



# H3C S6520X-HI Series Advanced Aggregation 10GE Switches

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New H3C Technologies Co., Limited

## Product Overview

H3C S6520X-HI series switches — Industry-leading high performance and scalable 10GE access switching solution with modular dual power, fixed or modular uplinks (10GE/40GE/100GE) and IRF for resiliency. The series offers OSPF/BGP and multicast, SDN enabled and flexible management.

H3C S6520X-HI series switches contain the following models:

- H3C S6520X-30QC-HI: 24 × 1/10GE SFP+ ports, 2 × QSFP+ ports (40GE, can be split into four 10GE ports.), 2 × expansion slots, 2 × fan tray slots, and 2 × power module slots
- H3C S6520X-54QC-HI: 48 × 1/10GE SFP+ ports, 2 × QSFP+ ports (40GE, can be split into four 10GE ports.), 2 × expansion slots, 2 × fan tray slots, and 2 × power module slots
- H3C S6520X-30HC-HI: 24 × 1/10GE SFP+ ports, 2 × QSFP28 ports(100GE, can be split into four 25GE ports), 2 × expansion slots, 2 × fan tray slots, and 2 × power module slots
- H3C S6520X-54HC-HI: 48 × 1/10GE SFP+ ports, 2 × QSFP28 ports(100GE, can be split into four 25GE ports), 2 × expansion slots, 2 × fan tray slots, and 2 × power module slots
- H3C S6520X-30HF-HI: 24 × 1/10GE SFP+ ports, 6 × QSFP28 ports, 3 × fan tray slots, and 2 × power module slots
- H3C S6520X-54HF-HI: 48 × 1/10GE SFP+ ports, 6 × QSFP28 ports, 3 × fan tray slots, and 2 × power module slots



S6520X-30QC-HI



S6520X-54QC-HI



S6520X-30HC-HI



S6520X-54HC-HI



S6520X-30HF-HI



S6520X-54HF-HI

## Features and Benefits

### 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.

### High-Density 10GE Forwarding

The switch offers high-density 10GE forwarding and can expand 10GE ports flexibly. It provides 48/24\*10/1GE autosensing SFP+ ports, six QSFP28 ports or two QSFP28 or QSFP+ ports onboard with two expansion slots that support up to 11 kinds of modules range from GE to 10GE, 25GE, 40GE, 100GE and Multigiga ports. Using a QSFP+ to SFP+ splitter cable, you can split a QSFP+ port into four line-rate 10GE SFP+ ports. Max 72\*10GE supported on one single switch.

### Embedded Access Controller

H3C S6520X-HI 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.

### H3C Intelligent Resilient Framework 2 (IRF2)

H3C Intelligent Resilient Framework 2 (IRF 2) virtualizes multiple S6520X-HI switches into one virtual switch and provides the following benefits:

- **Scalability:** IRF 2 allows you to add devices to the IRF 2 system easily. It provides a single point of

management, enables switch plug-and-play, and supports software auto-update for software synchronization from the master to the new member devices. It brings business agility with lower total cost of ownership by allowing new switches to be added to the fabric without network topology change as business grows.

- **High availability:** The H3C proprietary routing hot backup technology ensures redundancy and backup of all information on the control and data planes and non-stop Layer 3 data forwarding in an IRF 2 fabric. It also eliminates single point of failure and ensures service continuity.
- **Redundancy and load balancing:** The distributed link aggregation technology supports load sharing and mutual backup among multiple uplinks, which enhances the network redundancy and improves link resources usage.
- **Flexibility and resiliency:** The switch use standard GE ports instead of specialized ports for IRF links between IRF member devices. This allows customers to assign bandwidth as needed between uplink, downlink, and IRF system connections. In addition, an S6520X-HI IRF fabric can span a rack, multiple racks, or multiple campuses.

