



H3C S5560X-EI Series Converged Gigabit Switches

Release Date: January, 2022



New H3C Technologies Co., Limited

Product overview

H3C S5560X-EI is a series of intelligent scalable GE switches with outstanding performance, high port density, and ease of installation. It offers the following benefits:

- Industry-leading high-performance hardware architecture with H3C's state-of-the-art Comware 7 operating system.
- Seamless wired and wireless integration on a unified switching platform. The license-based wireless access controller functionality enables wired and wireless local forwarding at the access layer, eliminates the bandwidth bottlenecks typical of a wireless controller, expands wireless deployment, and saves TCO.
- Reliable hardware design with modular dual power supply and dual FAN design.
- Embedded SmartMC delivers the easiest and simplest network operation and management solution.
- Advanced free of charge enterprise features and functions like layered security, VXLAN, IRF and Macsec
- High-density 10/100/1000Base-T autosensing Ethernet ports or 10GE SFP + fiber ports on board
- One expansion slot, up to 9 optional interface cards that provide high density giga, 10GE, 25GE, 40GE and Multi-Giga access.

As an access device on enterprise networks, the switch can provide GE connections for desktop applications. It can also be used as a core device on small- and medium-sized enterprise networks. On MAN or industrial networks, it provides GE access for users and transmits the aggregated traffic from downstream switches to core switches.

The S5560X-EI switch series has the following models:

- S5560X-30C-EI—Provides 24 × 10/100/1000BASE-T ports (including 8 × combo interfaces), 4 × 10G/1G BASE-X SFP+ ports, 1 × expansion slot, 2 × fan tray slots, and 2 × power module slots.
- S5560X-54C-EI—Provides 48 × 10/100/1000BASE-T ports, 4 × 10G/1G BASE-X SFP+ ports, 1 × expansion slot, 2 × fan tray slots, and 2 × power module slots.
- S5560X-30F-EI—Provides 24 × SFP ports (including 8 × combo interfaces), 4 × 10G/1G BASE-X SFP+ ports, 1 × expansion slot, 2 × fan tray slots, and 2 × power module slots.
- S5560X-54F-EI—Provides 48 × SFP ports, 4 × 10G/1G BASE-X SFP+ ports, 1 × expansion slot, 2 × fan tray slots, and 2 × power module slots.
- S5560X-30C-PWR-EI—Provides 24 × 10/100/1000BASE-T ports, 4 × 10G/1G BASE-X SFP+ ports, 1 × expansion slot, 2 × fan tray slots, and 2 × power module slots.
- S5560X-54C-PWR-EI—Provides 48 × 10/100/1000BASE-T ports, 4 × 10G/1G BASE-X SFP+ ports, 1 × expansion slot, 2 × fan tray slots, and 2 × power module slots.
- S5560X-34S-EI—Provides 28 × 10/100/1000BASE-T ports (including 4 × combo interfaces), 4 × 10G/1G BASE-X SFP+ ports, and 2 × 40G QSFP+ ports, fixed AC&DC power supply
- S5560X-54S-EI—Provides 48 × 10/100/1000BASE-T ports, 4 × 10G/1G BASE-X SFP+ ports, and 2 × 40G QSFP+ ports, fixed AC&DC power supply



S5560X-30C-EI



S5560X-54C-EI



S5560X-30F-EI



S5560X-54F-EI



S5560X-30C-PWR-EI



S5560X-54C-PWR-EI



S5560X-34S-EI



S5560X-54S-EI



S5560X-30F-EIF

Features and benefits

High scalability and high port density

S5560X-EI series provide 24 or 48 Giga and 4 fixed 10GE ports onboard with one expansion slot, supporting up to 9 types of interface cards like 2-port 10GBaseT / SFP+; 8-port 10G SFP+ card; 2-port 40G QSFP+ card and Multi-giga ports. The switch supports up to 12 10G ports, 2*25G or 2*40G ports. The scaling flexibility and the high port density satisfy the requirements for hybrid configuration of copper ports and fiber ports at the distribution layer in large sized networks or at the core layer in SMB sized networks.

