

H3C S5130V2-LI Green Intelligent Gigabit Ethernet Switch

Product Overview

H3C S5130V2-LI switch is a new generation of high performance, high port density,

Highly secure and easy to install intelligent manageable Gigabit Ethernet switch, supporting IPv4/IPv6 dual stack management and forwarding, static routing protocols and routing protocols such as RIP and OSPF.

The protocol supports rich management and security features.

H3C S5130V2-LI is mainly positioned in the access layer and aggregation layer of enterprises and parks, meeting high-density Gigabit access and fixed Gigabit uplink ports.

Together we build high-performance end-to-end IP network solutions.



S5130V2-10P-LI



S5130V2-10P-HPWR-LI



S5130V2-12S-HPWR-LI



S5130V2-20P-LI



S5130V2-28P-LI



S5130V2-28P-PWR-LI



S5130V2-28P-HPWR-LI



S5130V2-28S-LI



S5130V2-28S-PWR-LI



S5130V2-28S-HPWR-LI



S5130V2-52P-LI



S5130V2-52P-PWR-LI



S5130V2-52S-LI



S5130V2-52S-PWR-LI

The H3C S5130V2-LI series Ethernet switches include the following models:

- S5130V2-10P-LI: 8 x 10/100/1000 BASE-T electrical ports + 2 x 1000 BASE-X SFP ports
- S5130V2-10P-HPWR-LI: 8 x 10/100/1000 BASE-T POE+ ports + 2 x 1000 BASE-X SFP ports
- S5130V2-12S-HPWR-LI: 8 x 10/100/1000BASE-T POE+ ports + 4 x 1G/10G BASE-X SFP+ ports
- S5130V2-20P-LI: 16 x 10/100/1000 BASE-T ports + 4 x 1000 BASE-X SFP ports
- S5130V2-28P-LI: 24 x 10/100/1000 BASE-T ports + 4 x 1000 BASE-X SFP ports
- S5130V2-28P-PWR-LI: 24 x 10/100/1000BASE-T PoE ports + 4 x 1000BASE-X SFP ports
- S5130V2-28P-HPWR-LI: 24 x 10/100/1000BASE-T PoE ports + 4 x 1000BASE-X SFP ports
- S5130V2-28S-LI: 24 x 10/100/1000 BASE-T ports + 4 x 1G/10G BASE-X SFP+ ports
- S5130V2-28S-PWR-LI: 24 x 10/100/1000BASE-T POE+ ports + 4 x 1G/10G BASE-X SFP+ ports
- S5130V2-28S-HPWR-LI: 24 x 10/100/1000BASE-T POE+ ports + 4 x 1G/10G BASE-X SFP+ ports
- S5130V2-52P-LI: 48*10/100/1000BASE-T ports + 4*1000BASE-X SFP ports
- S5130V2-52P-PWR-LI: 48 10/100/1000BASE-T POE+ ports + 4 1000BASE-X SFP ports
- S5130V2-52S-LI: 48*10/100/1000BASE-T electrical ports + 4*1G/10G BASE-X SFP+ ports
- S5130V2-52S-PWR-LI: 48 x 10/100/1000BASE-T POE+ ports + 4 x 1G/10G BASE-X SFP+ ports

Features

SmartMC (Smart Management Center)

As the network scale increases, a large number of access devices are required at the network edge, which makes the management of these devices very cumbersome. The main purpose of SmartMC is to solve

The centralized management of a large number of scattered network devices is designed to solve the operation and maintenance tasks of small enterprises mainly based on switches. SmartMC uses built-in devices and graphical operations to achieve

Unified operation, maintenance and management of the network

SmartMC's four business segments simplify the operation, maintenance, and management of small and medium-sized campuses:

Intelligent management:

Mainly includes device role selection, FTP server configuration, global configuration and network management port configuration, etc.

Intelligent Operation and Maintenance:

Mainly includes group management, equipment or group upgrade backup, monitoring and equipment failure replacement, etc.

Visualization:

Mainly includes network topology visualization and management, device list display, etc.

