S5710 Series

L3 Managed Ethernet Switch

Product Overview

The S5710 series switch is a layer 3 Ethernet switch, owns 10 gigabit uplinks 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, strategy-based IPV4/6 unicast routing, and Flexible forwarding strategy.

Device Brief Information

	**S5710-12TX** · 8* 10/100/1000M Base-T RJ45 port · 4* SFP/10G SFP+ port · AC input: 100~240V,50/60Hz · 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 · 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 · 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

Carrier-level equipment stability

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

Stacking Capabilities

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

Perfect safety mechanism

- Support link protection functions FlexLink, LACP
- Support remote loop detection function
- Support remote user authentication based on Tacacs+, Radius, and Local user authentication

Powerful 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

Rich management protocols

- Support 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

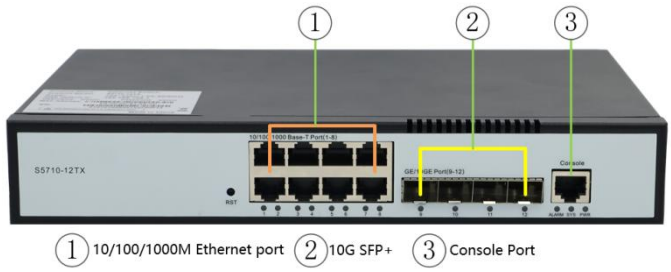
Hardware Specifications

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			

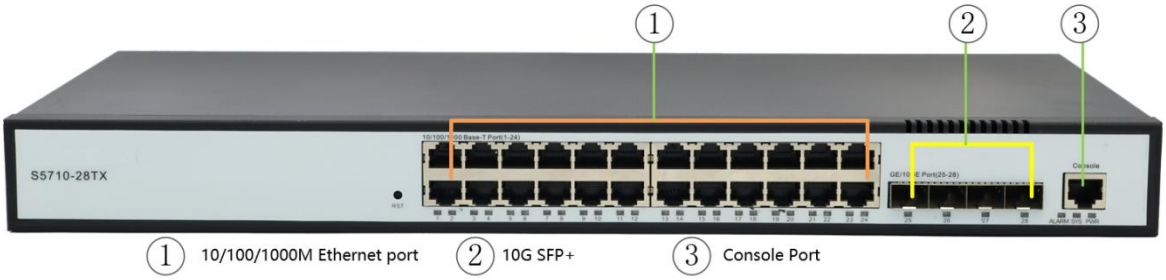
Power Supply	AC： 100～240V 50/60Hz；			
Power Consumption	Idle ≤10W Full load ≤20W	Idle ≤13W Full load ≤30W	Idle ≤15W Full load ≤450W	Idle ≤25W Full load ≤53W
Weight	1.6kg	2.6kg	4.2Kg	4.2kg
Dimensions (WxDxH)	270X180X44mm	440X210X44mm	440X260X44mm	440×290×44mm
Temperature	Working Temperature：-10℃～50℃； Storage Temperature：-40℃～70℃			
Humidity	Relative Humidity: 5%~95%, non-condensing			