VXLAN (Virtual eXtensible LAN) technology

Virtual eXtensible LAN (VXLAN) is a MAC-in-UDP technology that provides Layer 2 connectivity between distant network sites across an IP network. VXLAN enables long-distance virtual machine and data mobility and is typically used in data centers and the access layer of campus networks for multitenant services. The H3C implementation of VXLAN supports automatic VXLAN tunnel establishment with EVPN.

Open application architecture

In H3C open application architecture (OAA), the switch can accommodate high-performance OAP modules to offer dedicated services such as firewall, IPS, or load balancing in addition to conventional forwarding services. By

installing OAP modules, the customers can use the switch as a multiservice device without having to buy separate service appliances, such as a firewall device.

Embedded Access Controller

H3C S5560X-EI implements the WLAN function by installing an AC feature pack on the main control unit, thereby implementing both the wired function and the WLAN function on a single device. Embedded AC is a low-cost WLAN solution, save overall investment, improve forwarding capacity, realized a true unified wired and wireless solution in Campus. Max256 AP supported on one single switches.

High-performance IPv4/IPv6 service capabilities

The S5560X-EI 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 S5560X-EI switch series 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.

H3C Intelligent Resilient Framework 2 (IRF2)

H3C S5560X-EI 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 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

Software-defined networking

Software-defined networking (SDN) is an innovative network architecture that separates the control plane from the forwarding plane, typically by using OpenFlow. SDN significantly simplifies network management, reduces maintenance complexity and cost, enables flexible traffic management, and offers a good platform for core network and application innovations.

The S5560X-EI network 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 reduces network management complexity while substantially lowers network maintenance cost.

Comprehensive security control policies

Endpoint Admission Defense (EAD), in conjunction with the backend system, integrates endpoint security (including anti-virus and patching) and network security (including network access control and access right control) into an interactive security system. By checking, isolating, repairing, managing, and monitoring the endpoints, this system turns reactive single-point defense to proactive, all-round defense, and dispersed management to centralized policy management. This system enhances the overall network protection against numerous security threats and improves the responsiveness to new threats.

The switch supports unified MAC address authentication, 802.1x authentication, and portal authentication; dynamic or static binding of user identifiers such as user account, IP address, MAC address, VLAN, and port number; and dynamic application of user profiles or policies (such as VLAN, QoS, and ACL) on users. Using the switch in conjunction with H3C IMC, you can manage and monitor online users in real time and take prompt action on illegitimate behaviors.

The switch offers a large number of inbound and outbound ACLs and VLAN-based ACL assignment.

The switch supports Unicast Reverse Path Forwarding (uRPF), which protects a network against source spoofing attacks, preventing DoS and DDoS attacks.

MACsec

MACsec is an ideal hop-by-hop link-layer security protocol for Ethernet networks, which are typically insecure. It provides the following services:

- Data encryption—Encrypts data over the Ethernet link to protect data against security issues such as eavesdropping.
- Antireplay—Prevents packets from being intercepted and modified en route to protect the network against unauthorized access.
- Tampering protection—prevents packet tampering to protect data integrity.
- MACsec supports the following deployments:
 - Client-oriented—Protects data transmission over the link between the client and its access device.
 - Device-oriented mode—Protects data transmission over the link between two peering devices.
- The switch can cooperate with H3C iNode client and core switches such as S10500 and S7500E to provide a complete MACsec solution.

High availability

The switch offers the following hardware high availability features:

- 1+1 power module redundancy and 1+1 fan tray redundancy.
- Supports multiple AC and DC power module options.
- Automatically monitors power module and fan tray status, and generates alarms when a power or temperature event occurs.
- Adjusts fan speed based on the change in temperature.

In addition to hardware redundancy, the switch provides a variety of node and link redundancy and protection mechanisms, including:

- Ethernet link aggregation, including LACP.