## Wide Range of Advanced Features

The switch offers a wide range of features, including:

- **Modular hardware and software design:** The switch uses modular, hot swapping, and redundancy design for hardware, including power modules and fan trays. The switch also uses modular design for software, which enables feature installation and removal on an as-needed basis. Refined physical architecture and optimized software workflows greatly reduce the end-to-end packet processing delay.
- **Software-defined networking (SDN):** An innovative network architecture that separates the control plane from the forwarding plane, typically by using OpenFlow. SDN significantly simplifies network management, reduces maintenance complexities and costs, enables flexible traffic management, and offers a good platform for network and application innovations.
- **Virtual eXtensible LAN (VXLAN):** 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.
- **Ethernet Virtual Private Network (EVPN):** A Layer 2 VPN technology that provides both Layer 2 and Layer 3 connectivity between distant network sites across an IP network. EVPN uses MP-BGP in the control plane and VXLAN in the data plane. EVPN provides the following benefits: Configuration automation; Separation of the control plane and the data plane; Integrated routing and bridging (IRB).

- **In-Service Software Upgrade (ISSU) and Operation, Administration, and Maintenance (OAM):** Ensure business continuity and improve Ethernet management and maintainability.

## Comprehensive Security Control Policies

The switch supports AAA authentications (including RADIUS authentication) and dynamic or static binding of user identifiers such as user account, IP address, MAC address, VLAN, and port number. 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. This simplifies configurations and saves ACL resources.

## 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.
- **Anti-replay:** 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 S10500X and S7500X to provide a complete MACsec solution.

## High Availability

In addition to node and link protection, the switch offers the following hardware high availability features:

- 1+1 power module redundancy and 1+1 fan tray redundancy.
- Hot-swappable interface modules.
- Automatic power and fan tray status monitoring and alarming mechanisms.
- Automatic fan speed adjustment based on the change in temperature.



- Self-protection mechanisms that protect power modules against overcurrent, overvoltage, and overtemperature conditions.

### Outstanding Management Capacity

The switch provides a variety of management features and is easy to manage. It offers the following device management features:

- Provides multiple management interfaces, including the console port, out-of-band management Ethernet port, and USB port.
- Supports configuration and management from CLI or H3C IMC Intelligent Management Center.
- Supports multiple access methods, including SNMPv1/v2c/v3, Telnet, and more secure SSH 2.0 and SSL.
- Uses OAM to enhance system management capability.
- Supports FTP for system upgrade.

### 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.

### Multichassis Link Aggregation Group (M-LAG) (Original DRNI)

H3C S6520X-HI series switches support M-LAG, which enables links of multiple switches to aggregate into one to implement device-level link backup. M-LAG is applicable to servers dual-homed to a pair of access devices for node redundancy.

- Streamlined topology: M-LAG simplifies the network topology and spanning tree configuration by virtualizing two physical devices into one logical device.



- Independent upgrading: The DR member devices can be upgraded independently one by one to minimize the impact on traffic forwarding.
- High availability: The DR system uses a keepalive link to detect multi-active collision to ensure that only one member device forwards traffic after a DR system splits.

## Visualization Ability

H3C S6520X-HI 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.

## Hardware Specifications

Item	S6520X-54HC-HI	S6520X-54QC-HI	S6520X-30HC-HI	S6520X-30QC-HI	S6520X-54HF-HI	S6520X-30HF-HI
CPU	Dual Core, 1.6GHz					
Port Switching capacity	2160Gbps	1440Gbps	1680Gbps	960Gbps	2160Gbps	1680Gbps
Packet forwarding rate	1050Mpps		705Mpps		1050Mpps	
System Switching Capacity	2.56Tbps					
Dimensions (H × W × D)	43.6 × 440 × 360 mm (1.72 × 17.32 × 14.17 in)					
Weight	≤ 7.6 kg	≤ 7.2 kg	≤ 7.4 kg	≤ 7 kg	≤ 6.5 kg	≤ 6 kg
Flash/SDRAM	1GB/2GB					
Packet Buffer	12M					
Console ports	1					
Management Ethernet ports	1					
USB ports	1					
Micro USB ports	1					
SFP+	48	48	24	24	48	24





