Huawei CloudEngine S5755-H Series High-Quality 2.5GE Switches Datasheet

CloudEngine S5755-H series High-Quality 2.5GE switches are brand-new access switches that provide 24/48 10/100/1000/2.5G ports, and provide four 1/10/25GE and two 40/100GE uplink ports and one extended slot.

Introduction

CloudEngine S5755-H series High-Quality 2.5GE Switches are brand-new full-1/2.5GE switches developed by Huawei for the Wi-Fi 6/Wi-Fi 7. The CloudEngine S5755-H builds on Huawei's unified Platform and boasts various IDN features. For example, the VXLAN functionality implements network virtualization. With these merits, the CloudEngine S5755-H can function as core switches for small-sized campus networks and branches of medium- and large-sized campus networks, and also work as access switches for Metropolitan Area Network. CloudEngine S5755-H can provide a maximum of 48 10GE Multi-GE ports, which is a good choice for WLAN APs to connect to a switch in the high-quality campus networks.

Product Overview

Models and Appearances

The following models are available in the CloudEngine S5755-H series.

Models and Appearances	Description
 CloudEngine S5755-H24N4Y-A	• 24 × 10/100/1000/2.5G Base-T Ethernet ports, 4 x 1/10/25GE SFP28 • Built-in AC • Forwarding performance: 238 Mpps • Switching capacity*: 320 Gbps/2.4 Tbps
 CloudEngine S5755-H48N4Y-A	• 48 × 10/100/1000/2.5G Base-T Ethernet ports, 4 x 1/10/25GE SFP28 • Built-in AC • Forwarding performance: 327 Mpps • Switching capacity*: 440 Gbps/2.4 Tbps
 CloudEngine S5755-H24UN4Y2CZ	• 24 × 10/100/1000/2.5G Base-T Ethernet ports, 4 x 1/10/25GE SFP28, 2 x 40/100GE QSFP28 ports** • One extended slot • 90W PoE++ • N+1 power backup • Forwarding performance: 450 Mpps • Switching capacity*: 720 Gbps/2.4 Tbps

Models and Appearances	Description
 CloudEngine S5755-H48UN4Y2CZ	• 48 × 10/100/1000/2.5G Base-T Ethernet ports, 4 x 1/10/25GE SFP28, 2 x 40/100GE QSFP28 ports** • One extended slot • 90W PoE++ • N+1 power backup • Forwarding performance: 450 Mpps • Switching capacity*: 840 Gbps/2.4 Tbps

Note：*The value before the slash (/) refers to the device's switching capability, while the value after the slash (/) means the system's switching capability.

**Uplink 40GE ports can be split into 4 x 10GE ports, and uplink 100GE ports can be split into 4 x 25GE ports.

Subcards

The following table lists the subcards applicable to the CloudEngine S5755-H.

Technical specifications of the subcards applicable to the CloudEngine S5755-H series

Subcards	Technical Specifications	Applied Switch Model
 HSIC-X08S000	• 8*10GE SFP+ or 4*25GE SFP28 (only ports 1 to 4 support 25GE) • Dimensions without packaging (H x W x D) [mm(in.)]: 39.1 mm x 100.1 mm x 220 mm (1.54 in. x 3.94 in. x 8.66 in.) • Weight without packaging [kg(lb)]: 0.44 kg (0.97 lb) • Maximum power consumption [W]: 38.5 W • Maximum heat dissipation [BTU/hour]: 131.37 BTU/hour	• CloudEngine S5755-H24UN4Y2CZ • CloudEngine S5755-H48UN4Y2CZ
 HSIC-Y08S000	• 8*25GE SFP28 • Dimensions without packaging (H x W x D) [mm(in.)]: 39.1 mm x 100.1 mm x 220 mm (1.54 in. x 3.94 in. x 8.66 in.) • Weight without packaging [kg(lb)]: 0.44 kg (0.97 lb) • Maximum power consumption [W]: 38.5 W • Maximum heat dissipation [BTU/hour]: 131.37 BTU/hour	• CloudEngine S5755-H24UN4Y2CZ • CloudEngine S5755-H48UN4Y2CZ
 HSIC-Q04S000	• 4*40GE QSFP ports or 2*100GE QSFP28 ports (only ports 1/3 support 100GE） • Dimensions without packaging (H x W x D) [mm(in.)]: 39.1 mm x 100.1 mm x 220 mm (1.54 in. x 3.94 in. x 8.66 in.) • Weight without packaging [kg(lb)]: 0.44 kg (0.97 lb) • Maximum power consumption [W]: 40 W • Maximum heat dissipation [BTU/hour]: 136.48 BTU/hour	• CloudEngine S5755-H24UN4Y2CZ • CloudEngine S5755-H48UN4Y2CZ

Note: When the HSIC-Q04S000 is used on S5755-H series switches, it supports the 4 × 40GE and 2 × 100GE modes, but does not support stacking.

Fan Models

The following table lists the fan module applicable to the CloudEngine S5755-H.

Technical specifications of the fan module applicable to the CloudEngine S5755-H series

Fan Module	Technical Specifications	Applied Switch Model
 FAN-031A-B	• Dimensions (W x D x H): 40 mm x 100.3 mm x 40 mm • Number of fans: 1 • Weight: 0.1 kg • Maximum power consumption: 21.6 W • Maximum fan speed: 24500±10% revolutions per minute (RPM) • Maximum wind rate: 31 cubic feet per minute (CFM) • Hot swap: Supported	• CloudEngine S5755-H24UN4Y2CZ • CloudEngine S5755-H48UN4Y2CZ

Power Supply

The following table lists the power supplies applicable to the CloudEngine S5755-H.

Technical specifications of the power supplies applicable to the CloudEngine S5755-H series

Power Module	Technical Specifications	Applied Switch Model
 PAC600S56-EB	• Dimensions (H x W x D): 40 mm x 66 mm x 215 mm(1.57 in. x 2.6 in. x 8.46 in.) • Weight: 0.9 kg(1.98 lb) • Rated input voltage range: – 100 V AC to 130 V AC; 50/60 Hz – 100 V AC to 240 V AC, 50/60 Hz – 240 V DC • Maximum input voltage range: – 90 V AC to 290 V AC, 45 Hz to 66 Hz – 190 V DC to 290 V DC • Maximum input current: – 100 V AC to 130 V AC: 8 A – 100 V AC to 240 V AC: 8 A – 240 V DC: 4 A • Rated output current: – 53.5 V: 11.21 A – 55.5 V: 10.81 A • Rated output voltage: 53.5 V or 55.5 V • Rated output power: – 100 V AC to 130 V AC input: 300W – 100 V AC to 240 V AC & 240 V DC input: 600W • Hot swap: Supported	• CloudEngine S5755-H24UN4Y2CZ • CloudEngine S5755-H48UN4Y2CZ
 PAC1000S56-EB	• Dimensions (H x W x D): 40 mm x 66 mm x 215 mm(1.57 in. x 2.6 in. x 8.46 in.) • Weight: 1.1 kg (2.43 lb) • Rated input voltage range: – 100 V AC to 130 V AC, 50/60 Hz – 200 V AC to 240 V AC, 50/60 Hz	• CloudEngine S5755-H24UN4Y2CZ • CloudEngine S5755-H48UN4Y2CZ

Power Module	Technical Specifications	Applied Switch Model
	– 240 V DC • Maximum input voltage range: – 90 V AC to 290 V AC, 45 Hz to 66 Hz – 190 V DC to 290 V DC • Input current: – 100 V AC to 130 V AC: 12 A – 200 V AC to 240 V AC: 8 A – 240 V DC: 8 A • Maximum output current: – 100 V AC to 130 V AC input: 12 A – 200 V AC to 240 V AC input and 240 V DC input: 8 A – 240V DC: 8 A • Maximum output power: – Total power: 900 W (100 V AC to 130 V AC input)/1000 W (200 V AC to 240 V AC input and 240 V DC input) • Hot swap: Supported	
 PDC1000S56-EB	• Dimensions (H x W x D): 40 mm x 66 mm x 215 mm(1.57 in. x 2.6 in. x 8.46 in.) • Weight: 1 kg(2.20 lb) • Rated input voltage range: -48 V DC to -60 V DC • Maximum input voltage range: -38.4 V DC to -72 V DC • Maximum input current: 30 A • Rated output voltage: 53.5 V or 55.5 V • Rated output current: – 53.5 V: 18.69 A – 55.5 V: 18.02 A • Rated output power: 1000 W • Hot swap: Supported	• CloudEngine S5755-H24UN4Y2CZ • CloudEngine S5755-H48UN4Y2CZ

CloudEngine S5755-H series 2.5GE switches support PoE. They have max 3 power module slots.