- Spanning tree protocols, including STP, RSTP and MSTP.
- Smart Link, which protects faster link switchover for dual uplink network.
- Rapid Ring Protection Protocol (RRPP).
- IRF 2 ring topology in conjunction with multichassis link aggregation.

Abundant QoS features

The switch offers abundant QoS features, including:

- Packet filtering based on packet header fields from Layer 2 through Layer 4, including source MAC, destination MAC, source IP, destination IP, TCP/UDP port number, protocol type, and VLAN.
- Flexible queuing and scheduling algorithms configured on a per-port or per-queue basis, including strict priority (SP), weighted round robin (WRR), SP+WRR, weighted fair queuing (WFQ), and SP+WFQ.
- Committed access rate (CAR) with the minimum granularity at 64 kbps.
- Port mirroring in both outbound and inbound directions for network monitoring and troubleshooting.

Outstanding management capacity

The S5560X-EI switch series supports abundant management ports, such as the console port, mini-USB and the out-of-band network management port. It supports the Simple Network Management Protocol (SNMP) v1/v2/v3, Open View, IMC, CLI, Web-based NMS and Telnet allowing easy device management. It also supports SSH2.0 to provide better protection management.

The S5560X-EI switch supports SPAN/RSPAN/ERSPAN mirroring, and multiple mirroring ports so that network traffic can be analyzed to carry out corresponding management and maintenance measures and traffic of network services and applications is visible. The S5500X-EI switch provides network stream analysis reports, which help users to promptly optimize the network structure and adjust resource deployment.

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

Based on DRNI architecture

H3C S5560X-EI series switches support DRNI (Distributed Resilient Network Interconnect) cross-device interconnection aggregation technology, and realize the cross-device interconnection by virtually expanding two physical devices into one Aggregate to keep controls independent of each other, provide device-level redundancy protection and traffic load sharing, and improve system reliability.

Visualization ability

H3C S5560X-EI series switches support Telemetry technology, which can send the switch's real-time resource information and alarm information to the O&M platform through the GRPC protocol.

The platform can realize network quality backtracking, troubleshooting, risk early warning, architecture optimization and other functions to accurately guarantee user experience by analyzing real-time data.

Technical specifications

Item	S5560X-30C-EI	S5560X-54C-EI	S5560X-30F-EI	S5560X-54F-EI	S5560X-30F-EIF
CPU	Dual Core, 800MHz				
Box switching capacity	598Gbps				
Port switching capacity	288Gbps	336Gbps	288Gbps	336Gbps	288Gbps
Packet forwarding rate	216 Mpps	252 Mpps	216 Mpps	252 Mpps	216 Mpps
Dimensions (H × W × D)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)	43.6 × 440 × 220 mm (1.72 × 17.32 × 8.66 in)
Weight	≤ 6.7 kg (14.77 lb)	≤ 7.0 kg (15.43 lb)	≤ 6.6 kg (14.55 lb)	≤ 6.7 kg (14.77 lb)	≤ 3.2 kg (7.05 lb)
Flash/SDRAM	512MB/2GB				
Management Ethernet ports	1				
Console ports	1 × RJ-45 console port 1 × Micro-USB console port Only the Micro-USB console port is available when you connect both ports.				
Service ports	24 × 10/100/1000Base-T autosensing Ethernet ports (including 8 combo interfaces) 4 × 10G SFP+ ports	48 × 10/100/1000Base-T autosensing Ethernet ports 4 × 10G SFP+ ports	24 × SFP ports (including 8 combo interfaces) 4 × 10G SFP+ ports	48 × SFP ports 4 × 10G SFP+ ports	24 × SFP ports (including 8 combo interfaces) 4 × 10G SFP+ ports 2 × 40G QSFP+ ports
Expansion slots	1				0
Stacking bandwidth	Maximum 160Gbps				
Compatible interface module	2-port 40GE QSFP+ interface module 2-port 10G SFP+ interface module 2-port 25G SFP28 interface module				N/A