Smart Business:

It mainly includes user management, etc.: After creating network access users and successfully activating them, these users can access the SmartMC network through the one-click deployment port.

H3C S5130V2-LI series switches can be used as SmartMC managed devices. When connected to the SmartMC network, they can be easily maintained.

Rich business performance

H3C S5130V2-LI supports Internet broadband access, mainly supports Gigabit access for users of small and medium-sized enterprise networks, supports multimedia services such as VOD, supports delay-sensitive services such as VoIP, etc.

Provides voice services. It supports multicast audio and video services and gigabit uplink access. It supports 9216 Jumbo Frame, 802.1X, MAC authentication.

Certificate, port security, support LACP protocol, support 4K VLAN, support large MAC address table and black hole MAC and other features, support port-based second and third layer priority automatic mapping,

Supports port-based mirroring, redirection, port isolation, access control lists, port rate limiting, IPv6, Ethernet OAM: 802.3ah and 802.1ag (CFD: Connectivity Fault Detection), etc.

IRF2 (Intelligent Resilient Fabric, Second Generation)

H3C S5130V2-LI series Gigabit Ethernet switches support the innovative IRF (Intelligent Resilient Framework) technology, which allows users to

Multiple S5130V2-LI switches are connected to form a logically independent entity, thereby building a new intelligent network with high reliability, easy scalability and easy management.

H3C S5130V2-LI series Gigabit Ethernet switches support long-distance stacking. Users can stack switches located in different locations over optical fibers to make them more accessible.

Multiple devices in different domains and locations form a logical entity, and 1:N backup between devices further improves network reliability and manageability.

IRF provides the following benefits to users:

Simplified management After the IRF architecture is formed, you can connect to any port of any device to log in to a unified logical device, and achieve management through the configuration of a single device.

Manage the entire intelligent elastic system and the effects of all member devices within the system without having to physically connect to each member device to configure and manage them individually.

Simplify the business IRF formed logical device running various control protocols are also run as a single device unified, for example, the routing protocol will be calculated as a single device, and

With the application of cross-device link aggregation technology, the original spanning tree protocol can be replaced, which can save a lot of protocol message interactions between devices and simplify network operation.

This shortens the convergence time during network turbulence.

Elastic expansion can be realized according to user needs to ensure user investment. And when new devices join or leave the IRF architecture, they can be "hot-swapped" without affecting the

Normal operation of other equipment.

High reliability The high reliability of IRF is reflected in the three aspects of link, device and protocol. The physical ports between member devices support aggregation function, and the IRF system and upper and lower layer devices have high reliability.

The physical connection also supports aggregation function, which improves the reliability of the link through multi-link backup; the IRF system consists of multiple member devices. Once the Master device fails,

The system will automatically elect a new Master to ensure that the business through the system is not interrupted, thus achieving device-level 1:N backup; the IRF system will have real-time protocol hot standby

The backup function is responsible for backing up the protocol configuration information to all other member devices, thereby achieving 1:N protocol reliability.

For high-end switches, the performance and port density improvements are limited by the hardware structure. However, the performance and port density of an IRF system are the sum of the performance and port numbers

of all devices within the IRF. Therefore, IRF technology can easily increase the switching capacity of the device and the density of user ports by several times, thereby significantly improving the performance of the device.

able.

Complete security control strategy

H3C S5130V2-LI series switches support the innovative single-port multi-authentication Triple function. In a network environment with diverse client forms, different clients support access authentication.

For example, some clients can only perform MAC address authentication (such as printer terminals), some user hosts perform 802.1X authentication, and some user hosts only want to

To flexibly adapt to the multiple authentication requirements of this network environment, the S5130V2-LI series switches support a unified deployment of multiple authentication on a single port.

The client provides Guest authentication.

The VLAN function allows authorized access points to access only specific resources and adopt corresponding policies, such as obtaining 802.1x clients and upgrading clients.

Or obtain other upgrade programs, etc. Support for Secure Shell V2 (SSH V2) can provide secure information protection and strong authentication functions to protect Ethernet switches from attacks such as IP

address spoofing and plain text password interception.