The following table lists its power supply configurations.

Power supply configurations of CloudEngine S5755-H

Model	Power Module 1	Power Module 2	Power Module 3	Available PoE Power	Maximum Number of Ports (Fully Loaded)
CloudEngine S5755-H24UN4Y2CZ	1000 W AC (220 V)	–	–	765 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 12 • 802.3bt (90 W per port): 8
	1000 W AC (110 V)	–	–	675 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 22 • 802.3bt (60 W per port): 11

Model	Power Module 1	Power Module 2	Power Module 3	Available PoE Power	Maximum Number of Ports (Fully Loaded)
					• 802.3bt (90 W per port): 7
	1000 W DC	–	–	765 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 12 • 802.3bt (90 W per port): 8
	600 W AC (220 V)	–	–	428 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 14 • 802.3bt (60 W per port): 7 • 802.3bt (90 W per port): 4
	600 W AC (110 V)	–	–	143 W	• 802.3af (15.4 W per port): 9 • 802.3at (30 W per port): 4 • 802.3bt (60 W per port): 2 • 802.3bt (90 W per port): 1
	1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	–	1665 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 24 • 802.3bt (90 W per port): 18
	1000 W AC (110 V) 1000 W DC	1000 W AC (110 V)	–	1485 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 24 • 802.3bt (90 W per port): 16
	600 W AC (220 V)	600 W AC (220 V)	–	998 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 16 • 802.3bt (90 W per port): 11
	600 W AC (110 V)	600 W AC (110 V)	–	428 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 14 • 802.3bt (60 W per port): 7 • 802.3bt (90 W per port): 4
	1000 W AC (220 V) 1000 W DC	600 W AC (220 V)	–	1305 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 21 • 802.3bt (90 W per port): 14
	1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	2268 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 24 • 802.3bt (90 W per port): 24
	600 W AC (220 V)	600 W AC (220 V)	600 W AC (220 V)	1568 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 24

Model	Power Module 1	Power Module 2	Power Module 3	Available PoE Power	Maximum Number of Ports (Fully Loaded)
					• 802.3bt (90 W per port): 17
	1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	600 W AC (220 V)	2205 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 24 • 802.3bt (90 W per port): 24
	1000 W AC (220 V) 1000 W DC	600 W AC (220 V)	600 W AC (220 V)	1845 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 24 • 802.3bt (90 W per port): 20
	1000 W AC (110 V) 1000 W DC	1000 W AC (110 V) 1000 W DC	1000 W AC (110 V)	2268 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 24 • 802.3bt (90 W per port): 24
	600 W AC (110 V)	600 W AC (110 V)	600 W AC (110 V)	713 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 23 • 802.3bt (60 W per port): 11 • 802.3bt (90 W per port): 7
CloudEngine S5755-H48UN4Y2CZ	W AC (220 V)	–	–	740 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 12 • 802.3bt (90 W per port): 8
	1000 W AC (110 V)	–	–	650 W	• 802.3af (15.4 W per port): 42 • 802.3at (30 W per port): 21 • 802.3bt (60 W per port): 10 • 802.3bt (90 W per port): 7
	1000 W DC	–	–	740 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 12 • 802.3bt (90 W per port): 8
	600 W AC (220 V)	–	–	401 W	• 802.3af (15.4 W per port): 26 • 802.3at (30 W per port): 13 • 802.3bt (60 W per port): 6 • 802.3bt (90 W per port): 4
	600 W AC (110 V)	–	–	116 W	• 802.3af (15.4 W per port): 7 • 802.3at (30 W per port): 3 • 802.3bt (60 W per port): 1 • 802.3bt (90 W per port): 1
	1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	–	1640 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48 • 802.3bt (60 W per port): 27

Model	Power Module 1	Power Module 2	Power Module 3	Available PoE Power	Maximum Number of Ports (Fully Loaded)
					• 802.3bt (90 W per port): 18
	1000 W AC (110 V) 1000 W DC	1000 W AC (110 V)	–	1460 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48 • 802.3bt (60 W per port): 24 • 802.3bt (90 W per port): 16
	600 W AC (220 V)	600 W AC (220 V)	–	971 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 32 • 802.3bt (60 W per port): 16 • 802.3bt (90 W per port): 10
	600 W AC (110 V)	600 W AC (110 V)	–	401 W	• 802.3af (15.4 W per port): 26 • 802.3at (30 W per port): 13 • 802.3bt (60 W per port): 6 • 802.3bt (90 W per port): 4
	1000 W AC (220 V) 1000 W DC	600 W AC (220 V)	–	1280 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 42 • 802.3bt (60 W per port): 21 • 802.3bt (90 W per port): 14
	1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	2823 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48 • 802.3bt (60 W per port): 47 • 802.3bt (90 W per port): 31
	1000 W AC (02314APU-001, 220 V)	1000 W AC (02314APU-001, 220 V)	1000 W AC (02314APU-001, 220 V)	2880 W (supported in V600R025C10 and later versions)	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48 • 802.3bt (60 W per port): 48 • 802.3bt (90 W per port): 32
	600 W AC (220 V)	600 W AC (220 V)	600 W AC (220 V)	1541 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48 • 802.3bt (60 W per port): 25 • 802.3bt (90 W per port): 17
	1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	600 W AC (220 V)	2180 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48 • 802.3bt (60 W per port): 36 • 802.3bt (90 W per port): 24
	1000 W AC (220 V) 1000 W DC	600 W AC (220 V)	600 W AC (220 V)	1820 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48 • 802.3bt (60 W per port): 30 • 802.3bt (90 W per port): 20
	1000 W AC (110 V)	1000 W AC (110 V)	1000 W AC (110 V)	2270 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48

Model	Power Module 1	Power Module 2	Power Module 3	Available PoE Power	Maximum Number of Ports (Fully Loaded)
	1000 W DC	1000 W DC			• 802.3bt (60 W per port): 37 • 802.3bt (90 W per port): 25
	600 W AC (110 V)	600 W AC (110 V)	600 W AC (110 V)	686 W	• 802.3af (15.4 W per port): 44 • 802.3at (30 W per port): 22 • 802.3bt (60 W per port): 11 • 802.3bt (90 W per port): 7

Note：When a switch has multiple power modules installed, the multiple power modules work in load balancing mode to provide power for PDs.

Product Features and Highlights

High-density Multi-GE Access Interface

- The S5755-H series switches provide industry-leading Multi-GE port density, switching capacity, and packet forwarding rate. They support IEEE Std 802.3u Fast Ethernet Standard. A single switch supports a maximum of 48 10/100/1000/2.5G Base-T auto-sensing ports and 1G/10G/25G/40G/100G optical uplink ports, meets various device interconnection requirements and can be seamlessly integrated into the existing network.

