicast, supports Layer 2 IPv4 static multicast and Layer 2 IPv6 static multicast.

Perfect security mechanism

- Complete security authentication mechanism: It supports IEEE 802.1x, Radius, Tacacs+, etc., and can provide users with a complete security authentication mechanism.
- The perfect loop detection mechanism can ensure the stable operation of the network for a long time.
- Provide port isolation in the same VLAN, and security features such as DHCP-Snooping, IP+MAC+port binding, etc., to further ensure user data security.
- Support ARP protection, IP source protection, DoS protection.
- Support to restrict user access based on port number. IP address, and MAC address.

Diverse reliability protection

- Support STP (IEEE 802.1d), RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s) protocols to eliminate Layer 2 loops and implement link backup.
- Supports loop protection, root bridge protection, TC protection, BPDU protection, and BPDU filtering.
- · Support 50ms switching of optical ports.

Flexible and convenient management and maintenance

- Support various management methods such as Console, Telnet, and SSH.
- Support WEB management (HTTP, HTTPS, SSL V3), which is simpler and more efficient, and is convenient for users to install and debug.
- Support file upload and download management in TFTP mode.
- Support SNMP V1/V2/V3 to facilitate device management through the network management platform.
- Support one-stop management and maintenance of Fengrunda Apollo cloud platform, which can realize all-round remote operation and maintenance such as automatic device discovery, network topology management, and remote configuration management of devices.



Product Specifications

Hardware Specifications	
Network Interface	• 12 10/100/1000Mbps RJ45 Port
	• 12 Gigabit SFP Port
	• 1 Console Port
Network protocol standard	● IEEE 802.3、IEEE 802.3i、IEEE 802.3u、IEEE 802.3ab、 IEEE 802.3z、IEEE 802.3ad、IEEE 802.3x、IEEE 802.1p、 IEEE 802.1q、IEEE 802.1d、IEEE 802.1s、IEEE 802.1w
Performance Specifications	Backplane bandwidth : 48Gbps
	• Packet forwarding rate : 35.7Mpps
	MAC address table : 8K
	● Port cache : 4.1Mb
	Forwarding Mode: Store and Forward
LED indicator	• 24 Link/Act indicators
	• 1 Power indicator
	• 1 SYS indicator
Power support	● Input power: AC 100-240V/50-60Hz
Physical Specifications	• Dimensions (LxWxH) : 440mm×180mm×44mm
	Working temperature : 0°C~40°C
Environmental	● Storage temperature : -40°C∽70°C
Specifications	●Working humidity: 10%~90% RH non-condensing
	• Storage humidity: 5%~90% RH non-condensing
Safety regulations	CE/ROHS/FCC



Software Specifications		
	IEEE 802.3:Ethernet Media Access Control (MAC) Protocol	
	IEEE 802.3i:10BASE-T Ethernet	
	IEEE 802.3u:100BASE-TX Fast Ethernet	
	IEEE 802.3ab:1000BASE-T Gigabit Ethernet	
	IEEE 802.3z:1000BASE-X Gigabit Ethernet (optical)	
	IEEE 802.3ad: Standard way to perform link aggregation	
	IEEE 802.3x: flow control	
	IEEE 802.1p:LAN Layer 2 QoS/Cos protocol for traffic prioritization (multicast filtering function)	
	IEEE 802.1q:VLAN Bridge operation	
	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	Follow IEEE 802.1d standard	
	Support MAC address automatic learning and aging	
	Support static, dynamic, filtering address table	
Safety features	Password protection	
	Support to restrict user access based on port number, IP address, MAC address	
	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 authentication, AAA	
	Support port security and port isolation	
	Support CPU protection function	



Software Specifications		
Software Specifica		
Access control (ACL)	Support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function	
	Support port mirroring, flow rate limiting, QoS remarking	
Quality of service (QoS)	Supports 8 port queues	
	Support port priority, 802.1P priority, DSCP priority	
	Support SP, WRR, SP+WRR, WFQ priority scheduling algorithm	
Spanning tree	Support STP (IEEE 802.1d), RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s) protocols	
	Support loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering	
Multicast	Support IGMP v1/v2 Snooping	
	Support multicast VLAN	
	Support multicast filtering, packet statistics, unknown multicast discard	
Storm suppression	Support multicast suppression	
	Support broadcast suppression	
	Support unknown unicast suppression	
Link aggregation	Support static aggregation	
	Support dynamic aggregation	
	Support based on IP, MAC, mixed load balancing mode	
	A maximum of 32 aggregation groups are supported	
IPv6	Support IPv6 Ping、IPv6 Tracert、IPv6 Telnet	
	Support IPv6 SSH 、IPv6 SSL	
Management and maintenance	Support WEB 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, graded warning	
	Support Ping, Tracert detection, cable detection	



Networking application