Item	S6520X-54HC-HI	S6520X-54QC-HI	S6520X-30HC-HI	S6520X-30QC-HI	S6520X-54HF-HI	S6520X-30HF-HI
QSFP+	-	2	-	2	-	-
QSFP28	2	-	2	-	6	6
Expansion slots	2				N/A	
Compatible interface modules	2-Port 10G SFP Plus Ethernet Optical Interface Module 8-Port 10G SFP+ 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 2-port 25GE SFP28 interface module 2-port 40GE QSFP+ interface module 8-port 25GE SFP28 interface module (for S6520X-54HC-HI) 2-port 100GE QSFP28 interface module (for S6520X-54HC-HI)				N/A	
Input voltage range	Rated: 100 VAC to 240 VAC @ 50 Hz/60 Hz Max.: 90 VAC to 264 VAC @ 47 Hz to 63 Hz Rated voltage range: -48 to -60 VDC Max voltage range: -36 to -72 VDC				Rated voltage range: 100 to 240 VAC @ 50/60 Hz Max voltage range: 90 to 264 VAC @ 47 to 63 Hz	
Power Supply slots	2					
Fan trays	2 hot swappable fan trays, invertible airflow				3 hot swappable fan trays, invertible airflow	
Power consumption	MIN: Single AC: 44W; Dual AC: 49W MAX: Single AC: 249W. Dual AC: 251W	MIN: Single AC: 39W; Dual AC: 44W MAX: Single AC: 231W; Dual AC: 234W	MIN: Single AC: 38W; Dual AC: 43W MAX: Single AC: 197W; Dual AC: 200W	MIN: Single AC: 38W; Dual AC: 43W MAX: Single AC: 179W; Dual AC: 183W	MIN: Single AC: 36W Dual AC: 44W MAX: Single AC: 177W Dual AC: 176W	MIN: Single AC: 38W Dual AC: 46W MAX: Single AC: 143W Dual AC: 145W
Operating temperature	0°C to 45°C (32°F to 113°F) From -60m to 5000m altitude: From 0m, the maximum operating temperature reduce by 0.33°C for every time 100 the altitude increases by 100m.					
Storage	-40°C to 70°C(-40°F to 158°F)					



Item	S6520X-54HC-HI	S6520X-54QC-HI	S6520X-30HC-HI	S6520X-30QC-HI	S6520X-54HF-HI	S6520X-30HF-HI
temperature						
Operating & storage humidity	5% RH to 95% RH, non-condensing					
MTBF(Year)	60.8	60.2	63.4	62.8	60.8	63.4
MTTR(Hour)	1	1	1	1	1	1

Note: This content is applicable only to regions outside mainland China. H3C reserves the right to interpret the content.

## Software Specifications

Feature	S6520X-HI switch series
VxLAN	VXLAN Layer 2 switching VXLAN routing switching VXLAN gateway Centralized VXLAN control through OpenFlow+Netconf
Virtualization	Intelligent Resilient Framework 2 (IRF2) Distributed device management Distributed link aggregation Distributed resilient routing Stacking through standard Ethernet ports Local device stacking and remote device stacking LACP-, BFD-, and ARP-based multi-active detection (MAD)
Link aggregation	10GE/40GE/100GE port aggregation Static aggregation Dynamic aggregation
Jumbo frame	Supported
MAC address table	Static MAC address Blackhole MAC address MAC learning limit
Openflow	Openflow1.3
VLAN	Port-based VLAN Default VLAN QinQ and flexible QinQ

Feature	S6520X-HI switch series
	VLAN mapping PVST+ and RPVST+
Traffic monitoring	sFLOW
LLDP	LLDP/LLDP-MED
DHCP	DHCP client DHCP snooping DHCP relay DHCP server DHCP snooping Option 82/DHCP relay Option 82
ARP	Static entry Gratuitous ARP Common proxy ARP and local proxy ARP Dynamic ARP inspection ARP anti-attack ARP source suppression ARP detection based on DHCP snooping safety entries, 802.1X entries, and IP/MAC static binding entries
Routing	IPv4/IPv6 static routing Dynamic routing such as RIP v1/2 and RIPng Policy routing Equal-cost multi-path routing (ECMP) VRRP OSPFv1/v2/v3 BGP IS-IS
IPv6	Neighbor Discovery (ND) PMTU ICMP v6, Telnet v6, SFTP v6, SNMP v6, BFD v6, VRRP v3 IPv6 Portal IPv6 tunnel IPV6 SAVI
Multicast	IGMP Snooping v2/v3 IGMP Snooping fast-leave