Enabling Networks to Be More Agile for Services

- The S5755-H series switches provide industry-leading Multi-GE port density, switching capacity, and packet forwarding rate. A single switch supports a maximum of 48 10/100/1000/2.5G Base-T auto-sensing ports and 1G/10G/25G/40G/100G optical uplink ports, meets various device interconnection requirements and can be seamlessly integrated into the existing network.

Delivering Abundant Services More Agilely

- The CloudEngine S5755-H provides the integrated WLAN AC(native AC) function that can manage 1,024 APs, reducing the costs of purchasing additional WLAN AC hardware and breaking the forwarding performance bottleneck of an external WLAN AC. With this switch series, customers can stay ahead in the high-speed wireless era.
- With the unified user management function, the CloudEngine S5755-H authenticates both wired and wireless users, ensuring a consistent user experience no matter whether they are connected to the network through wired or wireless access devices. The unified user management function supports various authentication methods, including 802.1x, Portal, MAC address, and is capable of managing users based on user groups, domains, and time ranges. These functions visualize user and service management and boost the transformation from device-centric management to user experience-centric management.
- The CloudEngine S5755-H provides excellent quality of service(QoS) capabilities and supports queue scheduling and congestion control algorithms. Additionally, it adopts innovative priority queuing and multi-level scheduling mechanisms to implement fine-grained scheduling of data flows, meeting service quality requirements of different user terminals and services.

Note: The CloudEngine S5755-H can manage 16 APs by default. You can purchase licenses for more AP management on demand.

Providing Fine Granular Network Management More Agilely

- The CloudEngine S5755-H uses the Packet Conservation Algorithm for Internet(iPCA) technology that changes the traditional method of using simulated traffic for fault location. iPCA technology can monitor network quality for any service flow anywhere and anytime, without extra costs. It can detect temporary service interruptions in a very short time and can identify faulty ports accurately. This cutting-edge fault detection technology turns "extensive management" to "fine granular management."

Flexible Ethernet Networking

- In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), the CloudEngine S5755-H supports the latest Ethernet Ring Protection Switching (ERPS) standard. This protocol is reliable, easy to maintain, and implements fast protection switching within 50 ms. ERPS is defined in ITU-T G.8032. It implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.
- The CloudEngine S5755-H supports Smart Link and Virtual Router Redundancy Protocol (VRRP), which implement backup of uplinks. One CloudEngine S5755-H switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.

Various Security Control Methods

- Huawei switches support post-quantum cryptography (PQC) algorithms and encryption capabilities within transport security protocols, effectively defending against decryption threats posed by quantum computing to deliver future-proof quantum-resistant security for network infrastructure.
- The CloudEngine S5755-H supports 802.1x authentication, MAC address authentication, and hybrid authentication, and can dynamically delivery user policies such as VLANs, QoS policies, and access control lists (ACL). It also supports user management based on user groups.
- The CloudEngine S5755-H provides a series of mechanisms to defend against DoS and user-targeted attacks. DoS attacks are targeted at switches and include SYN flood, Land, Smurf, and ICMP flood attacks. User-targeted attacks include bogus DHCP server attacks, IP/MAC address spoofing, DHCP request flood, and change of the DHCP CHADDR value.
- The CloudEngine S5755-H sets up and maintains a DHCP snooping binding table, and discards the packets that do not match the table entries. You can specify DHCP snooping trusted and untrusted ports to ensure that users connect only to the authorized DHCP server.
- The CloudEngine S5755-H supports strict ARP learning, which prevents ARP spoofing attackers from exhausting ARP entries.
- The CloudEngine S5755-H supports Media Access Control Security (MACsec-256) with all downlink ports and uplink ports . It provides identity authentication, data encryption, integrity check, and replay protection to protect Ethernet frames and prevent attack packets.

Mature IPv6 Features

- The CloudEngine S5755-H is developed based on the mature, stable platform and supports IPv4/IPv6 dual stacks, IPv6 routing protocols (RIPng, OSPFv3, BGP4+, and IS-IS for IPv6). With these IPv6 features, the CloudEngine S5755-H can be deployed on a pure IPv4 network, a pure IPv6 network, or a shared IPv4/IPv6 network, helping achieve IPv4-to-IPv6 transition.

Intelligent Stack (iStack)

- The CloudEngine S5755-H supports the iStack function that combines multiple switches into a logical switch. Member switches in a stack implement redundancy backup to improve device reliability and use inter-device link aggregation to improve link reliability. iStack provides high network scalability. You can increase a stack's ports, bandwidth, and processing capacity by simply adding member switches. iStack also simplifies device configuration and management. After a stack is set up, up to nine physical switches can be virtualized into one logical device. You can log in to any member switch in the stack to manage all the member switches in the stack.

Note: All ports of the S5755-H series switches can be dedicated as stack ports or service ports as required.

Inter-Device Link Aggregation, Ensuring High Efficiency and Reliability

- The CloudEngine S5755-H supports Multichassis Link Aggregation Group (M-LAG) to implement link aggregation among multiple devices, improving link reliability from the card level to the device level.
- Switches in an M-LAG all work in active state to share traffic and back up each other, enhancing system reliability.
- Switches in an M-LAG system can be upgraded independently. During the upgrade, other switches in the system take over traffic forwarding to ensure uninterrupted services.
- M-LAG supports dual-homing to Ethernet, VXLAN, and IP networks, allowing for flexible networking.

VXLAN Features

- VXLAN is used to construct a Unified Virtual Fabric(UVF). As such, multiple service networks or tenant networks can be deployed on the same physical network, and service and tenant networks are isolated from each other. This capability truly

achieves 'one network for multiple purposes'. The resulting benefits include enabling data transmission of different services or customers, reducing the network construction costs, and improving network resource utilization.

- The CloudEngine S5755-H series switches are VXLAN-capable and allow centralized and distributed VXLAN gateway deployment modes. These switches also support the BGP EVPN protocol for dynamically establishing VXLAN tunnels and can be configured using NETCONF/YANG.

Intelligent O&M

- The CloudEngine S5755-H provides telemetry technology to collect device data in real time and send the data to Huawei campus network analyzer CampusInsight. The CampusInsight analyzes network data based on the intelligent fault identification algorithm, accurately displays the real-time network status, effectively demarcates and locates faults in a timely manner, and identifies network problems that affect user experience, accurately guaranteeing user experience.
- The CloudEngine S5755-H supports the WebMaster solution, featuring an embedded local management system. It automatically discovers network topology and provides full-network visibility, including topology views, network elements (NEs), and device alarms. The solution also enables unified management of switches, AR routers, and APs—without requiring an external network management system.WebMaster offers a graphical interface for intuitive operations, including guided service provisioning, one-click batch upgrades, zero-configuration device replacement, and automatic authentication and onboarding of NEs. It can also detect loops caused by incorrect cable connections and eliminate them automatically.With its rich feature set, WebMaster enables the entire campus network to be visible, manageable, and controllable—all through a single device.

PoE Function

- **Perpetual PoE**:When a PoE switch is warm rebooting (Don't turn PSE switch power off), for example, reboot upon the software upgrade, the power supply to PDs is not interrupted.This capability ensures that PDs are not powered off during the switch warm reboot.
- **Fast PoE**: PoE switches can supply power to PDs within seconds after they are powered on. This is different from common switches that generally take 1 to 3 minutes to start to supply power to PDs. When a PoE switch reboots due to a power failure, the PoE switch continues to supply power to the PDs immediately after being powered on without waiting until it finishes reboot. This greatly shortens the power failure time of PDs.

Intelligent Upgrade

- Switches support the intelligent upgrade feature. Specifically, switches obtain the version upgrade path and download the newest version for upgrade from the Huawei Online Upgrade Platform (HOUP). The entire upgrade process is highly automated and achieves one-click upgrade. In addition, preloading the version is supported, which greatly shortens the upgrade time and service interruption time.
- The intelligent upgrade feature greatly simplifies device upgrade operations and makes it possible for the customer to upgrade the version independently. This greatly reduces the customer's maintenance costs. In addition, the upgrade policies on the HOUP platform standardize the upgrade operations, which greatly reduces the risk of upgrade failures.

