H3C S5130S-HI Series Advanced Gigabit Access Switches

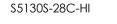Release Date: January, 2022

Product Overview

H3C S5130S-HI Switch Series – A robust (modular dual power), cost-effective and easy to deploy access switching solution with autosensing (Auto-MDIX) POE+ that offers enhanced security and 10GbE uplinks, static route, RIP ,OSPF, SDN and IRF enabled, flexible management.

H3C S5130-HI series Ethernet switch includes the following models:

- **S5130S-28S-HI**: 24x10/100/1000BASE-T Ethernet ports(8 combo ports), 4x10G/1G BASE-X SFP+ ports;2 power module slots;

- **S5130S-52S-HI**: 48x10/100/1000BASE-T Ethernet ports, 4x10G/1G BASE-X SFP+ ports; 2 power module slots;

- **S5130S-28S-PWR-HI**: 24x10/100/1000BASE-T Ethernet ports(PoE+, 4 combo ports), 4x10G/1G BASE-X SFP+ ports; 2 power module slots;

- **S5130S-52S-PWR-HI**: 48x10/100/1000BASE-T Ethernet ports(PoE+), 4x10G/1G BASE-X SFP+ ports; 2 power module slots;

S5130S-28S-HI

S5130S-52S-HI

S5130S-28S-PWR-HI

S5130S-52S-PWR-HI

S5130S-28C-HI

S5130S-28S-PWR-HI

S5130S-52C-HI

S5130S-52C-PWR-HI

Features

High Performance IPv4/IPv6 service capabilities

The S5130S-HI switch series comes with IPv4/IPv6 dual-stack platform which provides sophisticated IPv4/IPv6 solutions by supporting multiple tunnels, IPv4/IPv6 Layer 3 routing protocols, multicasting, and policy-based routing. The S5130S-HI switch is a mature commercial IPv6 product that has passed the IPv6 network access certification of the Chinese Ministry of Industry and Information Technology and the IPv6 Ready Phase II certification.

Software Defined Network (SDN)

- Software Defined Network (SDN) is an innovative network architecture that simplifies network management and reduces maintenance complexity by separating network control layer and network forwarding layer through Openflow. More importantly, it implements flexible network flow control and provides a well-defined network platform for core network application and innovation.
- The S5130S-HI switch series supports a large network flow table. Combined with H3C SDN controller, it can easily implement a two-layer network architecture and quickly add functions in existing network in order to drastically reduce network management complexity while substantially lowers network maintenance cost.

Intelligent Resilient Framework 2 (IRF2)

H3C S5130S-HI switch series is pre-built with Intelligent Resilient Framework 2 (IRF2). IRF2 provides the following benefit:

- 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
- 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 Forty Gigabit Ethernet (40GE) 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 obeyed within and across the rack, but also across the LAN.

Smart Management Center (SmartMC)

SmartMC is H3C's latest offering and innovation that helps small and middle size enterprise network to address management issue and is free of charge, easy to use web management tool. SmartMC is embedded network management tool into the switch, it includes commander switches and other access switches.
SmartMC delivers the following benefits:

- Intelligent operation: once the switch is powered on and SmartMC function is enabled, topology will be created

automatically and user can go enhanced web GUI to check the latest status.

- Centralized management: all management can be achieved via commander switch such as centralized configuration backup, and software version management, increasing working efficiency.
- One key device replacement: in case of one switch failure, the new added same type switch can download the same configuration and work as old switch immediately.

Comprehensive Security Control

- H3C S5130S-HI 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 S5130S-HI switch series support single-port multi-authentication unified deployment.
- The S5130S-HI switch series supports SSH V2 (Secure Shell V2) to secure information security, and strong authentication protect the Ethernet network switch from attacks such as IP address spoofing and clear text interception.
- ARP attack and ARP virus are major threats to LAN security, so the S5130S-HI 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 S5130S-HI switch series supports EAD (End User Admission Domination) function. With the iMC (intelligent Management Centre) system, EAD integrates terminal security policies, such as anti-virus and patch update, 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 to passive mode, 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.

High availability

- The S5130S-HI switch series adopts hot swappable dual-power supply, which allows you to configure AC or DC power supplies as needed. The switch can detect faults in power supplies, and will if any such faults are found, respond with an alarm. It can automatically adjust fan speed according to the temperature.
- Apart from device level redundancy, the S5130S-HI series switch also provides diverse link redundancy support such as LACP/STP/RSTP/MSTP/VRRP/Smart Link protocols. It supports IRF2 and 1: N redundancy backup as well as cross-device link aggregation which substantially increases network reliability.

