



H3C S5130-EI Next Generation High Performance GE Switch

Overview

H3C S5130-EI is the latest development of Gigabit speed Layer 2 Ethernet switch. This powerful and highly secure series switch is based on industry-leading high performance hardware architecture and H3C Comware V7 platform. It supports diversified services, high capacity GE access port as well as high density 10GE uplink, which meet the requirements for high density campus access and high performance aggregation.



S5130-EI 28 ports Family Switches



S5130-EI 52 ports Family Switches

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

- S5130-28S-EI: 24 10/100/1000BASE-T Ethernet ports, 4 10G BASE-X SFP+ ports;
- S5130-52S-EI: 48 10/100/1000BASE-T Ethernet ports, 4 10G BASE-X SFP+ ports;
- S5130-28F-EI: 24 100/1000Base-X SFP Ethernet ports, 8 10/100/1000BASE-T Combo ports, 4 10G BASE-X SFP+ ports;
- S5130-28S-PWR-EI: 24 10/100/1000BASE-T Ethernet ports (PoE+), 4 10G BASE-X SFP+ ports;
- S5130-28S-HPWR-EI: 24 10/100/1000BASE-T Ethernet ports (PoE+), 4 10G BASE-X SFP+ ports;
- S5130-52S-PWR-EI: 48 10/100/1000BASE-T Ethernet ports (PoE+), 4 10G BASE-X SFP+ ports;
- S5130-28TP-EI: 24 10/100/1000BASE-T Ethernet ports, 2 10G BASE-X SFP+ ports, 2 10G BASE-T ports;
- S5130-52TP-EI: 48 10/100/1000BASE-T Ethernet ports, 2 10G BASE-X SFP+ ports, 2 10G BASE-T ports;
- S5130-28TP-PWR-EI: 24 10/100/1000BASE-T Ethernet ports (PoE+), 2 10G BASE-X SFP+ ports, 2 10G BASE-T ports;
- S5130-52TP-PWR-EI: 48 10/100/1000BASE-T Ethernet ports (PoE+), 2 10G BASE-X SFP+ ports, 2 10G BASE-T ports;

Features

High scalability for investment protection

- The S5130-EI series switch supports 4 built-in 10GE ports, and protects your investment by providing 10GE access as well as 10GE uplink at a high price-to-performance ratio. The S5130-EI series switch also comes with IRF2 (Intelligent Resilient Framework 2), allowing you to build an IRF virtual device by interconnecting 9 devices. You can smoothly upgrade your network capacity as your business grows, and provide a highly flexible and expandable user network configuration. The 10GE BASE-T 5130 models have been added into the S5130-EI family to provide a 100 meter 10GE connection, allowing 10GE server connection and aggregation at a lower cost.

Diversified IPv6 features

- The S5130-EI series switch supports IPv4 and IPv6 dual stack protocols as well as IPv4 and IPv6 forwarding at full line speed on hardware. It supports IPv4/v6 static routing and routing information protocol (RIP). In addition, it supports ACL, QoS, multicast and network management which allow seamless transition upgrading from IPv4 to IPv6.

Intelligent Resilient Framework 2 (IRF2)

The S5130-EI switch series supports IRF2 (Intelligent Resilient Framework 2) that allows you to build a virtual device by interconnecting multiple devices simultaneously. You can manage the IRF virtual device as a whole. IRF benefits include:

- Simplify Management - You can log in to an IRF virtual device by connecting to any port of any member to manage all of its members through a single deployment, without having to connect to every member physically in order to deploy and manage them separately.
- Resilient Expandability - IRF can be flexibly expanded to suit users' needs to protect their investment. Switches can be added to or deleted from IRF by hot plugging, without affecting the running of other switches.
- High Reliability – The IRF delivers high reliability for links, switches, and protocols. It allows aggregation of physical ports of member switches and physical connections between the IRF system and its upper and lower level switches. The multi-link backup greatly enhances link reliability. An IRF system consists of a number of member switches. If the master switch fails, the system will immediately elect a new master to ensure that services are not interrupted. This provides the 1: N backup at the switch level. The IRF system provides real-time hot backup of protocols, backing up configurations to all other members to achieve 1:N protocol reliability.
- High Performance - For high-end switches, improvements on performance and port density will be constrained by the hardware structure. The performance and port density of an IRF system, however, are the sum of all switches and ports within it. Therefore, IRF can easily multiply the switching capabilities and port density to greatly improve switch performance.