	2-Port 10G BASE-T Interface Card with MACSec 2-Port 10G SFP Plus Interface Card with MACSec 4-Port 10/100/1000BASE-T Ethernet,6-Port SFP(2-Port Combo) Interface Module 8-Port 10G SFP Plus with MACSec Interface Module 8-Port 1/2.5/5G BASE-T Ethernet Copper Interface Module 8-Port 1/2.5/5/10G BASE-T Ethernet Copper Interface Module				
AC input voltage	PSR150-A1&PSR150-A2: Rated: 100 VAC to 240 VAC @ 50 Hz/60 Hz Max: 90 VAC to 264 VAC @ 47 Hz to 63 Hz				
DC input voltage	PSR150-D1: Rated: -48 VDC to -60 VDC Max: -36 VDC to -72 VDC You can use a -48 VDC power source in the equipment room or an H3C RPS (RPS800-A or RPS1600-A).				
Min. power consumption	Single AC input: 24 W Dual AC inputs: 29 W Single DC input: 24 W Dual DC inputs: 28 W	Single AC input: 27 W Dual AC inputs: 31 W Single DC input: 24 W Dual DC inputs: 29 W	Single AC input: 24 W Dual AC inputs: 29 W Single DC input: 24 W Dual DC inputs: 30 W	Single AC input: 30 W Dual AC inputs: 37 W Single DC input: 30 W Dual DC inputs: 36 W	AC:20W DC:23W
Max. power consumption	Single AC input: 87 W Dual AC inputs: 91 W Single DC input: 88 W Dual DC inputs: 95 W	Single AC input: 88 W Dual AC inputs: 93 W Single DC input: 89 W Dual DC inputs: 96 W	Single AC input: 112 W Dual AC inputs: 116 W Single DC input: 113 W Dual DC inputs: 122 W	Single AC input: 130 W Dual AC inputs: 134 W Single DC input: 132 W Dual DC inputs: 140 W	AC:71W DC:72W
MTBF(Year)	178.67	151.28	170.05	149.97	170.05
MTTR(Hour)	1	1	1	1	1

Technical specifications (continued)

Item	S5560X-30C-PWR-EI	S5560X-54C-PWR-EI	S5560X-34S-EI	S5560X-54S-EI
CPU	Dual Core, 800MHz			
Box switching capacity	598Gbps			
Port Switching capacity	288Gbps	336Gbps	288Gbps	336Gbps
Packet forwarding rate	216 Mpps	252 Mpps	216 Mpps	252 Mpps
Dimensions (H × W × D)	43.6 × 440 × 460 mm (1.72 × 17.32 × 18.11 in)	43.6 × 440 × 460 mm (1.72 × 17.32 × 18.11 in)	43.6 × 440 × 260 mm (1.72 × 17.32 × 10.24 in)	43.6 × 440 × 260 mm (1.72 × 17.32 × 10.24 in)
Weight	≤ 9.2 kg (20.28 lb)	≤ 9.6 kg (21.16 lb)	≤ 3.6 kg (7.94 lb)	≤ 3.9 kg (8.60 lb)