Abundant QoS policies

The S5130S-HI 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 S5130S-HI 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.

Professional Anti-lightning function

The S5130S-HI switch series uses built-in lightning protection technology and supports industry leading switch port 6KV anti-lighting capability, which can greatly reduce the rate of lightning damage to the equipment.

Enhanced PoE+ capability

H3C S5130S-HI switch series supports 802.3af/802.3at PoE function, provides multiple PoE modules for flexible PoE output selections, single switch can provide a total of 1680W PoE power, 30w per port and a total of 48 ports PoE+ function. A single port can provide a maximum of 30w of powered connected devices, such as IP phones, wireless APs, and high power cameras

Excellent manageability

The H3C S5130S-HI series switch 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. And with SSH 2.0 encryption, switch management security is enhanced.

Specifications

Feature	S5130S-28S-HI	S5130S-52S-HI	S5130S-28S-PWR-HI	S5130S-52S-PWR-HI
Port Switching capacity	128Gbps	176Gbps	128Gbps	176Gbps
Box Switching capacity	336Gbps			
Forwarding capacity	96Mpps	132Mpps	96Mpps	132Mpps
CPU	1 Core, 800MHz			
Dimensions (W × D × H)	440×360×43.6	440×360×43.6	440×460×43.6	440×460×43.6
Weight	≤6kg	≤6.5kg	≤8.5kg	≤9.5kg
Front panel data ports	24 x 10/100/1000BASE-T Ethernet ports, (including 8 combo ports), 4 x 10G/1G BASE-X SFP+ ports	48 x 10/100/1000BASE-T Ethernet ports, 4 x 10G/1G BASE-X SFP+ ports	24 x 10/100/1000BASE-T Ethernet ports, (including 4 combo ports), 4 x 10G/1G BASE-X SFP+ ports	48 x 10/100/1000BASE-T Ethernet ports, 4 x 10G/1G BASE-X SFP+ ports
Console port	1 × RJ-45 Out of Band console port 1 × Micro-USB(Type B) console port Only the Micro-USB console port is available when you connect both ports.			
Expansion slot	-			
Power consumption	Single AC: 34W Single DC: 36W Dual AC: 39W	Single AC: 52W Single DC: 53W Dual AC: 55W	Single AC: Upto 898W (including 810W PoE)	Single AC: Upto 1019W (including 900W PoE) Dual AC:

Feature				
(full configuration)	Dual DC: 44W	Dual DC: 57W	Dual AC：Upto 905W (including 810W PoE)	Upto 1854W（including 1680W PoE)
MTBF(Year)	174.61	151.28	89.35	61.87
Feature	**S5130S-28C-HI**	**S5130S-52C-HI**	**S5130S-28C-PWR-HI**	**S5130S-52C-PWR-HI**
Port Switching capacity	128Gbps	176Gbps	128Gbps	176Gbps
Box Switching capacity	336Gbps			
Forwarding capacity	96Mpps	132Mpps	96Mpps	132Mpps
CPU	1 Core, 800MHz			
Dimensions (W × D × H)	440×360×43.6	440×460×43.6	440×460×43.6	440×460×43.6
Weight	≤4.5kg	≤4.5kg	≤5.4kg	≤5.8kg
Front panel data ports	24 x 10/100/1000BASE-T Ethernet ports, (including 8 combo ports), 4 x 10G/1G BASE-X SFP+ ports	48 x 10/100/1000BASE-T Ethernet ports, (including 2 combo ports), 2 x 10G/1G BASE-X SFP+ ports	24 x 10/100/1000BASE-T Ethernet ports, (including 4 combo ports), 4 x 10G/1G BASE-X SFP+ ports	48 x 10/100/1000BASE-T Ethernet ports, (including 2 combo ports),2 x 10G/1G BASE-X SFP+ ports
Console port	1 × RJ-45 console port 1 × Micro-USB console port Only the Micro-USB console port is available when you connect both ports.			
Expansion slot	1			
Power consumption (full configuration)	Single AC: 30W Single DC: 32W Dual AC: 38W Dual DC: 38W	Single AC: 49W Single DC: 58W Dual AC: 51W Dual DC: 52W	Single AC:Upto 907W (including 810W PoE) Dual AC：Upto 918W (including 810W PoE)	Single AC:Upto 1032W (including 900W PoE) Dual AC：Upto 1855W（including 1680W PoE)
MTBF(Year)	174.61	151.28	89.35	61.87
Flash/SDRAM	256MB/512MB			
Maximum stacking bandwidth	80G			
Maximum stacking number	9			

