H3C S5120-SI Intelligent GE Switch

S5120-9P-SI

S5120-20P-SI

S5120-28P-SI

S5120-52P-SI

S5120-9P-PWR-SI

S5120-9P-HPWR-SI

S5120-28P-PWR-SI

S5120-28P-HPWR-SI

Overview

The H3C S5120-SI series switches are Layer 2 intelligent manageable switches designed for networks where high performance, high-density port access and easy installation are required. The S5120-SI series switches are mainly deployed at the access layer in enterprise networks that require Gigabit to the Desktop (GTTD) and at the distribution layer in metropolitan-area networks (MANs).

The H3C S5120-SI series switches include the following models: S5120-9P-SI, S5120-20P-SI, S5120-28P-SI, S5120-52P-SI, S5120-9P-PWR-SI, S5120-9P-HPWR-SI, S5120-28P-PWR-SI and S5120-28P-HPWR-SI.

Features

Full wire-speed, multi-layer switching

- S5120-SI series switches offer L2 wire-speed switching capacity. The product series offers high density, wire speed, GE ports and satisfies the most demanding requirements. S5120-SI series switches are able to identify and process traffic flows from L2-L4. With independent packet filters, all ports distinguish different flows and forward them with corresponding priority.

High reliability

- S5120-SI series switches support STP/RSTP/MSTP (Spanning Tree Protocol/Rapid Spanning Tree Protocol/Multiple Spanning Tree Protocol). The STP/RSTP features also support BPDU guard and Root guard. Thus the redundancy back-up and error tolerance capability of the link can be greatly improved to guarantee network stability.
- S5120-SI series switches support link-aggregation (including manual link aggregation and LACP), providing a simple and cost efficient way to expand the bandwidth of a switch port and balance the traffic among all the ports in a link aggregation. This also enhances connection reliability.

Comprehensive security control policies

- S5120-SI series switches support 802.1x authentication to identify users who attempt to access the network. With the 802.1x client version checking function enabled, the switch checks the version and validity of the 802.1x client running on supplicant systems to prevent those that use earlier versions of the 802.1x client or illegal clients from logging in.
- S5120-SI series switches provide Guest VLAN functions so that authorized terminals can only access specified resources and attain corresponding policies. For example, they can obtain 802.1x clients, upgrade clients, or attain other upgrade programs.
- They support Secure Shell V2 (SSH V2) to guarantee information security and powerful authentication, thus preventing Ethernet switches from attacks, such as IP address spoofing and interception of plain text passwords.

Diversified QoS policies

- S5120-SI series switches support packet filtering at L2 to L4 and traffic classification based on source MAC addresses, destination MAC addresses, source IP addresses, destination IP addresses, TCP/UDP port numbers, protocol types and VLANs. H3C S5120-SI series switches support flexible queue scheduling including SP, SDWRR and SP+SDWRR. They support port rate limiting with a minimum granularity of up to 64 kbps. They also support port mirroring at both the egress and ingress directions.

Excellent manageability

- S5120-SI series switches support Simple Network Management Protocol (SNMP) v1/v2/v3, Open View, iMC, CLI, Web-based NMS, Telnet, and HGMPv2 so that devices are conveniently

managed. They also support SSH2.0 to provide better protection management.

- S5120-SI series switches support Loopback detection on ports. After users enable loopback detection for Ethernet ports, the switch will monitor whether the ports have loopback on a regular basis; if the switch detects loopback for a particular port, t will bring that port back under control.
- S5120-SI series switches support VCT (Virtual Cable Test) which is convenient for troubleshooting. Customers can start the virtual cable test (VCT) to have the system test the cable connected to the current electrical Ethernet port. The test items include: whether a short or open circuit exists in the Rx/Tx direction of the cable, and what is the length of the cable in normal status or the length from the port to the fault point of the cable.

POE/POE+

- S5120-SI series switches provide POE+ function with maximum output 30W power per port. which can be used for 802.11n access point , IP video phone and other terminal devices.

Specifications

Item		S5120-9P-SI	S5120-20P-SI	S5120-28P-SI	S5120-52P-SI	S5120-9P-PWR-SI	S5120-9P-HPWR-SI	S5120-28P-PWR-SI	S5120-28P-HPWR-SI
Physical dimensions (W × D × H mm)		210 × 210 × 43.6	440 × 160 × 43.6	440 × 160 × 43.6	440 × 260 × 43.6	300 × 260 × 43.6	300 × 260 × 43.6	440 × 420 × 43.6	440 × 420 × 43.6
Console port		1	1	1	1	1	1	1	1
Service ports		8 × 10/100/1000Base-T auto sensing Ethernet ports + 1 GE SFP interfaces	16× 10/100/1000Base-T auto sensing Ethernet ports + 4 GE SFP interfaces	24× 10/100/1000Base-T auto sensing Ethernet ports + 4 GE SFP interfaces	48 × 10/100/1000Base-T auto sensing Ethernet ports + 4 GE SFP interfaces	8 × 10/100/1000Base-T auto sensing Ethernet ports + 1 GE SFP interfaces	8 × 10/100/1000Base-T auto sensing Ethernet ports + 1 GE SFP interfaces	24 × 10/100/1000Base-T auto sensing Ethernet ports + 4 GE SFP interfaces	24 × 10/100/1000Base-T auto sensing Ethernet ports + 4 GE SFP interfaces
Input voltage		AC: Rated voltage range: 100 VAC to 240 VAC, 50 Hz or 60 Hz Maximum voltage range: 90 VAC to 264 VAC, 47 Hz or 63 H							
Power consumption (AC full configuration)		14.4W	22.4 W	31.5 W	55.4 W	93W	228W	255W	523W
POE/POE+ consumption (AC)		N/A				65W	180W	170W	370W
Operating temperature		0°C to 45°C (32°F to 113°F)							
Operating humidity (noncondensing)		10% to 90%							
Wire speed L2 switching	Switching capacity (Full duplex)	18 Gbps	40 Gbps	56 Gbps	104 Gbps	18 Gbps	18 Gbps	56 Gbps	56 Gbps
	Packet forwarding rate	13.4 Mpps	29.8 Mpps	41.7 Mpps	77.4 Mpps	13.4 Mpps	13.4 Mpps	41.7 Mpps	41.7 Mpps
Link aggregation		• Dynamic aggregation of Gigabit Ethernet (GE) ports • Dynamic link aggregation through Link Aggregation Control Protocol (LACP) • Manual link aggregation • Support up to (total number of ports/2) link aggregation groups, each supporting up to eight GEs							
IRF		• Maximum 4 devices IRF stacking							

