

10G uplink 24 Port Gigabit Layer 3 Managed Switch S5700-24F-8G-4TF

Product brochure

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Product introduction:

The S5700-24F-8G-4TF Layer 3 Managed Switch is designed for Small and Medium Enterprises (SMEs), Large Enterprises and Internet Service Providers (ISPs). They offer high performance, flexibility, fault tolerance and advanced software features for maximum return on investment. The S5700-24F-8G-4TF switch features Gigabit Ethernet RJ45 and SFP ports, 10 GbE SFP+ ports, advanced security features and advanced Quality of Service (QoS) and can be used as a core, distribution or access layer switch with high port Density, switch stacking and ease of management, ideal for a variety of commercial networking applications.





Main features:

Port 6KV lightning protection, dual power redundant design

- All ports support 6KV lightning protection.
- Dual power redundant design, support seamless switchover in case of failure without manual intervention.

Advanced hardware architecture design, powerful processing capability

• Using high-performance switching chips, it can meet the application requirements of various complex scenarios and greatly improve the network data processing rate.

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 proxy ARP, 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 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.
- Support 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	• 8 10/100/1000Mbps RJ45 Port (Combo)	
	• 4 10G SFP+ Port	
	• 24 Gigabit SFP Port	
	• 1 RJ45 Console Port , 1 10/100Mbps RJ45 managed Port	
	• 1 USB 2.0 interface,1 Mini-usb 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 : 128Gbps	
	Packet forwarding rate : 95.2Mpps	
	MAC address table : 16K	
	Port cache : 12Mb	
	Forwarding Mode: Store and Forward	
	• 28 1000M Link/Act indicators	
LED indicator	● 24 10/100M网口 Link/Act indicators	
LLD IIIdicator	• 1 Power indicator	
	• 1 SYS indicator	
Power support	● Input power: AC 100-240V/50-60Hz	
Tower support	Dual power redundant input	
Physical Specifications	• Dimensions (LxWxH) : 440mm×320mm×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 Sp	pecifications
Network protocol standard	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
Layer 3 interface	Support Layer 3 interface
	Support IPv4, 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 Specifica	tions
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	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
Access control	Support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function
(ACL)	Support port mirroring, flow rate limiting, QoS remarking
	Supports 8 port queues
Quality of service	Support port priority, 802.1P priority, DSCP priority
(QoS)	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
	Support optical port 50ms switching



Software Specificat	ions
Multicast	Support IGMP v1/v2/v3 Snooping
	Support MLD v1/v2 Snooping
	Fast leave mechanism and querier supporting 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 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
	Support WEB management (HTTP、HTTPS、SSL V3)
	Support CLI (Telnet、SSH V1/V2、Local serial port)
Management and maintenance	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, graded warning
	Support Ping, Tracert detection, cable detection
	Support Apollo cloud platform one-stop management and maintenance



Networking application