SDN/ Open flow	OpenFlow 1.0 and 1.3 Multiple controllers (EQUAL, master/slave) Multiple tables flow sFlow Group table Meter
Port aggregation	GE/10GE port aggregation Dynamic aggregation Static aggregation Cross-device aggregation
Port features	IEEE802.3x flow control (full duplex) control based on port rate percentage PPS/BPS-based storm control
IRF2	Distributed device management, distributed link aggregation, and distributed resilient routing Stacking through standard Ethernet interfaces Local device stacking and remote device stacking
VLAN	Port-based VLAN (up to 4094 VLANs) MAC-based VLAN Protocol-based VLAN QinQ and selective QinQ VLAN mapping Voice VLAN GVRP VLAN tagging Jumbo frame support
ACL	Packet filtering at Layer 2 through layer 4 Traffic classification based on source MAC addresses, destination MAC addresses, source IPv4/IPv6 addresses, Time range-based ACL VLAN-based ACL Bidirectional ACL
QoS	Port rate limit (receiving and transmitting) Packet redirection Committed access rate (CAR) Eight output queues on each port Flexible queue scheduling algorithms based on ports and queues, including SP, WRR, WFQ and SP+WRR 802.1p DSCP remarking Class of service (CoS)
DHCP	DHCP Client DHCP Snooping DHCP Snooping option82 DHCP Relay DHCP Server DHCP auto-config

IP routing	IPV4 routing number 1K
	Static routing
	RIPv1/v2 and RIPng
	OSPFv1/v2 and OSPFv3
	Policy-based routing
	BGP (Border gateway routing)
	Loopback IP interface
	Route maps
MAC address table	16K
Multicast	IGMP Snooping /MLD Snooping
	Multicast VLAN
Layer 2 ring network protocol	STP/RSTP/MSTP/PVST
	Smart Link
	RRPP
	G.8032 Ethernet ring protection switching (ERPS)
OAM	802.1ag
	802.3ah
	802.1 AB (LLDP)
Mirroring	Port mirroring
	RSPAN
	Traffic mirroring
Security	Hierarchical user management and password protection
	MAC-based and Web-based authentication
	802.1X
	Guest VLAN
	RADIUS/HWTACACS/TACACS+
	DHCP protection
	Source-port filtering SSH
	2.0,SSL VPN
	Port isolation
	Port security
	MAC address learning limit
	IP Source guard/ACLs
	Dynamic ARP inspection, preventing man-in-the-middle attacks and ARP DoS attacks
	STP protection : BPDU and STP root guard
	IP/Port/MAC binding
	EAD

Management and maintenance	Loading and upgrading through XModem/FTP/TFTP
	Configuration through CLI, Telnet, and console port
	SNMPv1/v2/v3 and Web-based NMS
	Remote monitoring (RMON) alarm, event, and history recording
	IMC NMS
	System log, alarming based on severities, and output of debugging information
	NTP
	Ping, Tracert
	Virtual cable test (VCT)
	Device link detection protocol (DLDP)
	Loopback-detection
Green power	EEE (802.3az)
	Port auto Power down
	Port schedule down
Input voltage	Non PoE model input voltage:
	AC: Rated voltage range: 100V~240V AC, 50/60Hz
	DC: Maximum voltage range -48V~-60V DC
	PoE model input voltage:
	360W AC: 100V~240V, 50Hz~60Hz
	720W AC: 100V~240V, 50Hz~60Hz
	1110W AC: 115V~240V, 50Hz~60Hz
Operating temperature	-5℃ ~ 50℃(normal operating temperature)
	-5℃ ~ 45℃(When using transceiver modules with maximum transmission distance < 80km)
	-5℃ ~ 40℃(When using transceiver modules with maximum transmission distance ≥ 80km)
	-60m-5000m altitude: From 0m, the maximum operating temperature reduce by 0.33℃ for every time 100 the altitude increases by 100m.
Storage temperature	-40℃～+70℃
Operating& storage humidity (noncondensing)	5%～95%
EMC	FCC Part 15 Subpart B CLASS A
	ICES-003 CLASS A
	VCCI CLASS CISPR
	32 CLASS A EN
	55032 CLASS A
	AS/NZS CISPR32 CLASS A
	CISPR 24
	EN 55024
	EN 61000-3-2
	EN 61000-3-3
	ETSI EN 300 386 for telecommunications center installations
	GB/T 9254
	YD/T 993

Safety	UL 60950-1
	CAN/CSA C22.2 No 60950-1
	IEC 60950-1
	EN 60950-1
	AS/NZS 60950-1
	FDA 21 CFR Subchapter J
	GB 4943.1