ARP attacks and ARP viruses are the biggest threats to LAN security. H3C S5130V2-LI series switches support a variety of ARP defense functions, such as ARP Detection,

Implement user legitimacy check function and ARP message validity check function, ARP rate limit, avoid the impact of a large number of ARP messages on the CPU, etc.

H3C S5130V2-LI series switches support EAD (Terminal Access Control) function, which can be used with the background system to connect terminal security measures such as terminal anti-virus and patch repair to the network.

The network security measures such as access control and access permission control are integrated into a coordinated security system, which makes the whole system safe through the inspection, isolation, repair, management and monitoring of network access terminals.

The network changes from passive defense to active defense, from single-point defense to comprehensive defense, and from decentralized management to centralized policy management, thus improving the network's ability to withstand emerging security threats such as viruses and worms.

Overall defensive capabilities.

Rich QoS policies

H3C S5130V2-LI series switches support L2 (Layer 2) ~ L4 (Layer 4) packet filtering, providing

Destination IP address, TCP/UDP port number, protocol type, VLAN flow classification. Provides flexible queue scheduling algorithm, can be set based on both port and queue, support

SP, WRR, SP+WRR three modes. It also supports inbound/outbound bidirectional ACL, traffic monitoring CAR function, and inbound/outbound port/flow mirroring for designated

Monitor the packets on the port and copy the packets on the port to the monitoring port for network detection and troubleshooting.

Supports sFlow function, samples data packets on the network, accurately monitors network traffic on Gigabit high-speed networks, and is used for statistical analysis and control of network traffic.

Excellent manageability

H3C S5130V2-LI series switches support SNMPv1/v2/v3 (Simple Network Management Protocol), and can support common network management platforms such as Open View and

IMC Intelligent Management Center. Supports CLI command line, Web network management, and TELNET, making device management more convenient. It also supports encryption methods such as SSH2.0, making management more secure.

H3C S5130V2-LI series switches support VLAN division based on MAC address, which is a good solution for the intelligent and flexible management of mobile office.

The issuance of ACL policies simplifies user configuration and significantly saves hardware resources.

H3C S5130V2-LI switch supports BIMS protocol, which can automatically download configuration files and applications from the server to achieve zero-configuration startup, greatly reducing the cost of large networks and complex

The initial configuration workload of a complex network.

High reliability

H3C S5130V2-LI series switches have multiple reliability protections at the device and link levels. The hardware supports overcurrent protection, overvoltage protection, and overheating protection technologies; it supports power supply and fan

Fan fault detection and alarm can automatically adjust the fan speed according to temperature changes. These designs make the equipment highly reliable.

In addition to device-level reliability, the product also supports a variety of link-level reliability technologies, including LACP/STP/RSTP/MSTP and other protection protocols.

The link aggregation of the equipment greatly improves the network reliability. When the network carries multiple services and large traffic, it does not affect the network convergence time, ensuring the normal operation of the business.

S5130V2-LI can limit attacks on the CPU by illegal packets, protecting the switch from operating stably in various environments.

Professional lightning protection function

H3C S5130V2-LI series switches adopt professional built-in lightning protection technology and support the industry-leading 10KV service port lightning protection capability, making it safe even in relatively harsh working environments.

It can greatly reduce the damage rate of lightning strikes to equipment.

Green and energy-saving

H3C S5130V2-LI series switches adopt the latest energy-saving chips and innovative architecture design to achieve the lowest power consumption of Gigabit switches, bringing green, environmental protection and energy saving to users.

A new network access product with high performance, reducing user maintenance costs.

At the same time, the H3C S5130V2-LI series switches adopt a variety of green energy-saving designs, including auto-power-down (port automatic energy saving). If the interface status is always

If the port is down, the system will automatically stop supplying power to the port and enter energy saving mode. It supports EEE energy saving function. If the port is idle for a period of time, the system will automatically

The port is set to energy-saving mode. When there are messages being sent or received, the port is awakened by the monitoring code stream sent regularly to resume business, achieving energy-saving effects and meeting material environmental protection and safety requirements.

EU RoHS standards.