Flash/SDRAM	512MB/2GB			
Management Ethernet ports	1			
Console ports	1 × RJ-45 console port 1 × Micro-USB console port Only the Micro-USB console port is available when you connect both ports.			
Service ports	24 × 10/100/1000Base-T autosensing Ethernet ports 4 × 10G SFP+ ports	48 × 10/100/1000Base-T autosensing Ethernet ports 4 × 10G SFP+ ports	28 × 10/100/1000Base-T autosensing Ethernet ports (including 4 combo interfaces) 4 × 10G SFP+ ports 2 × 40G QSFP+ ports	48 × 10/100/1000Base-T autosensing Ethernet ports 4 × 10G SFP+ ports 2 × 40G QSFP+ ports
Expansion slots	1	1	N/A	N/A
Stacking bandwidth	Maximum 160Gbps			
Compatible interface modules	2-port 40GE QSFP+ interface module 2-port 25G SFP28 interface module 2-port 10G SFP+ interface module 2-Port 10G BASE-T Interface Card with MACSec 2-Port 10G SFP Plus Interface Card with MACSec 4-Port 10/100/1000BASE-T Ethernet,6-Port SFP(2-Port Combo) Interface Module 8-Port 10G SFP Plus with MACSec Interface Module 8-Port 1/2.5/5G BASE-T Ethernet Copper Interface Module 8-Port 1/2.5/5/10G BASE-T Ethernet Copper Interface Module		N/A	N/A
AC input voltage	PSR360-56A/PSR720-56A: Rated: 100 VAC to 240 VAC @ 50 Hz/60 Hz Max: 90 VAC to 264 VAC @ 47 Hz to 63 Hz PSR1110-56A: Rated: 115 VAC to 240 VAC @ 50 Hz/60 Hz Max: 102.5 VAC to 264 VAC @ 47 Hz to 63 Hz		Rated: 100 VAC to 240 VAC @ 50 Hz/60 Hz Max: 90 VAC to 264 VAC @ 47 Hz to 63 Hz	
DC input voltage	PSR560-56D: Rated: -48 VDC to -60 VDC Max: -36 VDC to -72 VDC You can use a -48 VDC power source in the equipment room or an H3C RPS (RPS1600-A).		Rated: -48 VDC to -60 VDC Max: -36 VDC to -72 VDC You can use a -48 VDC power source in the equipment room or an H3C RPS (RPS800-A or RPS1600-A).	
Min. power consumption	Single AC input: 31 W Dual AC inputs: 31 W Single DC input: 43 W Dual DC inputs: 60 W	Single AC input: 33 W Dual AC inputs: 40 W Single DC input: 48 W Dual DC inputs: 66 W	Single AC input: 19 W	Single AC input: 22 W
Max. power consumption	Single 1110 W AC input: 926 W	Single 1110 W AC input: 1090 W	Single AC input: 56 W Single DC input: 57 W	Single AC input: 66 W Single DC input: 68 W



	(including 720 W for PoE) Dual 1110 W AC inputs: 928 W (including 720 W for PoE) Single 560 W DC input: 486 W (including 360 W for PoE) Dual 560 W DC inputs: 876 W (including 720 W for PoE)	(including 810 W for PoE) Dual 1110 W AC inputs: 1742 W (including 1440 W for PoE) Single 560 W DC input: 502 W (including 360 W for PoE) Dual 560 W DC inputs: 1003 W (including 810 W for PoE)		
MTBF(Year)	151.08	133.40	109.80	101.50
MTTR(Hour)	1	1	1	1
Packet buffer	4M			
Operating temperature	0°C to 45°C (32°F to 113°F) -60m-5000m altitude: From 0m, the maximum operating temperature reduce by 0.33°C for every time 100 the altitude increases by 100m.			
Storage temperature	-40°C to 70°C(-40°F to 158°F)			
Operating & storage humidity	5% RH to 95% RH, non-condensing			
SDN/OpenFlow w	OpenFlow 1.3 Multiple controllers (equal/master/slave controller role) Concurrent processing of multiple flow tables Group table Meter			
VXLAN	VXLAN L2 switching VXLAN L3 routing VXLAN VTEP IS-IS+ENDP distributed control plane MP-BGP+EVPN distributed control plane OpenFlow+Netconf centralized control plane			
Link aggregation	1G/10G/40G port aggregation Static aggregation Dynamic aggregation Multichassis link aggregation			
Broadcast/Multicast/Unicast storm suppression	Storm suppression based on port bandwidth percentage Storm suppression based on PPS Storm suppression based on BPS Broadcast traffic/Multicast traffic/Unknown unicast traffic suppression			
Jumbo frame	A maximum of 10000 bytes			
MAC address table	64K MAC address entries Static MAC address Blackhole MAC address			