Big Data Security Collaboration

- The CloudEngine S5755-H switches use NetStream to collect campus network data and then report such data to the Huawei HiSec Insight. The purposes of doing so are to detect network security threats, display the security posture across the entire network, and enable automated or manual response to security threats. The HiSec Insight delivers the security policies to the iMaster NCE-Campus. The iMaster NCE-Campus then delivers such policies to switches that will handle security events accordingly. All these ensure campus network security.

Cloud Management

- The Huawei cloud management platform allows users to configure, monitor, and inspect switches on the cloud, reducing on-site deployment and O&M manpower costs and decreasing network OPEX. Huawei switches support both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI).

Link Layer Security

- This series switches support MACsec. MACsec protects transmitted Ethernet data frames through identity authentication, data encryption, integrity check, and anti-replay protection, reducing the risks of information leakage and malicious network attacks. With MACsec, these switch models are able to address strict information security requirements of customers in industries such as government and finance.

Open Programmability System(OPS)

- Open Programmability System(OPS) is an open programmable system based on the Python language. IT administrators can program the O&M functions of a switch through Python scripts to quickly innovate functions and implement intelligent O&M.

Licensing

IDN One Software

CloudEngine S5755-H supports both the traditional feature-based licensing mode and the latest Huawei IDN One Software (N1 mode for short) licensing mode. The N1 mode is ideal for deploying Huawei CloudCampus Solution in the on-premises scenario, as it greatly enhances the customer experiences in purchasing and upgrading software services with simplicity.

Software Package Features in N1 Mode

Switch Functions	N1 Basic Software	N1 Foundation Software Package	N1 Advanced Software Package
Basic network functions: Layer 2 functions, IPv4, IPv6, and others Note: For details, see the Service Features	√	√	√
Basic network automation based on the iMaster NCE-Campus: • Basic automation: Plug-and-play, SSID, and AP group management • Basic monitoring: Application visualization • NE management: Image and topology management and discovery • User access authentication	×	√	√
Automation and intelligent O&M: Basic functions for intelligent network analysis of CampusInsight.	×	√	√
Advanced network automation and intelligent O&M: VXLAN, free mobility, Endpoint plug&play of iMaster NCE-Campus and Application analysis function of CampusInsight, Smart Anomaly Detection (SmartAD)	×	×	√

Product Specifications

Functions and Features

Category	Service Feature
MAC address table	Automatic MAC address learning, synchronization, and aging
	Static MAC address and dynamic MAC address management
	Static, dynamic, and blackhole MAC address entries
	Packet filtering based on source MAC addresses
	MAC address learning limiting based on ports
VLAN	Support for 4K VLANs simultaneously

	Voice VLAN
	MUX VLAN
	Super-VLAN and sub-VLAN
	VLAN stacking and VLAN mapping
	LNP, VCMP, and GVRP
	Basic QinQ and selective QinQ
Layer 2 ring network protocol	Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protective switchover
	ERPS (G.8032) support, enabling less than 50 ms switchover upon a fault
	STP (IEEE 802.1d), RSTP (IEEE 802.1w), MSTP (IEEE 802.1s), and VBST
	BPDU protection, root protection, and loop protection
	BPDU tunnel
	SEP
Detection protocol	LBDT, L2PT, and DLDP
	Smart Link and Monitor Link
	802.1ag, 802.3ah, and Y.1731
Multicast	PIM DM, PIM SM, and PIM SSM
	IGMP v1/v2/v3, IGMP v1/v2/v3 snooping, and MLD snooping
	IPv4/IPv6 multicast routing and multicast load balancing
	Multicast VPN
	IP multicast over VXLAN, including Layer 2/Layer 3 multicast over VXLAN
	Multicast traffic statistics on a per-port basis
	Multicast VLAN and static multicast MAC
IP services	Dual-stack IPv4 and IPv6
	ARP
	Neighbor discovery (ND)
	DNS
	DHCPv4 client, DHCPv4 relay, DHCPv4 server, and DHCPv4 snooping
	DHCPv6 client, DHCPv6 relay, DHCPv6 server, and DHCPv6 snooping
	URPF
	6to4 Tunnel、6over4 Tunnel、4over6 Tunnel、6PE
	IPv4/v6 ping, tracert, and telnet
IP routing	Static route, routing policy, and policy-based routing
	RIPv1/v2, RIPng, OSPFv2, OSPFv3, IS-IS, ISISv6, BGP, and BGP4+
MPLS	MPLS LDP
	MPLS TE

	MPLS QoS
VPN	MPLS L2VPN (VPLS/VPWS) and MPLS L3VPN
	MPLS BGP VPN
	GRE
Segment routing	SRv6 BE (L3 EVPN)
	BGP EVPN
	SRv6 configuration through NETCONF
VXLAN	VXLAN distributed gateway and centralized gateway modes
	BGP EVPN
	VXLAN Layer 2 forwarding
	VXLAN Layer 3 forwarding
	VXLAN configuration through NETCONF and SDN-based automated wired network deployment
	VXLAN over IPv6 (static)
	VXLAN-Routing, VXLAN-Bridge, VXLAN-Tunnel, and VXLAN-Access
Reliability	LACP
	M-LAG
	VRRP
	BFD
	LLDP
User access and authentication	Multiple authentication modes, including AAA, RADIUS, RADIUS over DTLS, and HWTACACS
	Policy association
	Endpoint identification and unauthorized access prevention
	Free mobility
	802.1X, MAC address, and Portal authentication
	Free mobility
	802.1X, MAC address, and Portal authentication
QoS/ACL	Rate limiting on packets sent and received by a port
	Packet redirection
	Port-based traffic policing and two-rate three-color CAR
	Eight queues on each port
	SP, DRR, WDRR, SP+DRR, and SP+WDRR queue scheduling algorithms
	WRED
	Marking of 802.1p and DSCP priorities of packets
	Packet filtering at Layer 2 to Layer 4, filtering out invalid frames based on the source MAC address, destination MAC address, source IP address, destination IP address,

	TCP/UDP source port number/destination port number, protocol type, and VLAN ID
	Rate limiting in each queue and traffic shaping on ports
	Support 42K@320 bit (K=1024) (shared ingress/egress)
	VLAN slicing
Security features	Hierarchical user management and password protection
	DoS attack defense, ARP attack defense, and ICMP attack defense
	Binding of the IP address, MAC address, port number, and VLAN ID
	Port isolation, port security, and sticky MAC
	ARP security features including ARP snooping, ND snooping, ARP conflict detection, Dynamic ARP Inspection (DAI), and Egress ARP Inspection (EAI).
	Blackhole MAC addresses
	Unknown unicast, unknown multicast, and broadcast storm control on a per-port basis
	IEEE 802.1X authentication, with per-port maximum user limits
	IP Source Guard (IPSG)
	Smart Anomaly Detection (SmartAD)
	Public Key Infrastructure (PKI)
	SSH v2.0
	HTTPS
	MACsec
	CPU attack defense, CPU protection
	Blacklist and whitelist mechanisms
	Host Intrusion Prevention System (HIPS) and Federal Information Processing Standard (FIPS)
	Source Address Validation Improvement (SAVI)
Network management and monitoring	iStack and fast stack upgrade, Up to 9 switches in a stack
	iStack, stack bandwidth: 400Gbps
	SNMPv1/v2c/v3
	NETCONF/YANG-based cloud management
	Management via the eSight or web system
	RMON
	iPCA, Netstream, sFlow, NQA, and Telemetry
	Port mirroring, traffic mirroring, RSPAN, and ERSPAN
	Packet loss visibility
	Application identification
	iFlow-based full-flow quality degradation analysis
	USB-based deployment, deployment through the registration query center, and SZTP