Service Features (continued)

Item	S5120-9P-SI	S5120-20P-SI	S5120-28P-SI	S5120-52P-SI	S5120-9P-PWR-SI	S5120-9P-HPWR-SI	S5120-28P-PWR-SI	S5120-28P-HPWR-SI
Flow control	• IEEE 802.3x flow control and back pressure							
Jumbo frame	• Maximum frame size of 10 KB							
MAC address table	• 8K MAC addresses • 1K static MAC addresses • Blackhole MAC addresses • MAC address learning limit on a port							
VLAN	• Port-based VLANs (4094 VLANs) • Voice VLAN							
ARP	• 256 entries • 64 static entries							
VLAN virtual interface	• 8							
DHCP	• DHCP Client • DHCP Snooping • DHCP Relay							
Broadcast/multicast/ unicast storm control	• Storm control based on port rate percentage • PPS-based storm control • bps-based storm control							
MSTP	• STP/RSTP/MSTP protocol • 4 spanning tree instances • STP Root Protection • BPDU Protection							
QoS	• 802.1p/DSCP precedence marking • Four queues per port • SP, SDWRR, and SP+SDWRR queue scheduling algorithms • Support port-based line rate, with a minimum of 64-kbps granularity • Flow-based traffic redirecting • Support time ranges							
L3 routing	• Static Routing							
Mirroring	• Port mirroring							
Smart Link	• Maximum 4 groups smart link							
ACL	• Access Control List							
LLDP / LLDP-MED	• LLDP / LLDP-MED							
Security features	• Hierarchical management and password protection of users • AAA authentication • RADIUS authentication • Port isolation • 802.1X • Dynamic ARP Inspection							
802.1X	• Up to 1024 users under a single port • Port-based and MAC address–based authentication • Guest VLAN							
Loading and upgrade	• Loading and upgrade through XModem protocol • Loading and upgrade through file transfer protocol (FTP) • Loading and upgrade through trivial file transfer protocol (TFTP)							

Service Features (continued)

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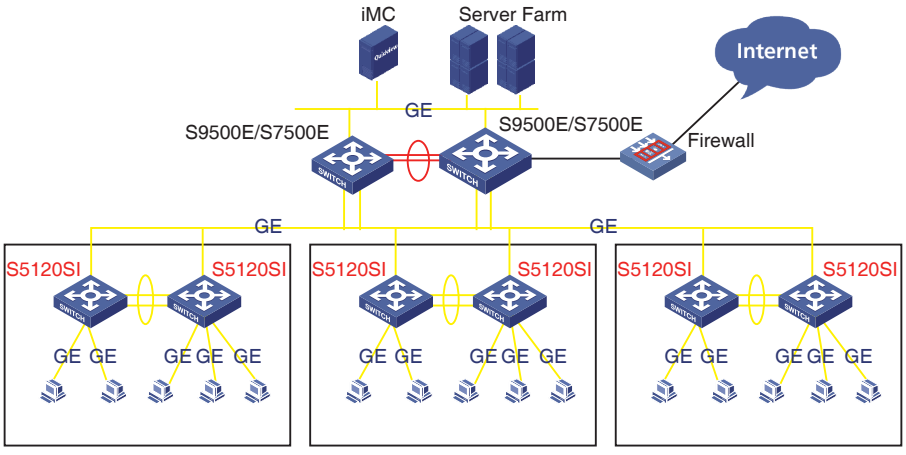
Management	• Configuration through CLI • Remote configuration through Telnet • Configuration through Console port • Simple Network Management Protocol (SNMP) • Remote Monitoring (RMON) alarm, event and history recording • DM NMS • Web NMS • System log • Hierarchical alarms • NTP • Power, fan, and temperature alarms							
Maintenance	• Debugging information output • Packet internet groper (ping) and Tracert • Remote maintenance through Telnet • Virtual cable test							

Networking Applications

In the access layer of large enterprise/campus network

In a large enterprise or campus network, the S5120-SI series switches are located at the access layer. S5120-SI series switches can provide 1000Mbps speed connection directly to the desktop user via the GE ports. S5120-SI series switches use MSTP and LA for reliability and 802.1x for secure user access. The whole solution provides a cost effective GE-to-Desktop application for customers.



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