	MAC learning limit
ARP Table	<ul style="list-style-type: none"> ARP entries: 32K Static entry Gratuitous ARP Common proxy ARP and local proxy ARP Dynamic ARP inspection ARP anti-attack ARP flood suppression ARP source suppression ARP detection based on DHCP snooping safety entries, 802.1X entries, and IP/MAC static binding entries
VLAN	<ul style="list-style-type: none"> Port-based VLAN (up to 4094 VLANs) MAC-based VLAN Protocol-based VLAN IP subnet based VLAN QinQ and flexible QinQ VLAN mapping Voice VLAN MVRP ((GVRP analog))
Loop-free redundant Layer 2 topology	<ul style="list-style-type: none"> STP/RSTP/MSTP STP Root Guard BPDU Guard BPDU Blocking and Root Guard Link Detection (UDLD) Digital Diagnostic Monitor (DDM) G.8032 Ethernet ring protection switching (ERPS)
DHCP	<ul style="list-style-type: none"> DHCP client DHCP snooping DHCP relay DHCP server DHCP snooping Option 82/DHCP relay Option 82
IRF2	<ul style="list-style-type: none"> IRF2 Distributed device management, distributed link aggregation, and distributed resilient routing Stacking through standard Ethernet interfaces Local device stacking and remote device stacking Support up to 9 devices stacking
IP routing	<ul style="list-style-type: none"> IPv4 routing number 32K IPv6 routing number 16K Static routing RIPv1/v2 and RIPv6 OSPFv1/v2/v3 BGP and BGP4+ for IPv6 Equal-cost multi-path routing (ECMP) and policy routing VRRP/VRRPv3
IPv6	Neighbor Discovery (ND)



	<p>PMTU</p> <p>IPv6-Ping, IPv6-Tracert, IPv6-Telnet, and IPv6-TFTP</p> <p>Manual tunnel</p> <p>6to4 tunnel</p> <p>ISATAP tunnel</p> <p>GRE tunnel</p>
Multicast	<p>IGMP Snooping v1/v2/v3 and MLD Snooping v1/v2</p> <p>PIM Snooping</p> <p>MLD Proxy</p> <p>Multicast VLAN</p> <p>IGMP v1/v2/v3 and MLD v1/v2</p> <p>PIM-DM, PIM-SM and PIM-SSM</p> <p>MSDP and MSDP for IPv6</p> <p>MBGP and MBGP for IPv6</p>
MPLS	<p>Support MPLS</p> <p>Support MCE</p> <p>Support MPLS VPN, VPLS</p>
Mirroring	<p>Flow mirroring</p> <p>N:4 port mirroring</p> <p>Local port mirroring and remote port mirroring</p> <p>Policy-based Mirroring</p> <p>Traffic Mirroring</p>
QoS/ACL	<p>Layer 2 to Layer 4 packet filtering</p> <p>Traffic classification based on source MAC, destination MAC, source IP, destination IP, TCP/UDP port, and VLAN</p> <p>Time range-based ACL</p> <p>Bi-directional ACLs (inbound and outbound)</p> <p>VLAN-based ACL issuing</p> <p>Rate limit for receiving and transmitting packets (a minimum CIR of 8 Kbps)</p> <p>Packet redirection</p> <p>802.1p priority and DSCP priority</p> <p>Committed Access Rate (CAR)</p> <p>Flexible queue scheduling algorithms based on both port and queue, including SP, WRR, and SP+WRR</p>
Security	<p>Hierarchical user management and password protection</p> <p>MAC-based authentication</p> <p>802.1X</p> <p>Storm constrain</p> <p>Guest VLAN</p> <p>AAA authentication</p> <p>RADIUS authentication</p> <p>HWTACACS</p> <p>SSH 2.0</p> <p>Port isolation</p> <p>Port security</p>