	RESTCONF, gRPC, and EVA
Network maintenance	Telnet for remote configuration and maintenance
	Ping and traceroute
	Virtual Cable Test (VCT)
	FTP, SFTP, and TFTP file management
	Time management
	CPU and memory resource monitoring
	System logs and hierarchical alarms
	Hot patching
	User operation logs
	IEEE 802.3az Energy-Efficient Ethernet (EEE)
	Configuration rollback
	Webmaster-based management
Wireless management (integrated WAC): Basic WLAN services	Hot backup for devices with integrated WAC functionality in cluster mode
	2.4 GHz & 5 GHz load balancing
	5 GHz-prior access
Wireless management (integrated WAC): AP management	Up to 1K APs managed
	IPv4 network between an AP and a WAC
	AP blacklist
	AP whitelist
	Setting of the AP access control mode
	AP configuration and management
	AP LLDP topology awareness
Wireless management (integrated WAC): Wireless user management	User roaming within a WAC
	AP-based user location
	802.1X authentication
	MAC address authentication
	Portal authentication
Wireless management (integrated WAC): CAPWAP	Direct forwarding over Layer 2/Layer 3 networks
	Tunnel forwarding over Layer 2/Layer 3 networks
	CAPWAP tunnel encryption
Wireless management (integrated WAC): RF management	802.11a/b/g/n
	802.11ac wave1/wave2
	802.11ax
	802.11be

	Sets RF interference monitoring and avoidance
	Detects co-channel interference, adjacent-channel interference, and interference from other devices and STAs
	Automatically selects channels and power when APs go online
	Dynamically optimizes power and channels
Wireless management (integrated WAC): WLAN QoS	Rate limiting of upstream and downstream traffic on the air interface based on the VAP
	Rate limiting of upstream and downstream traffic on the air interface based on users
	CAR for WLAN users
Interoperability	VBST (compatible with PVST/PVST+/RPVST)

Hardware Specifications

The following table lists the hardware specifications of the CloudEngine S5755-H.

Hardware specifications of CloudEngine S5755-H models

Item		CloudEngine S5755-H24N4Y-A	CloudEngine S5755-H48N4Y-A
Physical specifications	Dimensions (H x W x D, mm)	43.6 x 442 x 220	43.6 x 442 x 220
	Chassis height	1 U	1 U
	Chassis weight (including packaging)	4.45kg	4.71kg
Fixed port	10M	24	48
	100M	24	48
	1GE	24	48
	2.5GE port	24	48
	10GE SFP+ port	4	4
	25GE SFP28 port	4	4
	40GE QSFP+ port	0	0
	100GE QSFP28 port	0	0
Management port	ETH port	Supported	Supported
	Console port (RJ45)	Supported	Supported
	USB port	Not supported	Not supported
CPU	Frequency	2 GHz	2 GHz
	Cores	4	4
Storage	Memory (RAM)	4 GB	4 GB
	Flash memory	2 GB	2 GB
Power supply system	Power supply type	• Built-in AC	• Built-in AC
	Rated voltage range	• AC input: 100–240 V AC; 50/60 Hz	• AC input : 100 V AC to 240 V AC，50/60 Hz
	Maximum voltage range	• AC input: 90 V AC to 264 V AC,	AC input : 90 V AC to 264 V AC，

Item		CloudEngine S5755-H24N4Y-A	CloudEngine S5755-H48N4Y-A
		47 Hz to 63 Hz	47/63 Hz
	Maximum power consumption	100% traffic under the ATIS standard: 69 W	100% traffic under the ATIS standard: 105 W
	Typical power consumption	30% traffic under the ATIS standard: 65 W	30% traffic under the ATIS standard: 101 W
	Static power consumption	45 W	59 W
Heat dissipation system	Heat dissipation mode	Air cooling for heat dissipation, intelligent fan speed adjustment	Air cooling for heat dissipation, intelligent fan speed adjustment
	Number of fan modules	2 built-in fans	2 built-in fans
	Airflow	Air flows in from the left side, and exhausts from the right side	Air flows in from the left side, and exhausts from the right side
	Maximum heat dissipation of the device (BTU/hour)	100% traffic under the ATIS standard: 235.43	100% traffic under the ATIS standard: 358.27
Environment parameters	Long-term operating temperature	• 0-1800 m: -5°C to 45°C • 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m	• 0-1800 m: -5°C to 45°C • 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m
	Short-term operating temperature	• 0-1800 m: -5°C to 50°C • 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m	• 0-1800 m: -5°C to 50°C • 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m
	Storage temperature	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%–95% (non-condensing)	5%–95% (non-condensing)
	Operating altitude	5000 m	5000 m
	Noise at normal temperature (acoustic power) [dB(A)]	47.2 dB(A)	• 47.2 dBA
	Noise at normal temperature (acoustic pressure) [dB(A)]	35.2 dB(A)	• 56.2 dBA
	Power supply surge protection [kV]	Differential mode: ±6 kV; common mode: ±6 kV	Differential mode: ±6 kV; common mode: ±6 kV
Reliability	MTBF (year)[2]	51.06	45.5
	Availability	> 0.99999	> 0.99999
Certification		• EMC certification • Safety certification • Manufacturing certification	• EMC certification • Safety certification • Manufacturing certification

Item		CloudEngine S5755-H24UN4Y2CZ	CloudEngine S5755-H48UN4Y2CZ
Physical	Dimensions (H x W x D, mm)	43.6 x 442 x 420	43.6 x 442 x 420

Item		CloudEngine S5755-H24UN4Y2CZ	CloudEngine S5755-H48UN4Y2CZ
specifications	Chassis height	1 U	1 U
	Chassis weight (including packaging)	9.61kg	9.89kg
Fixed port	10M	24	48
	100M	24	48
	1GE	24	48
	2.5GE port	24	48
	10GE SFP+ port	4	4
	25GE SFP28 port	4	4
	40GE QSFP+ port	2	2
	100GE QSFP28 port	2	2
Extended slot	HSIC-X08S000	8*10GE SFP+ ports or 4*25GE SFP28 ports (only ports 1 to 4 support 25GE)	
	HSIC-Y08S000	8*25GE SFP28 ports	
	HSIC-Q04S000	4*40GE QSFP ports or 2*100GE QSFP28 ports (only ports 1/3 support 100GE）	
Management port	ETH port	Supported	Supported
	Console port (RJ45)	Supported	Supported
	USB port	USB 2.0	USB 2.0
CPU	Frequency	2 GHz	2 GHz
	Cores	4	4
Storage	Memory (RAM)	4 GB	4 GB
	Flash memory	2 GB	2 GB
Power supply system	Power supply type	• 600 W PoE AC (pluggable) • 1000 W PoE AC (pluggable) • 1000 W PoE DC (pluggable)	• 600 W PoE AC (pluggable) • 1000 W PoE AC (pluggable) • 1000 W PoE DC (pluggable)
	Rated voltage range	• AC input : 100 V AC to 130 V AC, 200 V AC to 240 V AC，50/60 Hz • High-Voltage DC input: 240 V DC • DC input : -48 VDC to -60 V DC	• AC input : 100 V AC to 130 V AC, 200 V AC to 240 V AC，50/60 Hz • High-Voltage DC input: 240 V DC • DC input : -48 VDC to -60 V DC
	Maximum voltage range	• AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz • High-Voltage DC input: 190 V DC to 290 V DC • DC input: -38.4 V DC to -72 V DC	• AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz • High-Voltage DC input: 190 V DC to 290 V DC • DC input: -38.4 V DC to -72 V DC
	Maximum power consumption	• 100% traffic under the ATIS standard, dual power supplies, and without PoE: • 120 W (all ports used) • 110 W (2 x 100GE ports not	• 100% traffic under the ATIS standard, dual power supplies, and without PoE: • 151 W (all ports used) • 141 W (2 x 100GE ports not

