ALTI-LINK

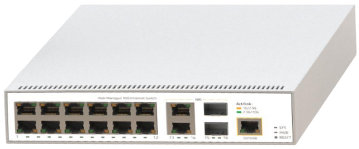
S5720 Series

Layer3 2.5G Managed Switch

Overview

The S5720 series switch is a layer3 2.5Gig Ethernet switch, which can meet the needs of cost-effective 2.5G access and 10 Gigabit uplink for enterprise networks and operator customers. S5720 uses a high-performance low-power network processor, provides Gigabit line-speed forwarding performance, supports green Ethernet line sleep capability, has the lowest power consumption of the same-level equipment in the industry, supports powerful QoS and ACL functions, and supports IP+MAC+ Security features such as port binding support service flow classification and packet priority marking. Support static data packet sampling, SFLOW function, support multi-port mirroring analysis function, support static and flexible QinQ function, support Ethernet OAM 802.3ag (CFM), 802.3ah (EFM), support strategy-based IPV4/6 unicast routing, support Flexible forwarding strategy.

Model Select



S5720-12M2H2X

- 12* 100/1000M/2.5G Base-T RJ45 port
- 2* 1G/2.5G/5G/10G Base-T RJ45 port
- 2*10G SFP+
- 280×260×44mm

S5720-30TX

- 24* 100/1000M/2.5G Base-T RJ45 port
- 6* 10G SFP+ port
- AC input: 100~240V,50/60Hz
- 19”1U (440X260X44mm)

S5720-30TXP

- 24* 100/1000M/2.5G Base-T PoE RJ45 port
- 6* 10G SFP+ port
- PoE budget: 400W (802.3af/at)
- AC input: 100~240V,50/60Hz
- 19”1U (440X260X44mm)

S5720-54QC

- 48* 100/1000M/2.5G Base-T RJ45 port
- 4*10G/25G SFP+
- 2*40G QSFP
- 880Gbps switching capacity
- AC input: 100~240V,47/63 Hz

Features

High density 2.5 Gigabit access

The switch supports high-density 2.5 Gigabit Ethernet ports, Providing targeted solutions for large scale 2.5G access point,2.5G PCIe card (PC & server) and NAS storage station etc access, simplifying the network structure and reducing network maintenance costs.

Carrier-level high availability

The switch not only supports the traditional STP/RSTP/MSTP spanning tree protocol, but also supports the G.8032 international standard ERPS protocol issued by ITU-T. This standard can realize 50ms fast loop recovery under Ethernet ring network. One switch can connect to multiple aggregation switches through multiple links, significantly improving the reliability of access devices.

Layer3 routing and enhanced multi-service

Support static route
Support dynamic route such as RIP, OSPF,BGP, IS-IS
Support IPV4/IPV6 dual protocol stack，Support RIPng、OSPFv3
Support DHCP Server and DHCP Relay,L2-Tunnel
Support Ethernet OAM protocol such as CFM、EFM

Uninterrupted PoE power supply

When the device restarts, the PoE switch will not interrupt the power supply to the connected camera, VoIP phone and other powered devices, ensuring that the powered device will not lose power during the restart of the switch, and achieve interruption of PoE supply.

Hardware based ACL control

The hardware based ACL processing mechanism is adopted to ensure the control requirements of Gigabit high-speed forwarding; it supports ACL access control from the second to the seventh layer, which can be based on the source and destination MAC addresses, source and destination IP addresses, UDP/TCP port numbers, and IP addresses. The protocol type and other information classify the data flow, and set the access control rules according to the data classification. You can set permit or deny, and then apply the rules to VLANs or physical ports; support the global ACL function, which expands the number of effective ACL entries, which is convenient The use and maintenance of customers.

Enhanced security and authentication technologies

Provides multiple security policies such as user authority/identity authentication, port security, port speed limit, port monitoring, address filtering, loopback detection, 802.1X authentication etc., to provide multiple protection mechanisms for user access and network security. It has a very good security function design, supports user security policy-based SNMP V3, MAC+IP+VLAN binding, 802.1X authentication and other security strategies, supports anti-
network storm attacks, anti-DOS/DDOS attacks, anti-ARP attacks, Security technologies such as anti-network protocol message

attacks can effectively prevent attacks and viruses, and are more suitable for large-scale, multi-service, and complex traffic access networks

Full QoS policy and Q-in-Q for campus or carrier network

The switch fully implements the DIFFSERV model, provides up to 8 QoS queues, supports DSCP/TOS/802.1P and other QoS methods, SP, SRR, WRR, WFQ and hybrid scheduling and other priority queue scheduling algorithms, which can achieve port speed limit QoS functions such as traffic shaping to meet customer network requirements for data processing priority; support port trust, configurable trust CoS, DSCP, IP priority, port priority, and modify the DSCP and CoS values of data packets; according to the port , VLAN, DSCP, IP priority, ACL table to classify the traffic, modify the DSCP and IP priority of the data packet, and specify different bandwidths to provide different service quality for voice/data/video transmission in the same network. Support QinQ function, encapsulate the user's private network VLAN tag in the public network VLAN tag, so that the message will pass through the backbone network with two layers of VLAN tag to realize the intercommunication of the user's private network.

