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10G Uplink L3 Managed PoE Switch

S5700-24GP-4TFR

Product Brochure

Product introduction

S5700-24GP-4TFR is a managed PoE switch specially designed for security transmission and WIFI coverage. It can meet the PoE power supply requirements of various types of devices such as WIFI AP, IP-camera, WIFI bridge, and IP phone. The product adopts a new generation of high-performance hardware and software platform, provides flexible and cost-effective full-gigabit access and uplink ports, supports Layer 3 routing protocols, complete security protection mechanisms, complete ACL/QoS policies and rich VLAN functions. It is easy to manage and maintain, meets users' 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 application scenarios.

Main features

Port 6KV lightning protection

• All ports support 6KV lightning protection, PSE short circuit protection, PoE overload protection, power supply over temperature protection, over voltage protection, surge current protection and other protection features.

AI smart button

• AI Extend: 1-8 ports support 250 meters long distance power supply (should be use cat5e or cat6 cable)

• AI VLAN: Isolating ports 1-24 to each other can effectively suppress network storms and improve network performance.

• AI QoS: Prioritize the identified video data for smoother video transmission.

• AI PoE: Automatically detect the power receiving port, find a dead device and restart the device after power off.

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.

Perfect POE power supply function

• Support 802.3af/at standard, built-in power supply, meet the needs of PoE scenarios such as security monitoring, wireless coverage and IP phone.
• Support PoE power limit and set PoE port priority. When the power exceeds the limit, the power will be given priority port.
• Support setting PoE power supply time period, users can control the time period of PoE power supply according to their own needs.
• Support PoE chip status check, users can view the PoE chip temperature, output power and other parameters in real time through the web page.

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	● 24 10/100/1000Mbps RJ45 port（POE） ● 4 10G SFP+ optical 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, IEEE 802.3af,IEEE 802.3at
Performance Specifications	● bandwidth：128Gbps ● Packet forwarding rate：95.2Mpps ● MAC addres：16K ● port cache：12Mb ● Forwarding mode: store and forward
LED indicator	● 28 Link/Act indicator ● 24 PoE indicator ● 1 Power indicator ● 1 SYS indicator
POE Pin	● 1/2（+），3/6（-）
Power	● Input：AC 100-240V/50-60Hz ● Single port max power: 30W ● The max power of the whole switch: 360W
Dimensions (LxWxH)	● 440mm×320mm×44mm
Environmental Specifications	● Operating temperature：0℃~40℃ ● Storage temperature：-40℃～70℃ ● Working humidity：10%~ 90% RH non condensing ● Storage humidity：5%～90% RH non condensing
Safety regulations	● CE/ROHS/FCC

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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:VLAN Bridge operation IEEE 802.1d:STP Spanning tree IEEE 802.1s:MSTP Spanning tree IEEE 802.1w:RSTP Spanning tree IEEE 802.3af&at
One-click shortcut function	AI VLAN AI Extend AI PoE AI QoS
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

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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
	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
PoE management	Support PoE power limit
	Support PoE chip status check
	Support setting PoE port priority
	Support setting PoE power supply time period
	Support intelligent power supply
Access control(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
Spanning tree	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

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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	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