Product Specifications

project	S5130V 2-10P- THAT	S5130 V2- 10P- HPWR- THAT	S5130 V2- 12S- HPWR- THAT	S51 30V 2- 20P -LI	S51 30V 2- 28P -LI	S5130 V2- 28P- PWR- THAT	S5130 V2- 28P- HPWR- THAT	S51 30V 2- 28S -LI	S5130 V2- 28S- PWR- THAT	S5130 V2- 28S- HPWR- THAT	S51 30V 2- 52P -LI	S5130 V2- 52P- PWR- THAT	S51 30V 2- 52S -LI	S5130 V2- 52S- PWR- THAT
Switching capacity	672Gbps/6.72Tbps													
Packet forwarding rate	108 Mpps	108 Mpps	108 Mpps	108M pps	126M pps	126Mpps s	126Mpps s	126M pps	126Mpps s	126Mpps s	166M pps	166Mpps s	166M pps	166Mpps s
Business Port	8*10/100/1000BAS ET electrical port +2*1000B ASE-X SFP port	8*10/100/1000B ASE-T(POE+) electrical port +2*1000B ASE-X SFP port	8*10/100/1000B ASE-T(POE+) electrical port +4*1G/10G ASE-X SFP+ ports	16*10/100/1000 BASE-T Electric +4*1000BASE SE-X SFP port	24*10/100/1000 BASE-T Electric +4*1000BASE SE-X SFP port	24*10/100/1000 BASE-T(POE+) electrical port +4*1000BASE SE-X SFP y	24*10/100/1000 BASE-T(POE+) electrical port +4*1000BASE SE-X SFP y	24*10/100/1000 BASE-T +4*1000BASE SE-X SFP y	48*10/100/1000 BASE-T +4*1000BASE SE-X SFP y	48*10/100/1000 BASE-T +4*1000BASE SE-X SFP y				
stacking	Maximum number of stacking units: 9 units													
Dimensions (Width x Depth x High, Single (mm))	266x160x43.6	330*230*43.6	330*230*43.6	330*230*43.6	440x160x43.6	440*260*43.6	440*260*43.6	440x160x43.6	440*260*43.6	440*260*43.6	440x260x43.6	440*260*43.6	440*260*43.6	440*260*43.6
weight	y1.2 kg	y2.3kg y2.3kg	y	y 1.9kg	y2.1 kg	y3.7kg y3.7kg y 2.1kg	y	y3.7kg	y3.7kg	y3.7kg	y3.1 kg	y4.1 kg	y 3.4kg	y4.1 kg
Input voltage	AC:180-264V,47-53Hz	AC:90-264V,47-63Hz	AC:90-264V,47-63Hz	AC:180-264V,47-53Hz	AC:180-264V,47-53Hz	AC:90-264V,47-63Hz	AC:90-264V,47-63Hz	AC:180-264V,47-53Hz	AC:90-264V,47-63Hz	AC:90-264V,47-63Hz	AC:180-264V,47-53Hz	AC:90-290V,47-63Hz	AC:180-264V,47-53Hz	AC:90-290V,47-63Hz
Power consumption (typical state)	ACy11W	ACy 13W	ACy 13W	ACy 12W	ACy 14W	AM: 21W	ACy 18W	ACy 14W	ACy 21W	ACy 18W	ACy 28W	ACy 27W	ACy 18W	ACy 27W
Power consumption (full load Load time)	ACy14W	ACy 157W (PoE powered) 125W y	ACy 161W (PoE powered) 125W y	ACy 17W	ACy 21W	ACy 300W (PoE power supply) 240W y	ACy 449W (PoE powered) 375W y	ACy 28W	ACy 303W (PoE power supply) 240W y	ACy 451W (PoE power supply) 375W y	ACy 39W	ACy 473W (PoE powered) 375W y	one ACy 38W	ACy 476W (PoE powered) 375W y
Working temperature	-5y45y													
Work Environment relative humidity	5%y95% (non-condensing)													

Service Features

characteristic	Feature Description
Link Aggregation	Support GE port aggregation
	Support static aggregation
	Support dynamic aggregation
	Support cross-device aggregation
Flow Control	Support 802.3x flow control and half-duplex back pressure flow control
MAC address table	Support black hole MAC address
	Support setting the maximum number of port MAC addresses to learn
VLAN	Support port-based VLAN

