24-Port Gigabit L3 Managed Ethernet Switch \$5700-24G-4TFR\$

Product Brochure

Shenzhen Fengrunda Technology Co., Ltd

Product Introduction:

The S5700-24G-4TFR adopts a new generation of high-performance hardware and software platforms to provide flexible and cost-effective full gigabit access and 10G uplink ports, support Layer 3 routing protocols, complete security protection mechanisms, complete ACL/QoS policies and rich VLAN function, it is easy to manage and maintain, meets the user's networking requirements for easy management, high security and low cost of network equipment. It is suitable for campus, hotel and enterprise park network access, aggregation and core multiple applications.



Main Features:

Port 6KV lightning protection

• All ports support 6KV lightning protection

Advanced hardware architecture design, powerful processing capability

 Realtek high-performance switching chips are used to meet the application requirements of various complex scenarios, greatly improve the network data processing rate, and prevent data transmission from being stuck.

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 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

- 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 Specification:		
	• 24*10/100/1000Mbps RJ45 ports	
Network Interface	• 4*10G SFP+ ports	
	• 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	
	Bandwith: 128Gbps	
	Packet forwarding rate: 95.2Mpps	
Performance	MAC table size: 16K	
	Port buffer: 12Mb	
	Forwarding type: storage forwarding	
	28*Link/Act indicator	
LED Indicator	• 1*Power indicator	
	• 1*SYS indicator	
Power Supplier	• Power input: AC 100-240V/50-60Hz	
Dimension	• WxDxH: 440mm×320mm×44mm	
	Operating temperature: 0°C~40°C	
Evironment	Storage temperature: -40°C ∽ 70°C	
L A II O I II II G I I I	Operating humidity: 10%~ 90% RH non condensing	
	●Storage humidity: 5%∽90% RH non condensing	
Safty Regulations	CE/ROHS/FCC	



Software Spe	Software Specifications:		
Protocol Standards	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:VLAN Bridge operation		
	IEEE 802.1d:STP Spanning tree		
	IEEE 802.1s:MSTP Spanning tree		
	IEEE 802.1w:RSTP Spanning tree		
L3 Interface	Support L3 interface		
	Support IPV4,IPV6 addresses configuration		
	Support ARP configuration		
	Support ND configuration		
L3 Routing	Support IPV4 static routing		
	Support IPV4 RIP v1/v2		
	Support IPV4 OSPFv2		
	Support IPV6 static routing		
	Support IPV6 RIPng		
	Support IPV6 OSPFv3		



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 Table	Support IEEE 802.1d standard	
	Support MAC addresses automatic learning and aging	
	Support static, dynamic and filtered address tables	
	Password guard	
	Support restricting user access based on port number, IP address and MAC address	
	Support HTTPS,SSL V3,TLS V1,SSH V1/V2	
Security Features	Support IP-MAC-PORT ternary binding	
	Support ARP protection, IP source protection, DOS protection	
	Support DHCP Snooping,DHCP Attack protection	
	Support 802.1X certification,AAA	
	Support Port security, port isolation	
	Support CPU Protection function	
ACL	Support L2(Layer 2) ~ L4(Layer 4) packet filtering function	
	Support Port mirroring, flow speed restriction, QoS re marking	
QoS	Support 8 port queues	
	Support port priority, 802.1p priority, DSCP priority	
	Support SP,WRR,SP+WRR,WFQ priority scheduling	
STP	Support STP(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	



Software Spe	cifications:
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
	Support Static convergence
LACP	Support Dynamic convergence
	Support based on IP, MAC and mixed load balancing mode
	Support 32 aggregation groups at most
IPv6	Support IPv6 Ping,IPv6 Tracert,IPv6 Telnet
	Support IPv6 SSH,IPv6 SSL
Network management	Support WEB management (HTTP,HTTPS,SSL V3)
	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