Comprehensive security control policy

- The S5130-EI series switch 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 S5130-EI series switch 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.

Multiple QoS Policies

- The H3C S5130-EI series switch supports L2 to L4 packet filtering and traffic classification by source or destination MAC address, source or destination IP address, TCP/UDP port number, protocol type, and VLAN. They also support flexible queue scheduling algorithms including strict priority (SP), weighted round robin (WRR) and SP+WRR. It can also support ingress/egress bidirectional ACL, CAR (committed access rate) flow control and ingress/egress port/flow mirroring. The S5130-EI series switch also support sFlow by collecting sample packets from the network, measuring network traffic accurately on GE/10GE high speed network, and carrying out network traffic analysis and control.

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 S5130-EI network series switch support a large network flow table. Combined with H3C SDN controller, it can implement a two-layer network architecture with ease and quickly add functions in existing network which drastically reduces network management complexity while substantially lowers network maintenance cost.

Outstanding Manageability

- The H3C S5130-EI series switch supports SNMPv1/v2/v3, and can be managed by NM platforms, for example Open View and iMC. With CLI and Telnet, switch management is made easier. And with SSH 2.0 encryption, switch management security is enhanced.

High reliability through redundancy

- The S5130-EI series switch features multiple redundancy measures at the device and link levels, support current and voltage surge control, overheat protection, power and fan troubleshooting and alert, as well as fan speed adjustment when the temperature changes. S5130-EI series switch supports RPS (Redundant Power System) 800/1600 to increase power input resilience. S5130-28F-EI switch also supports hot swappable AC/DC dual power supply.
- Apart from device level redundancy, the S5130-EI series switch also provides diverse link redundancy support such as LACP/STP/RSTP/MSTP/Smart Link protocols. It supports IRF2 and 1: N redundancy backup as well as cross-device link aggregation which substantially increases network reliability.

Specifications

Item	S5130-28S-EI S5130-28TP-SI	S5130-52S-EI S5130-52TP-EI	S5130-28F-EI	S5130-28S-HPWR-EI S5130-28S-PWR-EI S5130-28TP-PWR-EI	S5130-52S-PWR-EI S5130-52TP-PWR-EI
Overall switching capacity	256Gbps				
Packet forwarding rate	96Mpps	132Mpps	96Mpps	96Mpps	132Mpps
Fixed ports	24*10/100/1000Base-T 4*10G BASE-X SFP+ 24*10/100/1000Base-T 2*10G BASE-X SFP+, 2*10G BASE-T	48*10/100/1000Base-T 4*10G BASE-X SFP+ 48*10/100/1000Base-T 2*10G BASE-X SFP+, 2*10G BASE-T	24*100/1000Base-X GE optical (8*Com- bo); 4*10G BASE-X SFP+	24*10/100/1000Base-T 4*10G BASE-X SFP+ 24*10/100/1000Base-T 2*10G BASE-X SFP+, 2*10G BASE-T	48*10/100/1000Base-T 4*10G BASE-X SFP+ 48*10/100/1000Base-T 2*10G BASE-X SFP+, 2*10G BASE-T
Link aggregation	GE/10GE port aggregation Dynamic aggregation Cross-device aggregation				
Broadcast/multicast/ unicast storm control	IEEE802.3x flow control (full duplex) Storm control based on port rate percentage PPS/BPS-based storm control				
IRF2	Intelligent Resilient Framework 2 Standard-based Ethernet port stacking Local and remote stacking Distributed device management and distributed link aggregation				
SDN/ Openflow	OpenFlow 1.3 Multiple controllers (EQUAL, master/slave) Multiple tables flow Group table Meter				
VLAN	Port based VLAN MAC based VLAN Protocol based VLAN QinQ, flexible QinQ VLAN Mapping Voice VLAN MVRP				

