

10G Uplink 48-Port Gigabit L3 Managed Switch S5700-48G-4TF

Product Brochure

Shenzhen Fengrunda Technology Co., Ltd

Product introduction

S5700-48G-4TF layer3 management switch is designed for small and medium-sized enterprises (SMEs), large enterprises and Internet service providers (ISPs). They have high performance, flexibility and advanced software functions, which can achieve the maximum return on investment S5700-48G-4TF has 48 gigabit RJ45 port and 4 10 GbE SFP +port, advanced security functions and advanced quality of service (QoS), which can be used as core, distribution or access layer switches. With high port density, switch stacking and ease of management, it is an ideal choice for various commercial network applications.



Main features

Port 6kV lightning protection, dual power redundancy design

- the full port supports 6kV lightning protection.
- dual power redundancy design supports seamless switching in case of failure without manual intervention.

Advanced hardware architecture design, powerful processing capability

- On the 1U rack switch, the high port density of 48 Gigabit +4 10 Gigabit switch with high-performance ARM A55 CPU to meet the application
- requirements of various complex scenarios and greatly improve the network data processing speed.

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.
- Support RIP dynamic routing protocol, solve the routing problem after the small and medium-sized network is divided into subnets, and simplify the network configuration.
- Support static routing protocol, and manually configure routing entries to realize communication between different network segments.
- Support ARP configuration, so that hosts in different physical networks on the same network segment can communicate normally.



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

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

- Supports various management methods such as Console, Telnet, and SSH.
- Support WEB network management (HTTP, HTTPS, SSL V3), which is simpler and more efficient, and is convenient for users to install and debug.
- Supports 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.

Specifications

Hardware Specifications		
Network Interface	 48 10/100/1000Mbps RJ45 port 4 10G DFP+ fiber port 1 Console port 	
Network protocol	• 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	 bandwidth : 176Gbps Packet forwarding rate: 130.9Mpps MAC address: 16K port cache: 12Mb Forwarding mode: store and forward 	
LED indicator	 52 1000M Link/Act indicator 48 10/100M网口 Link/Act indicator 1 Power indicator 1 SYS indicator 	
Power	Input: AC 100-240V/50-60HzDual power redundant input	
Dimensions (LxWxH):	• 440mm×320mm×44mm	
Environmental Specifications	 Operating temperature: 0°C~40°C Storage temperature: -40°C ~70°C Working humidity: 10%~ 90% RH non condensing Storage humidity: 5% ~90% RH non condensing 	
Safety regulations	• CE/ROHS/FCC	

Software Specifications		
Protocol standard	IEEE 802.3:Ethernet media access control (MAC)	
	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 fiber)	
	IEEE 802.3ad:standard method of link aggregation	
	IEEE 802.3x:flow control	
	IEEE 802.1p:LAN layer 2 qos/cos protocol related to traffic priority (multicast filtering function)	
	IEEE 802.1q:VLANBridge operation	
	IEEE 802.1d:STP Spanning tree	
	IEEE 802.1s:MSTP Spanning tree	
	IEEE 802.1w:RSTP Spanning tree	
Layer3 interface	Support Layer3 interface	
	Support IPv4 and IPv6 address configuration	
	Support ARP configuration	
	Support ND configuration	
Layer 3 routing	Support IPv4 static routing	
	Support IPv4 dynamic routing RIP v1/v2	
	Support IPv4 dynamic routing OSPFv2	
	Support IPv6 static routing	
	Support IPv6 dynamic routing RIPng	
	Support IPv6 dynamic routing OSPFv3	

Software Spe	Software Specifications		
VLAN	Support 4K VLAN		
	Support 802.1Q VLAN、MAC VLAN ,IP VLAN,Voice VLAN		
DHCP	Support DHCP server		
	Support DHCP relay		
	Support DHCP Snooping		
MAC address table	Comply IEEE 802.1d standard		
	Support MAC address automatic learning and aging		
	Support static, dynamic and filtered address tables		
Safety features	Password protection		
	Support restricting user access based on port number, IP address and MAC address		
	Support HTTPS、SSL V3、TLS V1、SSH V1/V2		
	SupportIP-MAC-PORT ternary binding		
	Support ARP protection, IP source protection, DOS protection		
	SupportDHCP Snooping、DHCP Attack protection		
	Support802.1X certification、AAA		
	Support Port security, port isolation		
	SupportCPU Protection function		
Access	SupportL2(Layer 2) ~ L4(Layer 4) packet filtering function		
control(ACL)	Support Port mirroring, flow speed restriction, QoS re marking		
QoS	Support 8 port queues		
	Support port priority, 802.1p priority, DSCP priority		
	SupportSP、WRR、SP+WRR、WFQ priority scheduling		
Spanning tree	SupportSTP(IEEE 802.1d),RSTP(IEEE 802.1w) and MSTP(IEEE 802.1s) standard		
	Support Loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering		
	Support optical port 50ms switching		

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Software Spe	Software Specifications		
Multicast	Support IGMP v1/v2/v3 Snooping		
	Support MLD v1/v2 Snooping		
	Support Fast leave mechanism and querier of layer 2 multicast		
	Support Layer 2 IPv4 static multicast		
	Support Layer 2 IPv6 static multicast		
	Support IGMP v1/v2/v3 layer 3 multicast		
Storm suppression	Support Multicast suppression		
	Support Broadcast suppression		
	Support Unknown unicast suppression		
Link convergence	Support Static convergence		
	Support Dynamic convergence		
	Support based on IP, MAC and mixed load balancing mode		
	Support 32 aggregation groups at most		
IPv6	SupportIPv6 Ping、IPv6 Tracert、IPv6 Telnet		
	Support IPv6 SSH 、 IPv6 SSL		
	Support WEB management (HTTP、HTTPS、SSL V3)		
Network managemen t	Support CLI (Telnet、SSH V1/V2、local serial port)		
	Support SNMP V1/V2/V3		
	Support RMON V1/V2		
	Support LLDP device discovery		
	Support NTP time synchronization		
	Support DNS Client		
	Support CPU Monitoring, memory monitoring		
	Support System log, classification warning		
	Support Ping、Tracert Detection, cable detection		
	Support Apollo cloud platform one-stop management and maintenance		



Networking application