Item		CloudEngine S5755-H24UN4Y2CZ	CloudEngine S5755-H48UN4Y2CZ
		used) • Full PoE load, three 1000 W power modules: 2435 W (PoE: 2268 W)	used) • Full PoE load, three 1000 W power modules: 3022 W (PoE: 2820 W)
	Typical power consumption	30% traffic under the ATIS standard, dual power supplies: • 109 W (all ports used) • 99 W (2 x 100GE ports not used)	30% traffic under the ATIS standard, dual power supplies: • 135 W (all ports used) • 125 W (2 x 100GE ports not used)
	Static power consumption	71 W	78 W
Heat dissipation system	Heat dissipation mode	Air cooling for heat dissipation, intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	2	2
	Airflow direction	Air intake from left, front, and right and air exhaust from rear	Air flows in from the left, right, and front sides, and exhausts from the rear panel
	Maximum heat dissipation of the device (BTU/hour)	• 100% traffic under the ATIS standard, dual power supplies, and without PoE: • 409.45 (all ports used) • 375.33 (2 x 100GE ports not used) • PoE full load, three 1000 W power modules: 8308.46	• 100% traffic under the ATIS standard, dual power supplies, and without PoE: • 515.23 (all ports used) • 481.11 (2 x 100GE ports not used) • Full PoE load, three 1000 W power modules: 10311.37
Environment parameters	Long-term operating temperature	• 0-1800 m: -5°C to 45°C • 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m	• 0-1800 m: -5°C to 45°C • 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m
	Short-term operating temperature	• 0-1800 m: -5°C to 50°C • 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m	• 0-1800 m: -5°C to 50°C • 1800-5000 m: The operating temperature decreases 1°C every time the altitude increases 220 m
	Storage temperature	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5%–95% (non-condensing)	5%–95% (non-condensing)
	Operating altitude	5000 m	5000 m
	Noise at normal temperature (acoustic power) [dB(A)]	30% PoE load: 52.90 dBA	• 30% load: 52.9 dBA
	Noise at normal temperature (acoustic pressure) [dB(A)]	30% PoE load: 40.9 dBA	• 30% load: 59.8 dBA
	Surge protection specification (power port)	• Configured with AC power modules: ±6 kV in differential mode and ±6 kV in common mode • Configured with DC power modules: ±2 kV in differential	• Configured with AC power modules: ±6 kV in differential mode and ±6 kV in common mode • Configured with DC power modules: ±2 kV in differential

Item		CloudEngine S5755-H24UN4Y2CZ	CloudEngine S5755-H48UN4Y2CZ
		mode and ±4 kV in common mode	mode and ±4 kV in common mode
Reliability	MTBF (years)	71.48	56.34
	Availability	> 0.99999	> 0.99999
Certification		• EMC certification • Safety certification • Manufacturing certification	• EMC certification • Safety certification • Manufacturing certification

NOTE

1: The power consumption under different load conditions is calculated according to the ATIS standard. Additionally, the EEE function is enabled and there is no PoE power output.

2: The reliability parameter values are calculated based on the typical configuration of the device. The parameter values vary according to the modules configured by the customer.

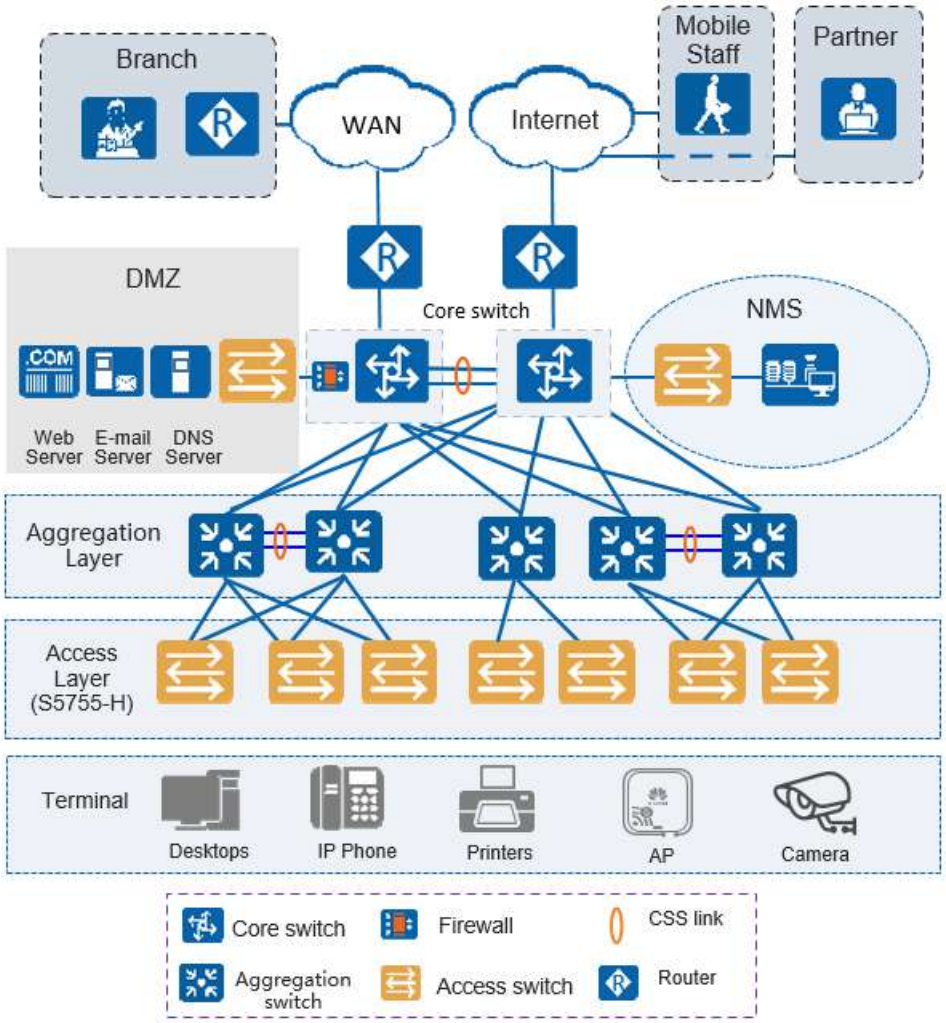
Performance Specification

Entries	S5755-H series switches
Number of dynamic MAC address entries	Up to 256K
Number of static MAC address entries	1024
Maximum number of VLANs	4094
Number of VLANIF interfaces	4094
IPv4 routing entries	Up to 192K
IPv6 routing entries	Up to 96K
Number of ARP entries	Up to 130500
Number of ND entries	Up to 65000
ACL scale entries	IPV4: 42K@320 bit (K=1024) , IPV6: 21K@640 bit (K=1024)
IPv4/IPv6 multicast L2 entries	16K/4K
IPv4/IPv6 multicast L3 entries	16K/4K
Device buffer (byte)	12MB
Jumbo frames	Up to 9600

