H3C S5120V2-LI Gigabit Access Switch Series

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New H3C Technologies Co., Limited

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Product Overview

H3C S5120V2-LI is the latest development of Gigabit Layer 2 access switch. It's the second generation intelligent managed switches designed for networks requiring high performance, high port density and easy to use.

H3C S5120V2-LI series switch offers Gigabit connectivity with10/100/1000 autosensing ports and SFP optical uplink ports.

H3C S5120V2-LI series switch includes eight models as follows:

- S5120V2-10P-LI：8 *10/100/1000TX+ 2*SFP

- S5120V2-20P-LI：16*10/100/1000TX+ 4*SFP

- S5120V2-28P-LI：24 *10/100/1000TX+ 4*SFP

- S5120V2-52P-LI：48*10/100/1000TX+ 4*SFP

- S5120V2-10P-PWR-LI：8 *10/100/1000TX+ 2*SFP

- S5120V2-28P-PWR-LI：24 *10/100/1000TX+ 4*SFP

- S5120V2-28P-HPWR-LI：24*10/100/1000 BASE-T + 4*SFP + 4*10/100/1000 BASE-T COMBO

- S5120V2-52P-PWR-LI：48*10/100/1000TX+ 4*SFP

Features and benefits

Abundant service capabilities

H3C S5120V2-LI switch series supports Internet broadband access, offers Gigabit access and 10G uplink for small to medium sized enterprises. It supports rich features such as Jumbo Frame, 802.1X, MAC authentication, Port security, LACP, 4K VLAN, 16K MAC and Black Hole MAC, etc. and abundant functions such as port-based priority mapping of layer 2 and layer 3, port-based mirror, redirection, port isolation, access control, port speed limit and rich IPV6 features, etc.

Intelligent Resilient Framework 2 (IRF2)

H3C S5120V2-LI switch series is pre-built with Intelligent Resilient Framework 2 (IRF2). IRF2 provides the following benefits:

- High scalability: With IRF2, plug-n-play device aggregation can be achieved by adding one or more switches into the IRF2 stack and enabling IRF2 stacking on the new device. New devices can be managed with a single IP, and upgraded at the same time to reduce network expansion cost.

- High reliability: The IRF2 patented 1: N backup technology allows each slave device in the IRF2 stack to serve as the backup of the master, creating control and data link redundancy, as well as uninterrupted layer-3 forwarding. This improves the reliability, avoids unplanned business downtime and serves to improve overall performance. When the master device fails, traffic remains uninterrupted.

- Load balancing: IRF2 supports cross-device link aggregation, upstream and downstream can be connected to more than one physical link, which creates another layer of network redundancy and boosts the network resource utilization.

Availability: H3C Implements IRF2 through standard Gigabit Ethernet (1GE) ports or Ten Gigabit Ethernet (10GE) ports which allocates bandwidth for business and application access and reasonably splits local traffic and upstream traffic. IRF2 rules not only able to obey within and across the rack, but also across the LAN.

Comprehensive security control policies

- H3C S5120V2-LI switch series supports innovative single-port multi-authentication function, the access authentication modes supported by different clients are different. For example, some clients can only perform MAC addresses Authentication (such as the printer terminal), and some user host for 802.1X authentication, and some user hosts only want to access through the Web portal authentication. In order to flexibly adapt to the multi-authentication requirements of the network environment, the S5120V2-LI switch series support single-port multi-authentication unified deployment.

- ARP attack and ARP virus are major threats to LAN security, so the S5120V2-LI switch series comes with diverse ARP protection functions such as ARP Detection to challenge the legitimacy of client, validate the ARP packets, and set a speed limit for ARP to prevent ARP swarm attacks from targeting CPU.

- H3C S5120V2-LI switch series support EAD (End User Admission Domination) function. Once working with the iMC (intelligent Management Centre) system, EAD integrates terminal security policies, such as anti-virus and patch update, into network access control and access right control policies to form a cooperative security system. By checking, isolating, updating, managing, and monitoring access terminals, EAD changes passive, single point network protection to active, comprehensive network protection, and changes separate management to centralized management, enhancing the network capability for preventing viruses, worms, and new threats.

Abundant QoS policies

- The S5120V2-LI switch series supports packet filtering at Layer 2 through Layer 4, 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. It supports flexible queue scheduling algorithms based on ports and queues, including strict priority (SP), weighted round Robin (WRR) and SP+WRR. The S5120V2-LI switch series enables committed access rate (CAR) with the minimum granularity of 8 kbps. It supports port mirroring in the outbound and inbound directions, to monitor the packets on the specific ports, and to mirror the packets to the monitor port for network detection and troubleshooting.

Excellent manageability

- The H3C S5120V2-LI switch series makes switch management with ease with the support of SNMPv1/v2/v3, which can be managed by NM platforms, such as Open View and iMC. With CLI and Telnet switch management is made easier. And with SSH 2.0 encryption, switch management security is enhanced.

Rich Layer 3 routing features

H3C S5120V2-LI switch series supports static routing, RIP, RIPng, OSPF V1/V2/V3.