Panel view

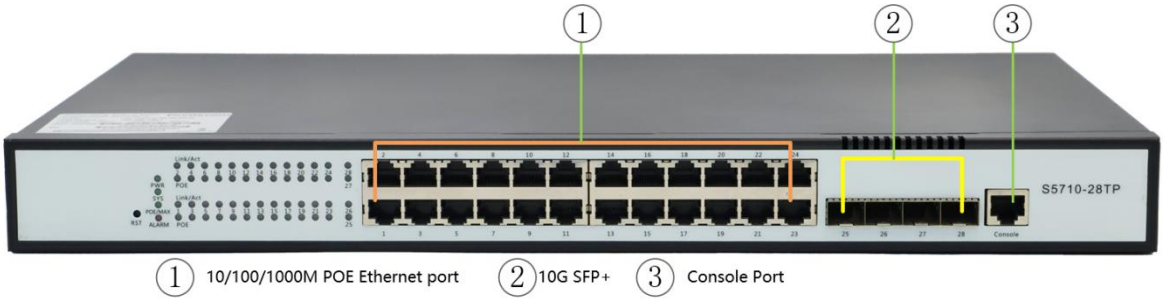
1）S5710-12TX



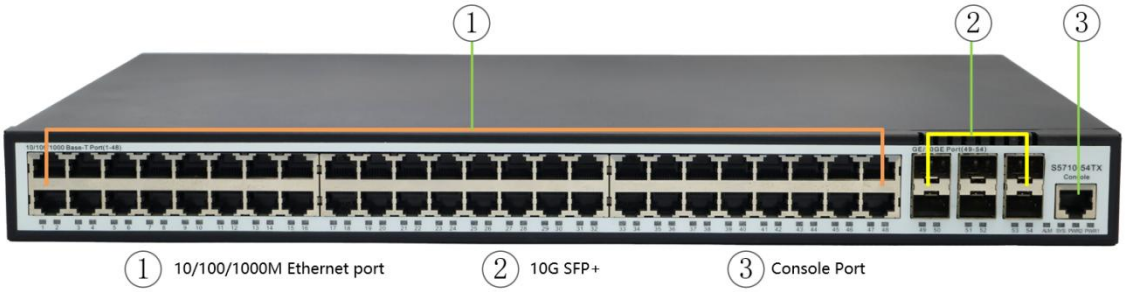
2）S5710-28TX



3）S5710-28TP



4）S5710-54TX



LED indicator

LEDs/Buttons	Color	Function	Description	
PWR	Green	Power status	ON	The AC power module is normal.
			OFF	The AC power module faulty or unavailable.
SYS	Green	System running status	Green OFF	The device is not running or power off.
			Green Flash	The device is running normally.
ALARM	RED	Hardware state	ON	The fan or power module is abnormal
			OFF	Components working properly.
POE MAX	Green	Power Threshold	ON	Maximum power supplied by POE.
			OFF	The POE power supply indicates the normal range.
GE/SFP Port	Green	Port status	ON/Flash	The link is properly connected (link up) and in action Works in Gigabit mode.
			OFF	The link is interrupted (link down).
	Orange		ON/Flash	The link is properly connected (link up) and in action Works in 10/100Mbps mode.
POE	Green	PD status	ON	The POE port is connected to the PD device and starts to supply power.
			OFF	No PD is connected to the device.

Plug-In Units

Power Supply Unit (PSU)

The S5710 series devices are equipped with a built-in AC power module and provide an AC power port on the back of the device.
The below shows the electrical characteristics of the switch:

Characteristic	S5710 Series
Nominal AC power supply	AC: 100 ~ 240V; 47/63Hz

FAN Unit

The fans of the device run according to the power of the device environment. A built-in fan group is installed on the side of the chassis. The fan group can be as follows:

Characteristic	FAN
S5710-12TX	0*FAN
S5710-28TX	1*FAN
S5710-28TP	3*FAN

S5710-54TX	2*FAN

Software Specifications

Attributes	S5710 Series
VLAN	Support 4K VLAN Support VLAN based on port, MAC and protocol Support dual Tag VLAN, Access/Trunk/Hybrid
Ethernet	Ethernet interface operating modes Ethernet interface operating rates Jumbo Frame Port enable/disable Port based storm-control Unknow-unicast/unknow-multicast/broadcast storm-control Port-isolate
Stackable	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 12K 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 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 SP（Strict Priority）scheduling WRR（Weighted Round Robin）scheduling SP + WRR mixed scheduling
Safety	Support Radius & TACACS+ authentication 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 IPv4static route Support dynamic route RIP/OSPF Support IPv4/IPv6 dual-stack platform Support CLI、Telnet、WEB、SNMP V1/V2/V3、SSHv2 mode
Terminal Services	Configurations through CLI Console Terminal service
Maintenance	Per-module Debug features CPU usage display and alarm Memory usage display and alarm User operation logs Management of logs, alarms, and debugging information Manual reboot Reboot Information logging Ping IPv6 Ping Traceroute To CPU/From CPU packets statistics Time configuration Timezone
System Security	SSHv1/v2 RADIUS TACACS+ MAC/IP ACL Port/VLAN/L4-Port ACL 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 SNTP Simple Network Time Protocol) LLDP
Configuration Management	Inband management interface and configuration Outband management interface and configuration Privileged user priority and privileged commands