Simple and easy-to-use network management function

Support CLI based on RS232 serial port, Telnet and SSHv2
Support WEB-based configure operation management, support SNMP V1/V2/V3
Support remote upgrade or equipment through FTP and TFTP

Specification

Model	S5720-12M2H2X	S5720-30TX	S5720-30TX-P	S5720-54QC
Ethernet Port	12*2.5GBase-T RJ45 2* 1G/2.5G/5G/10G RJ45	24*2.5GBase-T RJ45	24* 2.5GBase-T POE	48* 2.5GBase-T
Optic port	2*10G SFP+	6*10G SFP+	6*10G SFP+	4*10G SFP+, 2*40GQSFP
Chipset	Realtek9302	Realtek 9313	Realtek 9313	CTC7132
Switching capacity	140Gbps	240Gbps	240Gbps	880Gbps
forwarding rate	104Mbps	160Mbps	160Mbps	654Mbps
MAC	16K	32K	32K	16K
Multicast	1K	4K	4K	4K
ARP table	2K	8K	8K	8K
Routetable	6k	12k	12k	12k
PoE port	/	/	1~24 port (IEEE 802.3af/at)	/
PoE budget	/	/	400W	/
Memory/Memory	32MB/512MB	32MB/512MB	32MB/512MB	128M/1G
Power supply	AC: 100 ~ 240V	AC: 100 ~ 240V DC: 36V ~ 75V	AC: 100 ~ 240V	AC: 100 ~ 240V
Power consumption	≤30W	≤39W	≤450W	≤125W
Dimensions	280×260×44mm	440×260×44mm	440×260×44mm	440×320×44mm
Working Temperature:	0℃~ 45℃	0℃~ 45℃	0℃~ 45℃	0℃~ 45℃

Software

MAC address table	Supports manual addition and deletion of MAC address tables Supports port shutdown MAC address learning Support port MAC address number control Support port MAC address filtering function
VLAN	Supports 4K VLAN 802.1Q Supports VLANs based on ports, MACs and protocols Support Access/Trunk/Hybrid Support QinQ
Spanning tree	Support STP/RSTP/MSTP Supports remote loop detection
Ports	Supports bi-directional bandwidth control Supports static and LACP dynamic aggregation port aggregation Supports multi-port mirroring Supports port storm suppression Supports 12K Jumbo ultra-long frame forwarding
User security	Supports Anti-ARP-spoofing spoofing protection. Supports automatic suppression of Anti-ARP-flooding attacks. Supports IP Source Guard to automatically create IP+MAC+Port+VLAN binding tables. Supports Port Isolation hardware to isolate messages between ports. Supports MAC address binding to ports and port MAC address filtering Supports IEEE 802.1x and AAA/Radius for user authentication
Switch security	Support for SSHv2 Secure Shell Support SNMP v3 encryption management Supports Security IP's Telnet login and password mechanism.
Network security	Supports one-click binding based on dynamic ARP tables Supports manual binding of IP address, VLAN ID, MAC address and port parameters Supports L2-L7 ACL flow filtering Supports port broadcast/multicast message suppression and automatic shutdown of dangerous ports Supports DHCP Option82 and PPPoE+ tagging to upload user physical location information
ACL	Support for standard and extended ACLs Supports Time Range-based ACL policies. Provides flow classification and flow definition based on source/destination MAC address, VLAN, 802.1p, ToS, DiffServ, source/destination IP (IPv4/IPv6) address, TCP/UDP port number, protocol type and other IP message header information Supports 80-byte header filtering for IP messages from L2 to L7.
QoS	Supports COS/DSCP-based traffic classification Supports rate limiting of incoming and outgoing messages on ports or custom streams.

	Supports message mirroring and message redirection for ports or customized streams Supports priority marking of ports or customized streams, and provides Remark capability for 802.1P and DSCP priorities. Supports advanced queue scheduling based on ports or customized streams, supports 8 priority queues per port/stream, and provides various queue scheduling algorithms such as SP, WRR, SP+WRR, etc. Supports traffic supervision based on VLAN direction (in/out) Supports traffic supervision based on aggregated flow direction (inbound/outbound) Supports queue-based traffic shaping Supports port-based traffic shaping Supports SP strict priority scheduling Supports WRR (weighted round robin) scheduling Support SP + WRR hybrid scheduling Support for IPv4-v6 QoS (qc)
Multicast	Support for IGMPv1/v2/v3 Snooping Supports IGMP Filter multicast filtering Supports IGMP Fast leave fast leave multicast groups Support for IGMP Proxy
ARP	Supports ARP table entry aging Support for ARP Proxy
IPv4	Supports static IPv4 routes Ping, Traceroute are supported, VRRP support Support OSPF, RIP, PIM, BGP and other protocols Support ICMP redirect, ICMP unreachables
IPv6	Supports static IPv6 routing ICMPv6 support Support for Neighbor Discover
Loop protection	Supports enhanced Ethernet ring protocol Support Loopback-detection port loopback detection
Link protection	Supports FlexLink link backup Supports RSTP/MSTP link healing hardware acceleration capability Supports LACP dynamic link aggregation
Maintenance	Supports Telnet-based real-time port traffic, utilization, and incoming and outgoing packet statistics Supports LLDP neighbor device discovery protocol Supports Ethernet OAM 802.3ah EFM and 802.1ag CFM Support for data logging and RFC 3164 BSD syslog Protocol Ping and Traceroute support

Management	Supports Command Line Interface (CLI), Console port, Telnet, SSH and WEB configuration management Supports Virtual Cable Testing (VCT) Support SNMP V1/V2c/V3 management Support for SNTP protocol Support for hierarchical user rights Support user RADIUS remote authentication Support for user Tacacs+ remote authentication

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