Specifications

Feature	S5120V2-10P-LI	S5120V2-20P-LI	S5120V2-28P-LI	S5120V2-52P-LI	S5120V2-10P-PWR-LI	S5120V2-28P-PWR-LI	S5120V2-28P-HPWR-LI	S5120V2-52P-PWR-LI
Switching capacity	20Gbps	40Gbps	56Gbps	104Gbps	20Gbps	56Gbps	56Gbps	104Gbps
Packet forwarding rate	15Mpps	30Mpps	41.7Mpps	77.4Mpps	15Mpps	41.7Mpps	41.7Mpps	77.4Mpps
Dimensions (H × W × D)	43.6× 266 × 161 mm	43.6× 330 × 230 mm	43.6× 440 × 160 mm	43.6× 440 × 230 mm	43.6× 330 × 230 mm	43.6× 440 × 260 mm	43.6× 440 × 260 mm	43.6× 440 × 260 mm
Weight	≤ 1.5kg	≤ 2kg	≤ 2.5kg	≤ 3.5kg	≤ 3kg	≤ 4kg	≤ 4.5kg	≤ 6kg
Console ports	1							
Fixed ports	8*10/100/1000TX	16*10/100/1000TX	24*10/100/1000TX	48*10/100/1000TX	8*10/100/1000TX	24*10/100/1000TX	24*10/100/1000TX +4*10/100/1000 BASE-T Combo	48*10/100/1000TX
	+2*SFP	+4*SFP	+4*SFP	+4*SFP	+2*SFP	+4*SFP	+ 4*SFP	+4*SFP
Input voltage range	100 VAC to 240 VAC @ 50 Hz/60 Hz						AC: 100-240V @50/60Hz / DC: -48V~-60V	
Power consumption	MIN: 7W MAX: 12W	MIN: 9W MAX: 19W	MIN: 9W MAX: 23W	MIN: 18W MAX: 41W	MIN: 13W MAX:153W (PoE 125W)	MIN: 19W MAX: 240W(PoE 170W)	MIN: AC: 23W DC: 16W MAX: AC: 446W (PoE 370W) DC: 790W(PoE 740W)	MIN: AC: 36W DC: 26W MAX: AC: 467W (PoE 370W) DC: 807W(PoE 740W)
Operating temperature	0ºC to 45ºC							
Operating humidity	10% RH to 95% RH, non-condensing							
Stacking	Intelligent Resilient Framework 2 (IRF2)							
Link aggregation	1G/10GE port aggregation Static aggregation Dynamic aggregation Multichassis link aggregation							
Jumbo frame	Supported							
MAC address table	Blackhole MAC Address MAC learning limit							
Flow control	802.3x flow control and half-duplex backpressure							
VLAN	Port-based VLANQinQ Voice VLAN MAC VLAN							

ARP	ARP Detection ARP speed limit
ND	Supported
VLAN virtual port	Supported
DHCP	DHCP Client DHCP Snooping DHCP Relay DHCP Server DHCP Option82
DNS	Static and Dynamic DNS IPV4 and IPV6
Routing protocols	IPV4/IPV6 static routing RIP/ RIPng, OSPFV1/V2/V3
Multicast	IGMP Snooping V1/V2/V3 MVR
Strom suppression	Storm suppression based on port bandwidth percentage Storm suppression based on PPS
Layer 2 ring network protocol	STP/RSTP/MSTP STP Root Protection Smart Link RRPP
Mirroring	Flow mirroring Port mirroring
QoS/ACL	Packet filter Flexible queue scheduling algorithms based on ports and queues, including SP, WRR and SP+WRR Bidirectional ACL Port-based speed limit Flow redirection Time-range
Security	Hierarchical user management and password protection MAC-based authentication 802.1X SSH2.0 Port isolation IP source guard HTTPs EAD
IEEE	IEEE 802.3x IEEE 802.3ad IEEE 802.3af IEEE 802.3at IEEE 802.1p IEEE 802.1x IEEE 802.1q IEEE 802.1d IEEE 802.1w IEEE 802.1s
Loading and upgrading	Loading and upgrading through FTP/TFTP

Management and maintenance	Configuration from CLI Login through Telnet, and the console port Simple Network Management Protocol(SNMP) Remote Monitoring (RMON) IMC network management system WEB management System log Alarming based on severity IRF NTP Debugging information output Telnet-based remote maintenance NQA DLDP Virtual Cable Test

Ordering Information:

Product ID	Product Description
LS-5120V2-28P-LI-GL	H3C S5120V2-28P-LI L2 Ethernet Switch with 24*10/100/1000BASE-T Ports and 4*1000BASE-X Ports,(AC)
LS-5120V2-52P-LI-GL	H3C S5120V2-52P-LI L2 Ethernet Switch with 48*10/100/1000BASE-T Ports and 4*1000BASE-X Ports,(AC)
LS-5120V2-10P-PWR-LI-GL	H3C S5120V2-10P-PWR-LI L2 Ethernet Switch with 8*10/100/1000BASE-T PoE+ Ports(AC 125W), and 2*1000BASE-X SFP Ports,(AC)
LS-5120V2-10P-LI-GL	H3C S5120V2-10P-LI L2 Ethernet Switch with 8*10/100/1000BASE-T Ports and 2*1000BASE-X SFP Ports,(AC)
LS-5120V2-28P-HPWR-LI-GL	H3C S5120V2-28P-HPWR-LI L2 Ethernet Switch with 24*10/100/1000BASE-T PoE+ Ports(AC 370W,DC 740W), 4*100/1000BASE-X Ports, and 4*GE Combo Ports,(AC/DC)
LS-5120V2-52P-PWR-LI-GL	H3C S5120V2-52P-PWR-LI L2 Ethernet Switch with 48*10/100/1000BASE-T PoE+ Ports(AC 370W,DC 740W) and 4*1000BASE-X SFP Ports,(AC/DC)
LS-5120V2-20P-LI-GL	H3C S5120V2-20P-LI L2 Ethernet Switch with 16*10/100/1000BASE-T Ports and 4*1000BASE-X SFP Ports,(AC)
LS-5120V2-28P-PWR-LI-GL	H3C S5120V2-28P-PWR-LI L2 Ethernet Switch with 24*10/100/1000BASE-T PoE+ Ports(AC 185W) and 4*1000BASE-X Ports,(AC)