SS5720 Series

Layer3 2.5G Managed Switch

Product Overview

The SS5720 series switch is a layer 3 Ethernet switch, which can meet the needs of cost-effective 2.5G access and 10 Gigabit uplink for enterprise networks and operator customers. SS5720 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.

Product Interface

SS5720-24M6X

- 24* 2.5G Base-T RJ45 port
- 6*10G SFP+ port
- 240Gbps Switching capacity
- AC：100～240V　47/63Hz
- 19" Rack-mount (440×260×44mm)

SS5720-24MP6X

- 24* 2.5G Base-T RJ45(PoE) port
- 6*10G SFP+ port
- 240Gbps Switching capacity
- PoE budget: 370W (802.3af/at)
- 19" Rack-mount (440×260×44mm)

Key Features

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

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/ERPS/LACP

- Support PTP

Perfect safety mechanism

- Support ACL security filtering mechanism, which can provide security control functions based on MAC, IP, L4 port

- Support ARP attack automatic protection and user blocking functions

- Support DHCP attack automatic protection based on Mac Address and user blocking functions

- Support DDOS and virus attack protection

- Support DHCP-snooping/IP-source-Guard/802.1X and other security features

- Support link protection functions such as BFD, FlexLink, LACP and ERRP

- Support remote loop detection function

- Support CFM、EFM

- 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

Enhanced multi-service capabilities

- Support DHCP Server and DHCP Relay

- Support L2-Tunnel

- Support Ethernet OAM protocol such as CFM、EFM

Rich routing protocol

- Support static route

- Support dynamic route such as RIP, OSPF, BGP, ISIS

- Support IPV4/IPV6 dual protocol stack，Support RIPng、OSPFv3

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

Hardware Specifications

Attributes	SS5720-24M6X	SS5720-24MP6X
Port	24*2.5G Base-T, 6*1G Base-X SFP/10GE SFP+	24*2.5G Base-T POE, 6*1G Base-X SFP/10GE SFP+
Chip Solution	Realtek 9313	Realtek 9313
Exchange Capacity	240Gbps	240Gbps
Packet Forwarding Rate	178.56Mpps	178.56Mpps
MAC	32K	32K
Multicast	4K	4K
Route	12k	12k
DRAM/Flash	DRAM: 256MB; Flash:32MB	
Power	AC：100～240V　47/63Hz； DC：40V～60V；	
Power Consumption	Idle ≤18W Full load ≤39W	Idle ≤30W Full load ≤450W
Weight	3.5kg	4.2kg
Dimensions	440X260X44(W * H * D)	440X260X44(W * H * D)
Environment Temperature	Working Temperature：-10℃～55℃ Storge temperature：-40℃～70℃	

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Software Specifications

Attributes	SS5720-24M6X/24MP6X
VLAN	Support 4K VLAN Support VLAN based on port, MAC and protocol Support dual Tag VLAN, port-based Static QinQ and Fiexible 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/unknow-multicast/broadcast storm-control Port-isolate
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 Gratuitous ARP 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(QCEs)
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
	Traceroute
	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	Inband management interface and configuration
	Outband 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 Traceroute
	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 Uboot

Ordering Information

Product name	Product description
SS5720-24M6X	24*2.5G Base-T, 6*1000M Base-X SFP/10GE SFP+, Single power supply
SS5720-24MP6X	24*2.5G POE Base-T, 6*1000M Base-X SFP/10GE SFP+, Single Power supply