S5710 Series

L3 Managed Ethernet Switch

Product Overview

The S5710 series switch is a layer 3 Ethernet switch, owns 10 gigabit uplink for enterprise networks and operator customers, which can also meet the needs of cost-effective gigabit access. This device uses a high-performance & low-power network processor, provides gigabit line-speed forwarding performance, supports green Ethernet line sleep capability, which has the lowest power consumption of the same-level equipment in the industry as well. Supports powerful QoS and ACL functions, IP+MAC+ Security features such as port binding support service flow classification and packet priority marking.

The product includes an elastic stacking function, which allows multiple devices to be virtualized into a single logical entity. This not only facilitates the expansion of ports and switching capacity but also enables unified management, upgrades, and maintenance across devices. It can also support static data packet sampling, SFLOW function, multi-port mirroring analysis function, static and flexible QinQ function, Ethernet OAM 802.3ag (CFM), 802.3ah (EFM), strategy-based IPV4/6 unicast routing, and Flexible forwarding strategy.

Product Interface



S5710-12TX

- 8* 10/100/1000M Base-T RJ45 port
- 4* SFP/10G SFP+ port
- AC input: 100~240V,50/60Hz
- DC： 40V～60V
- 11”1U (270*180*44mm)



S5710-28TX

- 24* 10/100/1000M Base-T RJ45 port
- 4* SFP/10G SFP+ port
- AC input: 100~240V,50/60Hz
- DC： 40V～60V
- 19”1U (440*210*44mm)



S5710-28TP

- 24* 10/100/1000M Base-T PoE RJ45 port
- 4* SFP/10G SFP+ port
- PoE budget: 400W (802.3af/at)
- AC input: 100~240V,50/60Hz
- DC： 40V～60V
- 19”1U (440*260*44mm)



S5710-54TX

- 48* 100/1000M Base-T RJ45 port
- 6* SFP/10G SFP+ port
- AC input: 100~240V,50/60Hz
- DC： 40V～60V
- 19”1U (440*290*44mm)

Key Features

Stacking Capabilities

- Support Stacking of 8 units through a single IP address
- Support Unified management
- Support Redundancy mechanism
- Support High speed interconnect

Equipment Stability

- Support IPv4/IPv6 dual protocol stack platform based on Linux operating system
- Support multiple link redundancy and network redundancy protocols such as STP / RSTP / MSTP / ERPS / LACP

QoS Capabilities

- Support port speed and flow speed limit function
- Support classification based on service flow and Qos flow control function
- Support queue scheduling algorithms such as SP/WRR/SP+WRR
- Support port-based and service flow-based mirroring functions

Multi-service Capabilities

- Support DHCP Server and DHCP Relay
- Support L2-Tunnel
- Support Ethernet OAM protocol such as CFM / EFM

Routing Protocol

- Support static route
- Support dynamic route such as RIP / OSPF / BGP / ISIS
- Support IPV4/IPV6 dual protocol stack
- Support RIPng / OSPFv3

Safety Mechanism

- Support ACL security filtering mechanism, which can provide security control based on MAC, IP, L4 port
- Support ARP attack automatic protection
- Support DHCP attack automatic protection based on MAC Address
- Support DHCP snooping / IP-source-Guard / 802.1X and other security features

- Support link protection functions such as BFD, Flex Link, LACP and ERRP
- Support remote loop detection function
- Support CFM、EFM
- Support remote user authentication based on TACACS+, Radius, and Local user authentication

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

Hardware Specifications

Attributes	S5710-12TX	S5710-28TX	S5710-28TP	S5710-54TX
Port	8*10/100/1000M/ Ethernet port 4 *10G SFP+	24*10/100/1000M/ Ethernet port 4 *10G SFP+	24*10/100/1000M/ Ethernet port/POE 4 *10G SFP+	48*10/100/1000M/ Ethernet port 6 *10G SFP+
Chipset	RTL9301			RTL9311
Switching Capacity	96Gbps	128Gbps		216Gbps
Forwarding Rate	71.43Mpps	95.24Mpps		160.71Mpps
MAC	16K			32K
Multicast	1K			4K
Packet Buffer	12Mbit			16Mbit
ARP Table	2K			8K
Routing Table	512			12K
PoE Budget	N/A	N/A	415W(af/at)	N/A
Memory and Storage	Memory: 512MB, Storage:32MB			
Power Supply	AC： 100～240V 50/60Hz； DC： 40V～60V；			
Power Consumption	Idle ≤10W Full load ≤20W	Idle ≤13W Full load ≤30W	Idle ≤15W Full load ≤450W	Idle ≤25W Full load ≤53W
Weight	1.6kg	2.6kg	4.2Kg	4.2kg
Dimensions (WxDxH)	270X180X44mm	440X210X44mm	440X260X44mm	440×290×44mm
Temperature	Working Temperature：-10℃～50℃； Storage Temperature：-40℃～70℃			
Humidity	Relative Humidity: 5%~95%, non-condensing			