	Support QinQ and flexible QinQ
	Support Voice VLAN
	Support protocol VLAN
	Support MAC VLAN
ARP	Supports free ARP
	Support ARP Detection function (can be checked according to DHCP Snooping security table items, 802.1x table items, or IP/MAC static binding table items)
	Support ARP rate limit
ND	Support ND
	Support ND Snooping
VLAN Virtual interface	support
DHCP	Support DHCP Client
	Support DHCP Snooping
	Support DHCP Relay
	Support DHCP Server
	Support DHCP Option 82
Unicast routing	Support IPv4/IPv6 static routing
	Support RIP/RIPng, OSPF v2/v3
Multicast	Support IGMP Snooping
	Supports MLD Snooping
	Support multicast VLAN
Broadcast/Multicast/Unicast Explosion Suppression	Support storm suppression based on port rate percentage
	Support PPS-based storm suppression
	Support bps-based storm suppression
Layer 2 Ring Network Protocol	Supports STP/RSTP/MSTP protocols
	Supports STP Root Protection
	Support BPDU Protection
	Supports G.8032 Ethernet Ring Protection Protocol ERPS, with a switching time of 50ms, and is compatible with other products that support this protocol
QoS/ACL	Support 802.1p/DSCP priority marking
	Support packet filtering function
	Support SP/WRR/SP+WRR queue scheduling
	Support port-based speed limiting
	Supports flow-based redirection
	Support time period
Mirror	Support port mirroring
	Support flow mirroring
	Support remote mirroring
Safety Features	Support user hierarchical management and password protection
	Support AAA authentication
	Support Radius authentication
	Support HWTACACS
	Support SSH2.0
	Support port isolation

	Support 802.1X
	Support port security
	Support MAC address authentication
	Support IP Source Guard
	Support HTTPs
	Support EAD
802.1X	Support 802.1X authentication
	Support port-based authentication and MAC-based authentication
	Support for Guest VLAN
	Supports TRUNK port authentication
	Support dynamic delivery of QoS/ACL/VLAN based on 802.1x
Loading and Upgrading	Support XModem protocol to load and upgrade
	Support FTP (File Transfer Protocol) loading and upgrading
	Support TFTP (Trivial File Transfer Protocol) loading and upgrading
manage	Support command line interface (CLI) configuration
	Support Telnet remote configuration
	Support configuration through the Console port
	Support SNMPv1/2/3 Network Management Protocol
	Support RMON (Remote Monitoring) alarms, events, and history records
	Support IMC network management system
	Support WEB network management
	Support system log
	Support graded alarms
	Support NTP
	Support power supply, fan, and temperature alarms
	maintain
Support Ping and Tracert	
Support Telnet remote maintenance	
Support NQA	
Support 802.1ag	
Support 802.3ah	
Support DLDP	
Supports Virtual Cable Test	