Feature	S6520X-HI switch series
	IGMP Snooping group-policy PIM-SM and PIM-SSM PIM snooping MVRP (GVRP analog) MFF Enhanced Layer 3 multicast
MPLS	Support MPLS Support MCE Support MPLS VPN, VPLS
Zero configuration	DHCP auto-config CWMP-TR069
Broadcast/Multicast/Unicast storm suppression	Storm suppression based on port bandwidth percentage Storm suppression based on PPS Storm suppression based on BPS
Loop-free redundant Layer 2 topology	STP/RSTP/MSTP/PVST/PVST+ STP Root Guard BPDU Guard BPDU Blocking and Root Guard Link Detection (UDLD) Digital Diagnostic Monitor (DDM) G.8032 Ethernet ring protection switching (ERPS)
QoS/ACL	Rate limit for receiving and transmitting packets CAR Eight output queues per port Flexible queue scheduling algorithms based on both port and queue, including SP, WDRR, WRR, WFQ, and SP+WRR 802.1p priority and DSCP priority Layer 2 to Layer 4 packet filtering Traffic classification based on source MAC, destination MAC, source IP, destination IP, port, protocol, and VLAN Time range WRED
Mirroring	Flow mirroring



Feature	S6520X-HI switch series
	N:4 port mirroring Local port mirroring and remote port mirroring Policy-based Mirroring Traffic Mirroring
Security	Hierarchical user management and password protection MAC-based authentication 802.1X Storm constrain AAA authentication RADIUS authentication HWTACACS SSH2.0 Port isolation IP/Port/MAC binding IP source guard HTTPs SSL Public Key Infrastructure (PKI) CPU protection Control Plane Protection (CoPP), Wireless Intrusion Prevention System (WIPS)
Loading and upgrading	Loading and upgrading through XMODEM/FTP/TFTP Loading and upgrading from USB
Management and maintenance	Loading and upgrading through XModem/FTP/TFTP Zero Touch Provisioning Configuration through CLI, Telnet, and console port SNMPv1/v2c/v3 Restful Python Job scheduler ISSU VCT 802.1ag and 802.3ah Simple Network Management Protocol (SNMPv1/v2c/v3) IMC network management system



Feature	S6520X-HI switch series
	System log Alarming based on severity NTP Power, fan, and temperature alarming Debugging information output Ping and Tracert Track Telnet-based remote maintenance
EMC	FCC Part 15 Subpart B CLASS A ICES-003 CLASS A VCCI CLASS A 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 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

## Performance Specification

Model	S6520X-30QC-HI	S6520X-54QC-HI	S6520X-30HC-HI	S6520X-54HC-HI	S6520X-30HF-HI	S6520X-54HF-HI
MAC address entries(max)	262,144	262,144	262,144	262,144	262,144	262,144
VLAN table	4094	4094	4094	4094	4094	4094



Model	S6520X-30QC-HI	S6520X-54QC-HI	S6520X-30HC-HI	S6520X-54HC-HI	S6520X-30HF-HI	S6520X-54HF-HI
VLAN interface	1024	1024	1024	1024	1024	1024
IPv4 routing entries(max)	131,072	131,072	131,072	131,072	131,072	131,072
IPv4 ARP entries(max)	131,072	131,072	131,072	131,072	131,072	131,072
IPv4 ACL entries	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512
IPv4 multicast L2 entries	4000	4000	4000	4000	4000	4000
IPv4 multicast L3 entries	4000	4000	4000	4000	4000	4000
IPv6 unicast routing entries(max)	65,792	65,792	65,792	65,792	65,792	65,792
QOS forward queues	8	8	8	8	8	8
IPv6 ACL entries	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512	Ingress: 4096 Egress: 512
IPv6 ND entries(max)	65,792	65,792	65,792	65,792	65,792	65,792
IPv6 multicast L2 entries	2000	2000	2000	2000	2000	2000
IPv6 multicast L3 entries	2000	2000	2000	2000	2000	2000
Jumbo frame length	10000	10000	10000	10000	10000	10000
Max Stacking Member	9	9	9	9	9	9
Max Stacking	480Gbps	480Gbps	480Gbps	480Gbps	480Gbps	480Gbps