	<p>EAD</p> <p>Dynamic ARP detection</p> <p>BPDU guard and root guard</p> <p>uRPF</p> <p>IP/Port/MAC binding</p> <p>Plaintext authentication and MD5 authentication for OSPF and RIPv2 packets</p> <p>Public Key Infrastructure (PKI)</p> <p>IP Source Guard</p>
IEEE	<p>IEEE 802.3x</p> <p>IEEE 802.3ad</p> <p>IEEE 802.3af</p> <p>IEEE 802.3at</p> <p>IEEE 802.3bz</p> <p>IEEE 802.1p</p> <p>IEEE 802.1x</p> <p>IEEE 802.1q</p> <p>IEEE 802.1d</p> <p>IEEE 802.1w</p> <p>IEEE 802.1s</p>
Loading and upgrading	<p>Loading and upgrading through XMODEM/FTP/TFTP</p> <p>Loading and upgrading from USB</p>
Management and maintenance	<p>Configuration through CLI, Telnet, and console port</p> <p>SNMP v1/v2/v3</p> <p>Web network management</p> <p>Remote Monitoring (RMON) alarm, event, and history recording</p> <p>IMC network management system</p> <p>System log, alarming based on severity, debugging information output</p> <p>NTP, SNTP</p> <p>Power, fan, and temperature alarming</p> <p>Ping and Tracert</p> <p>Virtual Cable Test (VCT)</p> <p>Device Link Detection Protocol (DLDP)</p> <p>LLDP, LLDP-MED</p> <p>Loopback detection</p>
Power saving	<p>Automatic port power-down</p> <p>Scheduled port power-down (schedule job)</p> <p>802.3az Energy Efficient Ethernet (EEE) support</p>
EMC	<p>FCC Part 15 Subpart B CLASS A</p> <p>ICES-003 CLASS A</p> <p>VCCI CLASS A</p> <p>CISPR 32 CLASS A</p> <p>EN 55032 CLASS A</p> <p>AS/NZS CISPR32 CLASS A</p> <p>CISPR 24</p> <p>EN 55024</p>



	EN 61000-3-2 EN 61000-3-3 ETSI EN 300 386 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-5560X-30C-EI-GL	H3C S5560X-30C-EI L3 Ethernet Switch(24GE(8SFP Combo)+4SFP Plus+1Slot),No Power
LS-5560X-54C-EI-GL	H3C S5560X-54C-EI L3 Ethernet Switch with 48*10/100/1000BASE-T Ports,4*10G/1G BASE-X SFP+ Ports and 1*Slot,No Power
LS-5560X-30C-PWR-EI-GL	H3C S5560X-30C-PWR-EI L3 Ethernet Switch with 24*10/100/1000BASE-T Ports,4*10G/1G BASE-X SFP+ Ports and 1*Slot,PoE,No Power
LS-5560X-54C-PWR-EI-GL	H3C S5560X-54C-PWR-EI L3 Ethernet Switch with 48*10/100/1000BASE-T Ports,4*10G/1G BASE-X SFP+ Ports and 1*Slot,PoE,No Power
LS-5560X-30F-EI-GL	H3C S5560X-30F-EI L3 Ethernet Switch(24SFP(8GE Combo)+4SFP Plus+1Slot),No Power
LS-5560X-30F-EIF-GL	H3C S5560X-30F-EIF L3 Ethernet Switch (24SFP+4SFP Plus+2QSFP Plus)-(AC/DC)
LS-5560X-54F-EI-GL	H3C S5560X-54F-EI L3 Ethernet Switch with 48*100/1000 Base-X SFP Ports,4*10G/1G BASE-X SFP+ Ports and 1*Slot,No Power
LS-5560X-34S-EI-GL	H3C S5560X-34S-EI L3 Ethernet Switch(28GE(4SFP Combo)+4SFP Plus+2QSFP Plus),(AC/DC)
LS-5560X-54S-EI-GL	H3C S5560X-54S-EI L3 Ethernet Switch with 48*10/100/1000BASE-T Ports,4*10G/1G BASE-X SFP+ Ports and 2*40G QSFP+ Ports,(AC/DC)
Fan	
LSPM1FANSA	Ethernet Switch Fan Module(Power to Port Airflow) For S5560
LSPM1FANSB	Ethernet Switch Fan Module(Port to Power Airflow) For S5560
Power supply	
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
Modules	
LSWM2QP2P	2-Port 40G QSFP Plus Interface Card

