S5710-28SX

L3 Managed Ethernet Switch

Product Overview

The S5710-28SX 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, and supports green Ethernet line sleep capability. It 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 switch 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.

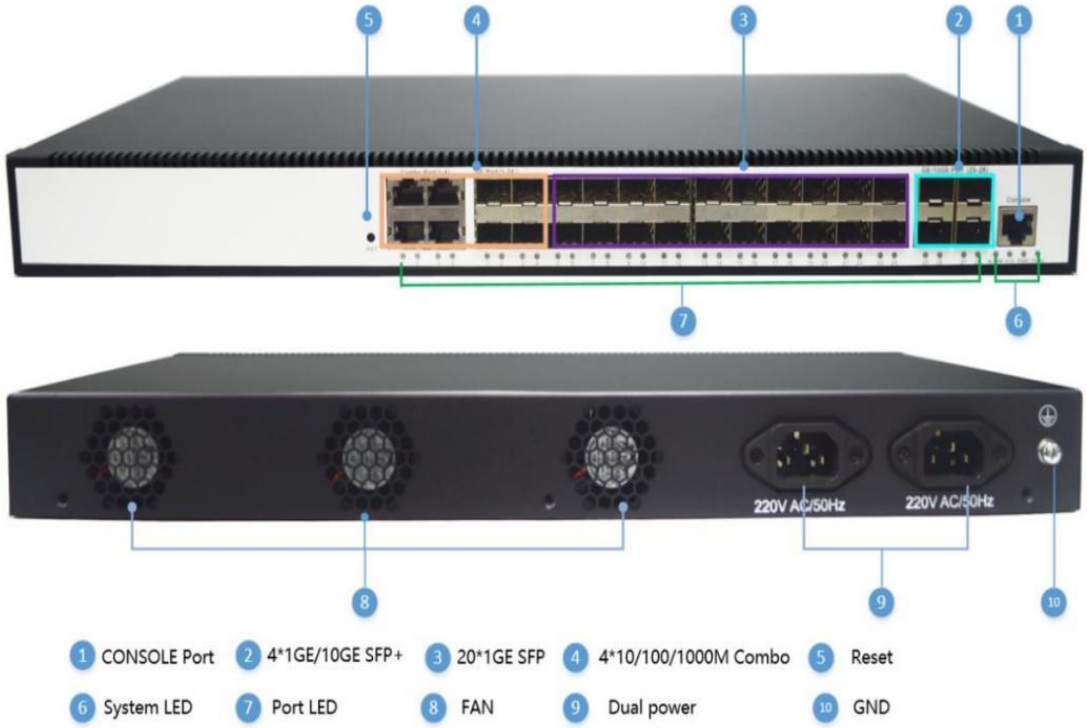
Product Interface



S5710-28SX

- 20* 1000M Base-X SFP port
- 4* GE/SFP Combo port
- 4*10G SFP+ port
- 128Gbps Switching capacity
- AC+AC (or AC+DC) power supply
- 19" Rack-mount (440X210X44mm)

LED Indicator



Port	Connect Device	Description
10GE/GE 25-28	SFP+	Link to external uplink equipment
Combo Port 5-24	SFP	20*1GE SFP
Combo Port 1-4	RJ45/SFP	4*10/100/1000M combo/SFP
CONSOLE	RJ45	Debug port

Key Features

Stack 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 attach 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 Specification

Attributes	S5710-28SX
Port	4*10/100/1000M Combo+20*1GE SFP，4*1GE/10GE SFP+
Chip Solution	RTL9301
Exchange Capacity	128Gbps
Packet Forwarding Rate	95.24Mpps
MAC	16K
Packet Buffer	12Mbit
Multicast	1K
Route	512
ARP	2K
Memory and Storage	Memory：512MB, Storage：32MB
Power	AC： 100～240V 47/63Hz； DC： -40V～-60V；
Power Consumption	Idle power consumption ≤13W Full load power consumption ≤58W
Weight	2.9kg
Dimensions (W * D * H) mm	440*210*44mm
Environment Temperature	Working Temperature：-10℃～50℃ Storage temperature：-40℃～70℃ Relative Humidity: 5%~95%, non-condensing

Software Specification

Attributes	S5710-28SX
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 Sacking 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 Time zone
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 Xmodem

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 Trace route Supports configuration management based on WEB pages Support the whole machine power failure alarm function
Upgrade Management	Upgrade with the local image file Upgrade with the remote TFTP server Online upgrade U-boot

Purchase Info

Product Name	Product Description
S5710-28SX	4*10/100/1000M Combo+20*1GE SFP，4*1GE/10GE SFP+, Dual power supply