Model	S6520X-30QC-HI	S6520X-54QC-HI	S6520X-30HC-HI	S6520X-54HC-HI	S6520X-30HF-HI	S6520X-54HF-HI
Bandwidth						

## Removable Components Matrix

Field Replace Unit	S6520X-30QC-HI S6520X-54QC-HI	S6520X-30HC-HI S6520X-54HC-HI	S6520X-30HF-HI S6520X-54HF-HI
Removable power supplies			
PSR250-12A	Supported	Supported	Not supported
PSR250-12A1	Supported	Supported	Not supported
PSR450-12D	Supported	Supported	Not supported
PSR180-12A-F	Not supported	Not supported	Supported
PSR180-12A-B	Not supported	Not supported	Supported
Removable fan trays			
LSWM1FANSCE	Supported	Supported	Not supported
LSWM1FANSCBE	Supported	Supported	Not supported
LSPM1FANSA-SN	Not supported	Not supported	Supported
LSPM1FANSB-SN	Not supported	Not supported	Supported
Expansion cards			
LSWM2QP2P	Supported	Supported	Not supported
LSWM2SP8P	Supported	Supported	Not supported
LSWM4SP8PM	Supported	Supported	Not supported
LSWM2ZQP2P	Not supported	Supported	Not supported
LSWM2ZSP8P	Not supported	Supported	Not supported
LSPM6FWD	Supported	Supported	Not supported
LSPM6FWD8	Supported	Supported	Not supported
LSWM2XMGT8P	Supported	Supported	Not supported
LSWM2MGT8P	Supported	Supported	Not supported
LSWM2ZSP2P	Supported	Supported	Not supported
LSWM2SP2PB	Supported	Supported	Not supported



Field Replace Unit	S6520X-30QC-HI S6520X-54QC-HI	S6520X-30HC-HI S6520X-54HC-HI	S6520X-30HF-HI S6520X-54HF-HI
LSWM2SP4PB	Supported	Supported	Not supported

## Standards and Protocols Compliance

Organization	Standards and Protocols
IEEE	802.1x Port based network access control protocol
	802.1ab Link Layer Discovery Protocol
	802.1ak MVRP and MRP
	802.1ax Link Aggregation
	802.1d Media Access Control Bridges
	802.1p Priority
	802.1q VLANs
	802.1s Multiple Spanning Trees
	802.1ag Connectivity Fault Management
	802.1v VLAN classification by Protocol and Port
	802.1w Rapid Reconfiguration of Spanning Tree
	802.3ad Link Aggregation Control Protocol
	802.3ah Ethernet in the First Mile
	802.3x Full Duplex and flow control
	802.3z 1000BASE-X
	802.3ae 10-Gigabit Ethernet
	802.3an 10-Gigabit Base-T Ethernet
	802.3by 25G Ethernet
802.3ba 40/100G Ethernet	
IETF	RFC 2710 Multicast Listener Discovery (MLD) for IPv6
	RFC 2711 IPv6 Router Alert Option
	RFC 2787 Definitions of Managed Objects for the Virtual Router Redundancy Protocol
	RFC 2918 Route Refresh Capability for BGP-4