Software Specifications

Attributes	S5710 Series
VLAN	Support 4K VLAN Support VLAN based on port, MAC and protocol Support dual Tag VLAN, port-based Static QinQ and Flexible QinQ Access/Trunk/Hybrid VLAN Swap
Ethernet	Ethernet interface operating modes Ethernet interface operating rates Jumbo Frame Port enable/disable Flow-control TX/RX Port based storm-control Unknow unicast/multicast/broadcast storm-control Port-isolate
Stack	Support Stacking of 8 units through a single IP address Support Unified management Support Redundancy mechanism Support High speed interconnect
MAC	Support static MAC address setting Support black hole MAC address filtering Support port MAC address limit Automatic learning and aging of MAC addresses
ARP	Static and dynamic ARP entries Aging of ARP entries ARP-Proxy
Port Control	Support two-way bandwidth control Support port storm suppression Support 9K Jumbo ultra-long frame forwarding
Port Aggregation	Support static link aggregation Support dynamic LACP Each aggregation group supports a maximum of 8 ports LAG load balance（SIP/DIP/SMAC/DMAC）

Mirroring	Supports multi-port mirroring analysis Service flow-based image analysis
ACL	Support standard and extended ACL Support ACL policy based on time period Provide MAC, IP, L4 port and port level security control functions
QoS	Traffic classification based on COS/DSCP (simple classification) Traffic classification based on ACL (complex classification) Traffic classification based on inner header of the tunnel packets Queue scheduling Remark the priority fields (COS/DSCP) of the packet based on ACL Flow redirection Flow mirror Traffic policing based on direction(in/out) of Port Traffic policing based on direction(in/out) of VLAN Traffic policing based on direction(in/out) of flow Traffic policing based on direction(in/out) of aggregated flow Queue based traffic shaping Port based traffic shaping SP（Strict Priority）scheduling WRR（Weighted Round Robin）scheduling SP + WRR mixed scheduling IPv4-v6 QoS
Safety	Support user hierarchical management and password protection Support IEEE 802.1X authentication Support Radius & TACACS+ authentication Support MAC address learning limit, support black hole MAC function Support port isolation Support broadcast message rate suppression Support IP Source Guard Support ARP flood suppression and ARP spoofing protection
Layer 3	Support ARP learning and aging Support IPv4/IPv6 static route Support dynamic route RIP/OSPF/BGP/ISIS Support IPv4/IPv6 dual-stack platform Support VRRP、CLI、Telnet、WEB、SNMP V1/V2/V3、SSHv2 mode
Terminal Services	Configurations through CLI

	Console Terminal service
Maintenance	Per-module Debug features ICMP Debug CPU usage display and alarm Memory usage display and alarm Device temperature、PSU、FAN、status display and alarm User operation logs Management of logs, alarms, and debugging information VCT（Virtual Cable Test） Detailed Diagnostic-information collection Manual /Schedule reboot Reboot Information logging Ping IPv6 Ping Trace route Port/Flow/Remote mirror Multi-destination mirror（m:n） To CPU/From CPU packets statistics Time configuration Timezone
System Security	SSHv1/v2 RADIUS TACACS+ Authentication Accounting Port based dot1x MAC based dot1x MAC/IP ACL Basic Mode ACL Port/VLAN/L4-Port ACL Time Range IP Source Guard Limitation on MAC address learning on interface Rate limit CPU Traffic Limit

	CLI/WEB/SNMP/Telnet/SSH filtering
Spanning-Tree	Rapid Spanning-Tree Protocol Multi-instance Spanning-Tree Protocol
Network Management	DHCP Server DHCP Relay DHCP Snooping DHCP Option60 DHCP Option82 SNTP（Simple Network Time Protocol） LLDP
Configuration Management	In-band management interface and configuration Privileged user priority and privileged commands Network management based on SNMPv1/v2c/v3 Public and private MIB Public and private Trap Configuration and management based on WEB Restore factory default configuration
File system	Upload and download files through FTP or TFTP Upload and download files through X modem
System Management	Support FTP, TFTP file upload and download Support SNTP Support system work log Support LLDP neighbor device discovery protocol Support 802.3ah Ethernet OAM Support RFC1213 SNMP network management Support PING and Tracert Supports configuration management based on WEB pages Support the whole machine power failure alarm function
Upgrade	Upgrade with the local image file Upgrade with the remote TFTP server Online upgrade U-boot

Purchase Info

Product Name	Product Description
S5710-12TX	8*10/100/1000M Base-T, 4*1000M Base-X SFP/10GE SFP+, Single Power, Fanless
S5710-28TX	24*10/100/1000M Base-T, 4*1000M Base-X SFP/10GE SFP+, Single Power, 1*FAN
S5710-28TP	24*10/100/1000M Base-T POE, 4*1000M Base-X SFP/10GE SFP+, Single Power, 3*FAN
S5710-54TX	48*10/100/1000M Base-T, 6*1000M Base-X SFP/10GE SFP+, Single Power，2*FAN