Ordering Information

Product ID	Product Description
LS-5130S-28S-HI-GL	H3C S5130S-28S-HI Ethernet Switch with 24*10/100/1000BASE-T Ports, 8*100/1000BASE-X SFP Combo Ports, and 4*1G/10G BASE-X SFP Plus Ports, dual power supply slots
LS-5130S-52S-HI-GL	H3C S5130S-52S-HI Ethernet Switch with 48*10/100/1000BASE-T Ports and 4*1G/10G BASE-X SFP Plus Ports, dual power supply slots
LS-5130S-28S-PWR-HI-GL	H3C S5130S-28S-PWR-HI Ethernet Switch with 24*10/100/1000BASE-T PoE+ Ports, 4*100/1000BASE-X SFP Combo Ports, and 4*1G/10G BASE-X SFP Plus Ports, dual power supply slots
LS-5130S-52S-PWR-HI-GL	H3C S5130S-52S-PWR-HI Ethernet Switch with 48 10/100/1000BASE-T PoE+ Ports and 4 1G/10G BASE-X SFP Plus Ports, dual power supply slots
LS-5130S-28C-HI-GL	H3C S5130S-28C-HI L2 Ethernet Switch with 24*10/100/1000BASE-T Ports and 8*SFP Combo Ports and 4*10G BASE-X SFP Plus Ports and 1*Slot, dual power supply slots
LS-5130S-52C-HI-GL	H3C S5130S-52C-HI L2 Ethernet Switch with 48*10/100/1000BASE-T Ports and 2*SFP Combo Ports and 2*10G BASE-X SFP Plus Ports and 1*Slot, dual power supply slots
LS-5130S-28C-PWR-HI-GL	H3C S5130S-28C-PWR-HI L2 Ethernet Switch with 24*10/100/1000BASE-T(PoE+) Ports and 4*SFP Combo Ports and 4*10G BASE-X SFP Plus Ports and 1*Slot, dual power supply slots
LS-5130S-52C-PWR-HI-GL	H3C S5130S-52C-PWR-HI L2 Ethernet Switch with 48*10/100/1000BASE-T(PoE+) Ports and 2*SFP Combo Ports and 2*10G BASE-X SFP Plus Ports and 1*Slot, dual power supply slots
Power supply	
PSR75-12A-GL	75W AC Pluggable Power Module
PSR150-A1-GL	150W Asset-manageable AC Power Module
PSR150-D1-GL	150W Asset-manageable DC Power Module
LS5M1560DC	560W DC Pluggable Power Module
PSR360-56A-GL	360W PoE AC Power Supply Module
PSR720-56A-GL	720W PoE AC Power Supply Module
PSR1110-56A-GL	1110W PoE AC Power Supply Module
Transceivers	
SFP-GE-SX-MM850-A	1000BASE-SX SFP Transceiver, Multi-Mode (850nm, 550m, LC)
SFP-GE-LX-SM1310-A	1000BASE-LX SFP Transceiver, Single Mode (1310nm, 10km, LC)
SFP-GE-LH40-SM1310	1000BASE-LH40 SFP Transceiver, Single Mode (1310nm, 40km, LC)
SFP-GE-LH40-SM1550	1000BASE-LH40 SFP Transceiver, Single Mode (1550nm, 40km, LC)
SFP-GE-LH80-SM1550	1000BASE-LH80 SFP Transceiver, Single Mode (1550nm, 80km, LC)
SFP-GE-LH100-SM1550	1000BASE-LH100 SFP Transceiver, Single Mode (1550nm, 100km, LC)
SFP-GE-LX-SM1310-BIDI	1000BASE-LX BIDI SFP Transceiver, Single Mode (TX1310/RX1490, 10km, LC)
SFP-GE-LX-SM1490-BIDI	1000BASE-LX BIDI SFP Transceiver, Single Mode (TX1490/RX1310, 10km, LC)

SFP-GE-T	1000BASE-T SFP
SFP-XG-LX-SM1310-E	SFP+ Module (1310nm,10km, LC)
SFP-XG-SX-MM850-E	SFP+ Module (850nm,300m, LC)
Cables	
CAB-CON-1.8m	Single Cable, Console Serial Port Cable,1.8m, D9F,28UL20276(4P) (P296U),MPH-8P8C
LSWM1STK	SFP+ Cable 0.65m
LSWM2STK	SFP+ Cable 1.2m
LSWM3STK	SFP+ Cable 3m
LSTM1STK	SFP+ Cable 5m

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