Networking and Applications

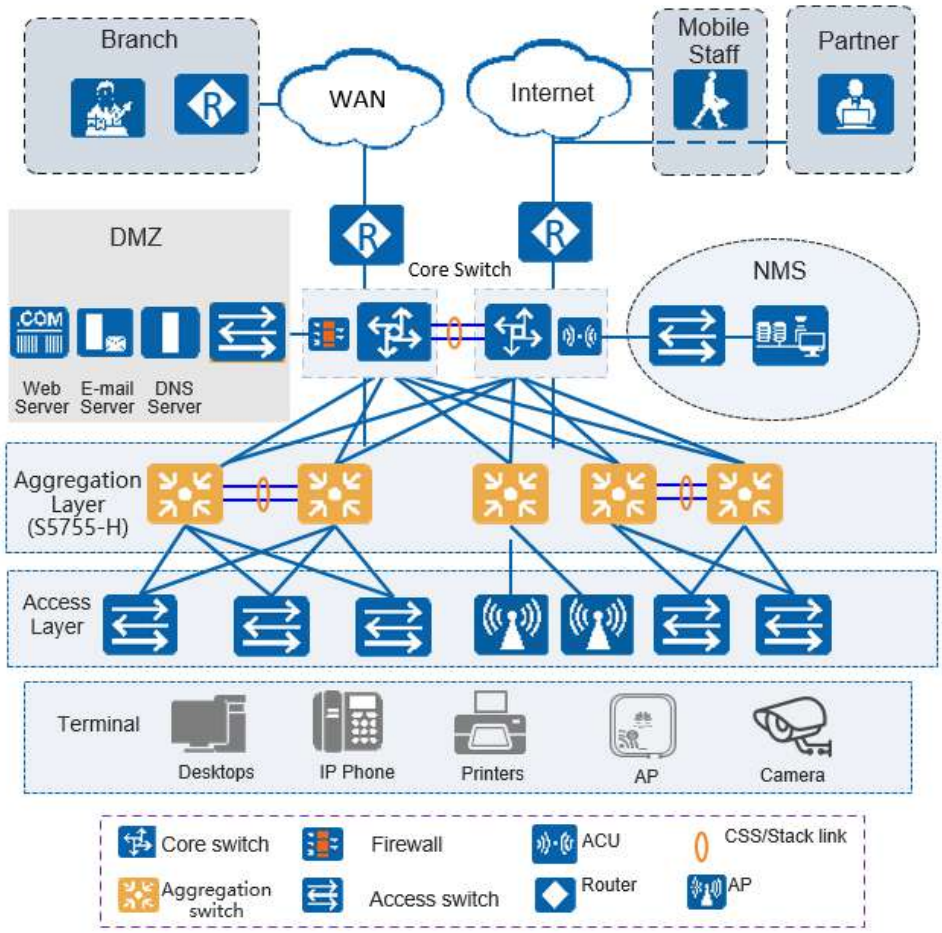
Large-Scale Enterprise Campus Network

CloudEngine S5755-H series switches can be deployed at the access layer of a campus network to build a high-performance and highly reliable enterprise network.



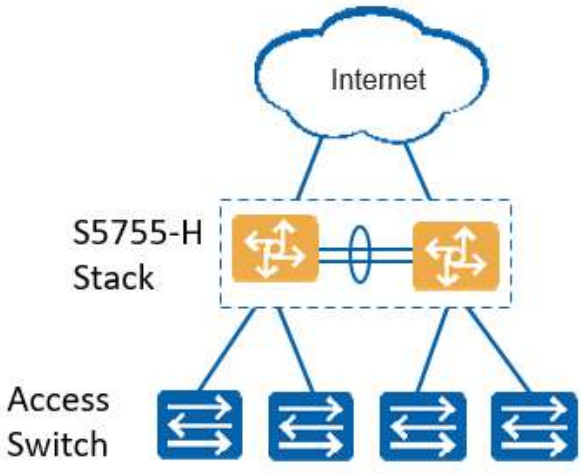
Small- or Medium-scale Enterprise Campus Network

CloudEngine S5755-H series switches can be deployed at the aggregation layer of a campus network to build a high-performance, multi-service, and highly reliable enterprise network.



Small-scale Enterprise Campus Network

With powerful aggregation and routing capabilities of CloudEngine S5755-H series switches make them suitable for use as core switches in a small-scale enterprise network. Two or more S5755-H switches use iStack technology to ensure high reliability. They provide a variety of access control policies to achieve centralized management and simplify configuration.



Safety and Regulatory Compliance

The following table lists the safety and regulatory compliance of the CloudEngine S5755-H.

Certification Category	Description
Safety	IEC 62368-1
	EN 62368-1
	UL 62368-1
	CSA C22.2 No 62368-1
Electromagnetic Compatibility (EMC)	CISPR32
	CISPR35
	EN 55032
	EN 55035
	ETSI EN 300 386
	CFR 47 FCC Part 15
	ICES 003
	AS/NZS CISPR32
	VCCI
	IEC61000-4-2
Environment	RoHS
	REACH
	WEEE
Laser safety	IEC60825-1
	IEC60825-2
	EN60825-1
	EN60825-2

NOTE

- EMC: electromagnetic compatibility
- CISPR: International Special Committee on Radio Interference
- EN: European Standard
- ETSI: European Telecommunications Standards Institute
- CFR: Code of Federal Regulations
- FCC: Federal Communication Commission
- IEC: International Electrotechnical Commission
- AS/NZS: Australian/New Zealand Standard
- VCCI: Voluntary Control Council for Interference
- UL: Underwriters Laboratories
- CSA: Canadian Standards Association
- IEEE: Institute of Electrical and Electronics Engineers
- RoHS: restriction of the use of certain hazardous substances
- REACH: Registration Evaluation Authorization and Restriction of Chemicals
- WEEE: Waste Electrical and Electronic Equipment

MIB and Standards Compliance

Supported MIBs

The following table lists the MIBs supported by the CloudEngine S5732-H.

MIBs supported by the CloudEngine S5755-H series

Category	MIB
Public MIB	• BRIDGE-MIB • DISMAN-NSLOOKUP-MIB • DISMAN-PING-MIB • DISMAN-TRACEROUTE-MIB • ENTITY-MIB • EtherLike-MIB • IF-MIB • IP-FORWARD-MIB • IPv6-MIB • LAG-MIB • LLDP-EXT-DOT1-MIB • LLDP-EXT-DOT3-MIB • LLDP-MIB • MPLS-FTN-STD-MIB • MPLS-L3VPN-STD-MIB • MPLS-LDP-GENERIC-STD-MIB • MPLS-LDP-STD-MIB • MPLS-LSR-STD-MIB • MPLS-TE-STD-MIB • NOTIFICATION-LOG-MIB • NQA-MIB • OSPF-TRAP-MIB • P-BRIDGE-MIB • Q-BRIDGE-MIB • RFC1213-MIB • RIPv2-MIB • RMON2-MIB • RMON-MIB • SAVI-MIB • SNMP-FRAMEWORK-MIB • SNMP-MPD-MIB • SNMP-NOTIFICATION-MIB • SNMP-TARGET-MIB • SNMP-USER-BASED-SM-MIB • SNMPv2-MIB • TCP-MIB • UDP-MIB
Huawei-proprietary MIB	• HUAWEI-AAA-MIB