	Network management based on SNMPv1/v2c 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
System Management	Support FTP, TFTP file upload and download Support SNTP Support LLDP neighbor device discovery protocol Support Ping and Traceroute Supports configuration management based on WEB pages
Upgrade	Upgrade with the local image file Upgrade with the remote TFTP server Online upgrade Uboot

Connector Specifications

The switch provides standardized interfaces, thus facilitating rapid and trouble-free integration into the existing network infrastructures.

Network Interfaces

The switch optical interface ports for SFP/SFP+ modules and below table is available SFP/SFP+ module list.

Index	SFP/SFP+ Module Description
1	- Wavelength: 850 nm / Distance: 550 m / Mode: multi-mode - Connector: LC / Data rate: 1.25Gbit/s / Core type: Dual Core - Operating Temperature: 0 °C - 70 °C
2	-. Wavelength: 1310nm / Distance: 5km / Mode: single-mode -. Connector: LC / Data rate: 1.25Gbit/s / Core type: Dual Core -. Operating Temperature: 0 °C – 70 °C
3	- Wavelength: 1310 nm / Distance: 10 km / Mode: single-mode - Connector: LC / Data rate: 1.25 Gbit/s / Core type: Dual Core - Operating Temperature: 0 °C – 70 °C
4	- Wavelength: 1310 nm / Distance: 15 km / Mode: single-mode - Connector: LC / Data rate: 1.25 Gbit/s / Core type: Dual Core - Operating Temperature: 0 °C – 70 °C
5	- Wavelength: 1310 nm / Distance: 20 km / Mode: single-mode - Connector: LC / Data rate: 1.25 Gbit/s / Core type: Dual Core - Operating Temperature: 0 °C - 70 °C
6	- Wavelength: 1310 nm / Distance: 40 km / Mode: single-mode - Connector: LC / Data rate: 1.25 Gbit/s / Core type: Dual Core - Operating Temperature: 0 °C - 70 °C
7	- Wavelength: 850nm / Distance: 300m / Mode: Multimode - Connector: LC / Data rate: 10.3125 Gbit/s / Core type: Dual Core - Operating Temperature: 0°C ~ 70 °C - 10GBASE-SR (10G)
8	- Wavelength: 850nm / Distance: 300m / Mode: Multimode - Connector: LC / Data rate: 10.3125 Gbit/s / Core type: Dual Core

	- Operating Temperature: 0°C ~ 70 °C - 1000BASE-SX (1G), 10GBASE-SR (10G)
9	- Wavelength: 1310nm / Distance: 10Km / Mode: Single mode - Connector: LC / Data rate: 10.3125 Gbit/s / Core type: Dual Core - Operating Temperature: 0°C ~ 70 °C - 10GBASE-LR (10G)
10	- Wavelength: 1550nm / Distance: 40Km / Mode: Single mode - Connector: LC / Data rate: 10.3125 Gbit/s / Core type: Dual Core - Operating Temperature: 0°C ~ 70 °C - 10GBASE-ER (10G)
11	- Wavelength: 1310nm / Distance: 70Km / Mode: Single mode - Connector: LC / Data rate: 10.3125 Gbit/s / Core type: Dual Core - Operating Temperature: 0°C ~ 70 °C - 10GBASE-ZR (10G)

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+, Dual Power，2*FAN

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