Organization	Standards and Protocols
	RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations
	RFC 2934 Protocol Independent Multicast MIB for IPv4
	RFC 3101 OSPF Not-so-stubby-area option
	RFC 3019 MLDv1 MIB
	RFC 3046 DHCP Relay Agent Information Option
	RFC 3056 Connection of IPv6 Domains via IPv4 Clouds
	RFC 3065 Autonomous System Confederation for BGP
	RFC 3137 OSPF Stub Router Advertisement sFlow
	RFC 3376 IGMPv3
	RFC 3416 (SNMP Protocol Operations v2)
	RFC 3417 (SNMP Transport Mappings)
	RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
	RFC 3484 Default Address Selection for IPv6
	RFC 3509 Alternative Implementations of OSPF Area Border Routers
	RFC 3580 IEEE 802.1X Remote Authentication Dial In User Service (RADIUS) Usage Guidelines
	RFC 3623 Graceful OSPF Restart
	RFC 3768 Virtual Router Redundancy Protocol (VRRP)
	RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
	RFC 3973 PIM Dense Mode
	RFC 4022 MIB for TCP
	RFC 4113 MIB for UDP
	RFC 4213 Basic Transition Mechanisms for IPv6 Hosts and Routers
	RFC 4251 The Secure Shell (SSH) Protocol
	RFC 4252 SSHv6 Authentication
	RFC 4253 SSHv6 Transport Layer
	RFC 4254 SSHv6 Connection
	RFC 4271 A Border Gateway Protocol 4 (BGP-4)
	RFC 4273 Definitions of Managed Objects for BGP-4
	RFC 4291 IP Version 6 Addressing Architecture

Organization	Standards and Protocols
	RFC 4292 IP Forwarding Table MIB
	RFC 4293 Management Information Base for the Internet Protocol (IP)
	RFC 4360 BGP Extended Communities Attribute
	RFC 4419 Key Exchange for SSH
	RFC 4443 ICMPv6
	RFC 4456 BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP)
	RFC 4486 Subcodes for BGP Cease Notification Message
	RFC 4541 IGMP & MLD Snooping Switch
	RFC 4552 Authentication/Confidentiality for OSPFv3
	RFC 4601 PIM Sparse Mode
	RFC 4607 Source-Specific Multicast for IP
	RFC 4724 Graceful Restart Mechanism for BGP
	RFC 4750 OSPFv2 MIB partial support no SetMIB
	RFC 4760 Multiprotocol Extensions for BGP-4
	RFC 4861 IPv6 Neighbor Discovery
	RFC 4862 IPv6 Stateless Address Auto-configuration
	RFC 4940 IANA Considerations for OSPF
	RFC 5059 Bootstrap Router (BSR) Mechanism for PIM, PIM WG
	RFC 5065 Autonomous System Confederation for BGP
	RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
	RFC 5187 OSPFv3 Graceful Restart
	RFC 5340 OSPFv3 for IPv6
	RFC 5424 Syslog Protocol
	RFC 5492 Capabilities Advertisement with BGP-4
	RFC 5519 Multicast Group Membership Discovery MIB (MLDv2 only)
	RFC 5798 VRRP (exclude Accept Mode and sub-sec timer)
	RFC 5880 Bidirectional Forwarding Detection
	RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification
	RFC 6620 FCFS SAVI
	RFC 6987 OSPF Stub Router Advertisement



Organization	Standards and Protocols
	RFC6020 YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)
	RFC7348 Virtual eXtensible Local Area Network (VXLAN): A Framework for Overlaying Virtualized Layer 2 Networks over Layer 3 Networks
	RFC7432 BGP MPLS-Based Ethernet VPN
	RFC4664 Framework for Layer 2 Virtual Private Networks (L2VPNs)
	RFC4665 Service Requirements for Layer 2 Provider Provisioned Virtual Private Networks
	RFC4761 Virtual Private LAN Service (VPLS) Using BGP for Auto-Discovery and Signaling
	RFC4762 Virtual Private LAN Service (VPLS) Using Label Distribution Protocol (LDP) Signaling
	RFC5120 M-ISIS: Multi Topology (MT) Routing in Intermediate System to Intermediate Systems (IS-ISs)
	RFC5280 Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile
	RFC5308 Routing IPv6 with IS-IS
	RFC5381 Experience of Implementing NETCONF over SOAP
	RFC5415 Control and Provisioning of Wireless Access Points (CAPWAP) Protocol Specification
ITU	ITU-T Y.1731
	ITU-T Rec G.8032/Y.1344 Mar. 2010