LSWM2SP2PB	2-Port 10G SFP Plus Ethernet Optical Interface Module
LSW2SP2PM	2-Port 10G SFP Plus Interface Card with MACSec
LSW2XGT2PM	2-Port 10G BASE-T Interface Card with MACSec
LSWM4SP8PM	8-Port 10G SFP Plus with MACSec Interface Module
LSPM4G4T6P	4-Port 10/100/1000BASE-T Ethernet,6-Port SFP(2-Port Combo) Interface Module
LSWM2MGT8P	8-Port 1/2.5/5G BASE-T Ethernet Copper Interface Module
LSWM2XMGT8P	8-Port 1/2.5/5/10G BASE-T Ethernet Copper Interface Module
LSWM2ZSP2P	2-Port 25G SFP28 Ethernet Optical Interface Module
Wireless license	
LIS-WX-128-BE	Enhanced Access Controller License,128 APs
LIS-WX-32-BE	Enhanced Access Controller License,32 APs
LIS-WX-16-BE	Enhanced Access Controller License,16 APs
LIS-WX-8-BE	Enhanced Access Controller License,8 APs
LIS-WX-1-BE	Enhanced Access Controller License,1 AP
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-LH40-SM1550	SFP+ Module(1550nm,40km,LC)
SFP-XG-LX-SM1310-E	SFP+ Module(1310nm,10km,LC)
SFP-XG-SX-MM850-E	SFP+ Module(850nm,300m,LC)
SFP-25G-SR-MM850	25G SFP28 Optical Transceiver Module (850nm,100m,SR,MM,LC)
QSFP-40G-LR4-WDM1300	40GBASE-LR4 QSFP+ Optical Transceiver Module
QSFP-40G-CSR4-MM850	QSFP+ 40GBASE Optical Transceiver Module (850nm,300m,CSR4,Support 40G to 4*10G)
QSFP-40G-SR4-MM850	QSFP+ 40GBASE Optical Transceiver Module (850nm,100m,SR4,Support 40G to 4*10G)
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
SFP-25G-D-CAB-1M	25G SFP28 to 25G SFP28 1m Passive Cable
SFP-25G-D-CAB-3M	25G SFP28 to 25G SFP28 3m Passive Cable
SFP-25G-D-CAB-5M	25G SFP28 to 25G SFP28 5m Passive Cable
LSWM1QSTK0	40G QSFP+ Cable 1m
LSWM1QSTK1	40G QSFP+ Cable 3m
LSWM1QSTK2	40G QSFP+ Cable 5m
LSWM1QSTK3	40G QSFP+ to 4x10G SFP+ Cable 1m
LSWM1QSTK4	40G QSFP+ to 4x10G SFP+ Cable 3m
LSWM1QSTK5	40G QSFP+ to 4x10G SFP+ Cable 5m
OP-MPO8-8LC-10-M	Fiber Connector,MPO(8 core)/PC,8LC/PC(0.5m),Multimode(OM3),3.0mm,10.0m
OP-MPO8-MPO8-10-M	Fiber connector,MPO(8 core)/PC,MPO(8 core)/PC,Multimode(OM3),3.0mm,10.0m
OP-MPO8-MPO8-50-M	Fiber connector,MPO(8 core)/PC,MPO(8 core)/PC,Multimode(OM3),3.0mm,50.0m
OP-MPO8-MPO8-100-M	Fiber connector,MPO(8 core)/PC,MPO(8 core)/PC,Multimode(OM3),3.0mm,100.0m
OP-MPO8-MPO8-200-M	Fiber connector,MPO(8 core)/PC,MPO(8 core)/PC,Multimode(OM3),3.0mm,200.0m