Specifications (continued)

Item	S5130-28S-EI	S5130-52S-EI	S5130-28F-EI	S5130-28S-HPWR-EI	S5130-52S-PWR-EI
	S5130-28TP-SI	S5130-52TP-EI		S5130-28TP-PWR-EI	S5130-52TP-PWR-EI
ACL	Layer 2 to Layer 4 packet filtering, source and destination MAC addresses, source and destination IP addresses, TCP/UDP ports, protocol types, VLAN traffic				
	Time Range ACL				
	Port, VLAN, overall ACL				
	Bi-directional ACL				
QoS	Support port-based line rate, and packet speed forwarding limit				
	Packet re-direction				
	Committed Access Rate (CAR)				
	Eight queues per port				
DHCP	SP, WRR, and SP/WRR queue scheduling algorithms				
	802.1p/DSCP precedence marking				
	DHCP Client				
	DHCP Snooping				
	DHCP Snooping option82				
	DHCP Relay				
	DHCP Server				
IP Routing	IPv4 static route, RIPv1/v2				
	IPv6 dynamic route, RIPng				
Multicast	IGMP Snooping /MLD Snooping				
	VLAN Multicast				
MSTP	STP/RSTP/MSTP/PVST				
	Smart Link				
OAM	802.1ag				
	802.3ah				
Mirroring	Port mirroring				
	Remote port mirroring (RSPAN)				
	Stream mirroring				
Security	User level management and password protection				
	802.1X /centralized MAC address authentication				
	Guest VLAN				
	RADIUS				
	SSH 2.0				
	Port isolation				
	Port security				
	MAC address learning limit				
	IP source guard				
	ARP Detection IP+MAC+Port multiple binding				
Management and maintenance	Upgrade via the XModem, File Transfer Protocol (FTP) and Trivial File Transfer Protocol (TFTP)				
	Configuration via CLI, Telnet, and Console port				
	SNMPv1/v2/v3, RMON alarm, event and log				
	H3C Intelligent Management Centre (iMC)				
	NTP				
	Ping, Tracert				
	Virtual cable test (VCT)				
	Device link detection protocol (DLDP)				

Specifications (continued)

Item	S5130-28S-EI S5130-28TP-SI	S5130-52S-EI S5130-52TP-EI	S5130-28F-EI	S5130-28S-HPWR-EI S5130-28S-PWR-EI S5130-28TP-PWR-EI	S5130-52S-PWR-EI S5130-52TP-PWR-EI
	Loopback-detection				
	Alarming for power supply, fan, and temperature				
	BFD				
Green functions	IEEE(802.3az)				
	Port auto power down				
	Timed port auto down (schedule job)				
PoE	N/A			S5130-28S-PWR-EI: 180W S5130-28S-HPWR-EI: AC input: 370W DC input: 740W S5130-28TP-PWR-EI: AC input: 370W DC input: 740W	AC input: 370W DC input: 740W
Input voltage	Rated voltage range: AC: 100V~240V 50 Hz or 60 Hz	Rated voltage: AC: 100V~240V 50/60Hz DC: -36V ~ -72V	Rated voltage: AC: 100V~240V 50/60Hz DC: -36V ~ -72V	Rated voltage: AC: 100V~240V 50/60Hz DC: -54V ~ -57V	Rated voltage: AC: 100V~240V 50/60Hz DC: -54V ~ -57V
Physical dimensions (W × D × H mm)	440×160×43.6	440×260×43.6	440×360×43.6	S5130-28S-PWR-EI: 440×260×43.6 S5130-28S-HPWR-EI: 440×300×43.6 S5130-28TP-PWR-EI: 440×300×43.6	440×360×43.6
Operating temperature	0°C ~ 45°C				
Operating humidity (non-condensing)	5% ~ 95%				

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