## Ordering Information

Product ID	Product Description
LS-6520X-30QC-HI-GL	H3C S6520X-30QC-HI L3 Ethernet Switch (24SFP Plus+2QSFP Plus+2Slot), No Power
LS-6520X-54QC-HI-GL	H3C S6520X-54QC-HI L3 Ethernet Switch (48SFP Plus+2QSFP Plus+2Slot), No Power
LS-6520X-30HC-HI-GL	H3C S6520X-30HC-HI L3 Ethernet Switch (24SFP Plus+2QSFP28+2Slot), No Power
LS-6520X-54HC-HI-GL	H3C S6520X-54HC-HI L3 Ethernet Switch (48SFP Plus+2QSFP28+2Slot), No Power
LS-6520X-30HF-HI	H3C S6520X-30HF-HI L3 Ethernet Switch with 24 SFP Plus Ports and 6 QSFP28 Ports, Without Power Supplies
LS-6520X-54HF-HI	H3C S6520X-54HF-HI L3 Ethernet Switch with 48 SFP Plus Ports and 6 QSFP28 Ports, Without Power Supplies
Fan	
LSWM1FANSCE	Ethernet Switch Fan Module(Power to Port Airflow)



LSWM1FANSCBE	Ethernet Switch Fan Module(Port to Power Airflow)
LSPM1FANSA-SN	H3C Fan Module (Fan Panel Side Intake Airflow)
LSPM1FANSB-SN	H3C Fan Module (Fan Panel Side Exhaust Airflow)
Power supply	
PSR250-12A-GL	250W AC Power Supply Module
PSR250-12A1-GL	250W AC Power Supply Module
PSR450-12D	450W DC Power Supply Module
PSR180-12A-F	180W Asset-Manageable AC Power Supply Module (Power Panel Side Intake Airflow)
PSR180-12A-B	180W Asset-Manageable AC Power Supply Module (Power Panel Side Exhaust Airflow)
Modules	
LSWM2QP2P	2-Port 40G QSFP Plus Interface Card
LSWM2SP2PB	2-Port 10G SFP Plus Ethernet Optical Interface Module
LSWM2SP4PB	4-Port 10G SFP Plus Ethernet Optical 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
LSWM4SP8PM	8-Port 10G SFP Plus with MACSec Interface Module
LSWM2ZSP8P	8-Port 25G SFP28 Interface Module
LSWM2ZQP2P	2-Port 100G QSFP28 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)
QSFP-100G-SR4-MM850	100G QSFP28 Optical Transceiver Module (850nm,100m OM4,SR4,MPO)
QSFP-100G-LR4-WDM1300	100G QSFP28 Optical Transceiver Module(1310nm,10km,LR4,WDM,LC)
QSFP-100G-LR4L-WDM1300	100G QSFP28 Optical Transceiver Module (1310nm,2km,LR4L,CWDM4,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
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
QSFP-100G-D-CAB-1M	100G QSFP28 to 100G QSFP28 1m Passive Cable





QSFP-100G-D-CAB-3M	100G QSFP28 to 100G QSFP28 3m Passive Cable
QSFP-100G-D-CAB-5M	100G QSFP28 to 100G QSFP28 5m Passive Cable
QSFP-100G-4SFP-25G-CAB-1M	100G QSFP28 to 4x25G SFP28 1m Passive Cable
QSFP-100G-4SFP-25G-CAB-3M	100G QSFP28 to 4x25G SFP28 3m Passive Cable
QSFP-100G-4SFP-25G-CAB-5M	100G QSFP28 to 4x25G SFP28 5m Passive Cable
QSFP-100G-D-AOC-7M	100G QSFP28 to 100G QSFP28 7m Active Optical Cable
QSFP-100G-D-AOC-10M	100G QSFP28 to 100G QSFP28 10m Active Optical Cable
QSFP-100G-D-AOC-20M	100G QSFP28 to 100G QSFP28 20m Active Optical Cable
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



The Leader in Digital Solutions

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