*Not supported in the current version, but may be supported in later versions

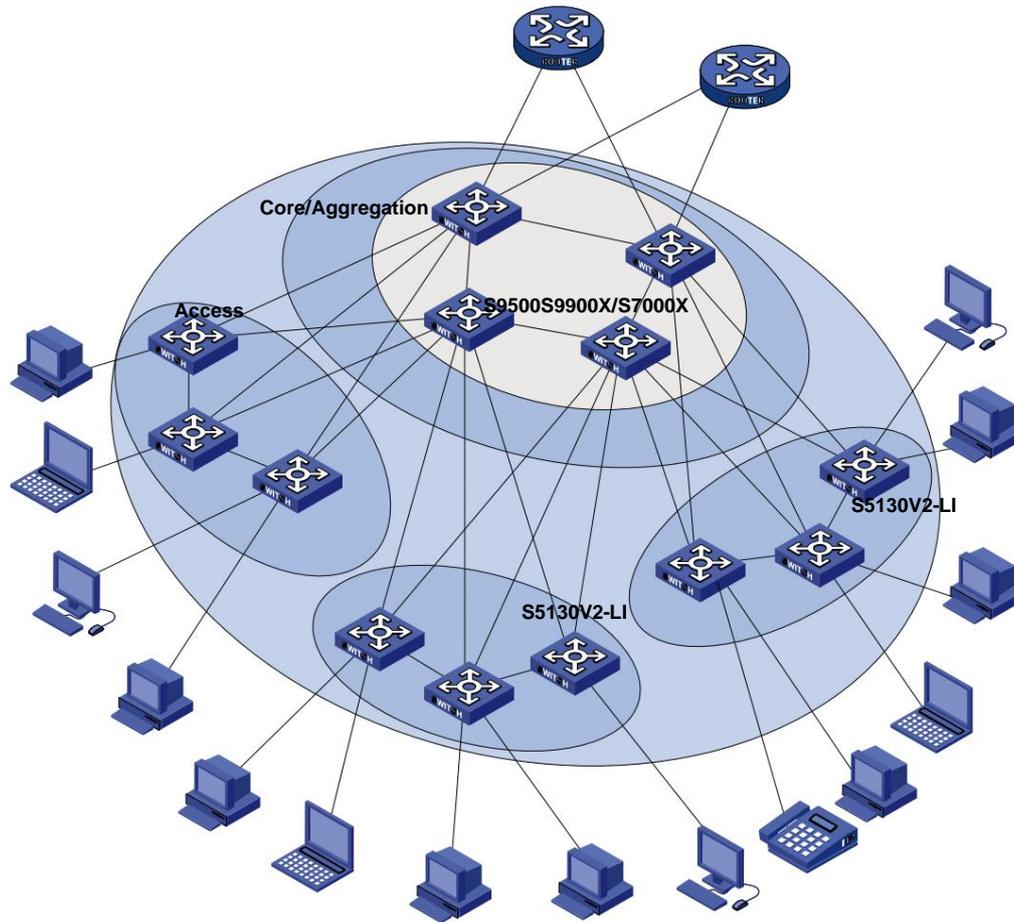
Networking Application

Typical applications in large campus networks

The S5130V2-LI series Ethernet switches can be used as access layer switches, providing users with high access bandwidth and high port density.

PoE function can supply power to IP Phone, WLAN AP (Wireless LAN Access Point) and other PD devices supporting IEEE802.3at through Ethernet cable, which is convenient for users to

Network maintenance and management.



S5130V2-LI access layer networking application

Optional information

Host Purchase

H3C S5130V2-LI Series Ethernet Switch Host Optional Configurations:

Device Name	Quantity	Notes
S5130V2-10P-LI Ethernet switch host	1	Optional
S5130V2-10P-HPWR-LI Ethernet switch host	1	Optional
S5130V2-12S-HPWR-LI Ethernet switch host	1	Optional
S5130V2-20P-LI Ethernet switch host	1	Optional
S5130V2-28P-LI Ethernet switch host	1	Optional
S5130V2-28P-PWR-LI Ethernet switch host	1	Optional
S5130V2-28P-HPWR-LI Ethernet switch host	1	Optional
S5130V2-28S-LI Ethernet switch host	1	Optional
S5130V2-28S-PWR-LI Ethernet switch host	1	Optional
S5130V2-28S-HPWR-LI Ethernet switch host	1	Optional

Device Name	Quantity	Notes
S5130V2-52P-LI Ethernet switch host	1	Optional
S5130V2-52P-PWR-LI Ethernet switch host	1	Optional
S5130V2-52S-LI Ethernet switch host	1	Optional
S5130V2-52S-PWR-LI Ethernet switch host	1	Optional



New H3C Technologies Co., Ltd.

Beijing Headquarters

No. 1, Lixinghang Center, No. 8 Guangshun South Street, Chaoyang District, Beijing

Zip code: 100102

Hangzhou Headquarters

No. 466, Changhe Road, Binjiang District, Hangzhou

Zip code: 310052

Tel: 0571-86760000

Fax: 0571-86760001

<http://www.h3c.com>

Customer Service

Hotline : 400-810-0504

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