Category	MIB
	• HUAWEI-ACL-MIB • HUAWEI-ALARM-MIB • HUAWEI-ALARM-RELIABILITY-MIB • HUAWEI-BASE-TRAP-MIB • HUAWEI-BRAS-RADIUS-MIB • HUAWEI-BRAS-SRVCFG-EAP-MIB • HUAWEI-BRAS-SRVCFG-STATICUSER-MIB • HUAWEI-CBQOS-MIB • HUAWEI-CDP-COMPLIANCE-MIB • HUAWEI-CONFIG-MAN-MIB • HUAWEI-CPU-MIB • HUAWEI-DAD-TRAP-MIB • HUAWEI-DC-MIB • HUAWEI-DATASYNC-MIB • HUAWEI-DEVICE-MIB • HUAWEI-DHCPR-MIB • HUAWEI-DHCPS-MIB • HUAWEI-DHCP-SNOOPING-MIB • HUAWEI-DIE-MIB • HUAWEI-DNS-MIB • HUAWEI-DLDP-MIB • HUAWEI-ELMI-MIB • HUAWEI-ERPS-MIB • HUAWEI-ERRORDOWN-MIB • HUAWEI-ENERGYMNGT-MIB • HUAWEI-EASY-OPERATION-MIB • HUAWEI-ENTITY-EXTENT-MIB • HUAWEI-ENTITY-TRAP-MIB • HUAWEI-ETHARP-MIB • HUAWEI-ETHOAM-MIB • HUAWEI-FLASH-MAN-MIB • HUAWEI-FWD-RES-TRAP-MIB • HUAWEI-GARP-APP-MIB • HUAWEI-GTSM-MIB • HUAWEI-HGMP-MIB • HUAWEI-HWTACACS-MIB • HUAWEI-IF-EXT-MIB • HUAWEI-INFOCENTER-MIB • HUAWEI-IPPOOL-MIB • HUAWEI-IPV6-MIB • HUAWEI-ISOLATE-MIB • HUAWEI-L2IF-MIB • HUAWEI-L2MAM-MIB • HUAWEI-L2VLAN-MIB • HUAWEI_LDT-MIB

Category	MIB
	• HUAWEI-LLDP-MIB • HUAWEI-MAC-AUTHEN-MIB • HUAWEI-MEMORY-MIB • HUAWEI-MFF-MIB • HUAWEI-MFLP-MIB • HUAWEI-MSTP-MIB • HUAWEI-BGP-VPN-MIB • HUAWEI-CCC-MIB • HUAWEI-MULTICAST-MIB • HUAWEI-NAP-MIB • HUAWEI-NTPV3-MIB • HUAWEI-PERFORMANCE-MIB • HUAWEI-PORT-MIB • HUAWEI-PORTAL-MIB • HUAWEI-QINQ-MIB • HUAWEI-RIPv2-EXT-MIB • HUAWEI-RM-EXT-MIB • HUAWEI-RRPP-MIB • HUAWEI-SECURITY-MIB • HUAWEI-SEP-MIB • HUAWEI-SNMP-EXT-MIB • HUAWEI-SSH-MIB • HUAWEI-STACK-MIB • HUAWEI-SWITCH-L2MAM-EXT-MIB • HUAWEI-SWITCH-SRV-TRAP-MIB • HUAWEI-SYS-MAN-MIB • HUAWEI-TCP-MIB • HUAWEI-TFTPC-MIB • HUAWEI-TRNG-MIB • HUAWEI-XQOS-MIB

Standard Compliance

The following table lists the standards that the CloudEngine S5732-H complies with.

Standard compliance list of the CloudEngine S5755-H series

Standard Organization	Standard or Protocol
IETF	• RFC 768 User Datagram Protocol (UDP) • RFC 792 Internet Control Message Protocol (ICMP) • RFC 793 Transmission Control Protocol (TCP) • RFC 826 Ethernet Address Resolution Protocol (ARP) • RFC 854 Telnet Protocol Specification • RFC 951 Bootstrap Protocol (BOOTP) • RFC 959 File Transfer Protocol (FTP) • RFC 1058 Routing Information Protocol (RIP)

Standard Organization	Standard or Protocol
	• RFC 1112 Host extensions for IP multicasting • RFC 1157 A Simple Network Management Protocol (SNMP) • RFC 1256 ICMP Router Discovery • RFC 1305 Network Time Protocol Version 3 (NTP) • RFC 1349 Internet Protocol (IP) • RFC 1493 Definitions of Managed Objects for Bridges • RFC 1542 Clarifications and Extensions for the Bootstrap Protocol • RFC 1643 Ethernet Interface MIB • RFC 1757 Remote Network Monitoring (RMON) • RFC 1901 Introduction to Community-based SNMPv2 • RFC 1902-1907 SNMP v2 • RFC 1981 Path MTU Discovery for IP version 6 • RFC 2131 Dynamic Host Configuration Protocol (DHCP) • RFC 2328 OSPF Version 2 • RFC 2453 RIP Version 2 • RFC 2460 Internet Protocol, Version 6 Specification (IPv6) • RFC 2461 Neighbor Discovery for IP Version 6 (IPv6) • RFC 2462 IPv6 Stateless Address Auto configuration • RFC 2463 Internet Control Message Protocol for IPv6 (ICMPv6) • RFC 2474 Differentiated Services Field (DS Field) • RFC 2740 OSPF for IPv6 (OSPFv3) • RFC 2863 The Interfaces Group MIB • RFC 2597 Assured Forwarding PHB Group • RFC 2598 An Expedited Forwarding PHB • RFC 2571 SNMP Management Frameworks • RFC 2865 Remote Authentication Dial In User Service (RADIUS) • RFC 3046 DHCP Option82/Relay • RFC 3376 Internet Group Management Protocol, Version 3 (IGMPv3) • RFC 3513 IP Version 6 Addressing Architecture • RFC 3579 RADIUS Support For EAP • RFC 4271 A Border Gateway Protocol 4 (BGP-4) • RFC 4760 Multiprotocol Extensions for BGP-4 • draft-grant-tacacs-02 TACACS+ • RFC 6241 Network Configuration Protocol (NETCONF) • RFC 6020 YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)
IEEE	• IEEE 802.1D Media Access Control (MAC) Bridges • IEEE 802.1p Traffic Class Expediting and Dynamic Multicast Filtering • IEEE 802.1Q Virtual Bridged Local Area NetworksFIS • IEEE 802.1ad Provider Bridges • IEEE 802.2 Logical Link Control • IEEE Std 802.3 CSMA/CD • IEEE Std 802.3ab 1000BASE-T specification • IEEE Std 802.3ab RJ45 con Auto-MDIX

Standard Organization	Standard or Protocol
	• IEEE Std 802.3ad Aggregation of Multiple Link Segments • IEEE Std 802.3ae 10GE WEN/LAN Standard • IEEE Std 802.3x Full Duplex and flow control • IEEE Std 802.3z Gigabit Ethernet Standard • IEEE802.1ax/IEEE802.3ad Link Aggregation • IEEE 802.1ag Connectivity Fault Management • IEEE 802.1ab Link Layer Discovery Protocol • IEEE 802.1D Spanning Tree Protocol • IEEE 802.1w Rapid Spanning Tree Protocol • IEEE 802.1s Multiple Spanning Tree Protocol • IEEE 802.1x Port based network access control protocol • IEEE 802.3az Automatic power adjustment on Ethernet interfaces
ITU	• ITU SG13 Y.17ethoam • ITU SG13 QoS control Ethernet-Based IP Access
ISO	• ISO 10589 IS-IS Routing Protocol
MEF	• MEF 2 Requirements and Framework for Ethernet Service Protection • MEF 9 Abstract Test Suite for Ethernet Services at the UNI • MEF 10.2 Ethernet Services Attributes Phase 2 • MEF 11 UNI Requirements and Framework • MEF 13 UNI Type 1 Implementation Agreement • MEF 15 Requirements for Management of Metro Ethernet Phase 1 Network Elements • MEF 17 Service OAM Framework and Requirements • MEF 20 UNI Type 2 Implementation Agreement • MEF 23 Class of Service Phase 1 Implementation Agreement • Xmodem XMODEM/YMODEM Protocol Reference

Ordering Information

The following table lists ordering information of the CloudEngine S5755-H series switches.

Model	Product Description
CloudEngine S5755-H24N4Y-A	S5755-H24N4Y-A (24*10/100/1000/2.5G Ethernet ports, 4*25GE SFP28 ports, AC power, front access)
CloudEngine S5755-H48N4Y-A	S5755-H48N4Y-A (48*10/100/1000/2.5G Ethernet ports, 4*25GE SFP28 ports, AC power, front access)
CloudEngine S5755-H24UN4Y2CZ	S5755-H24UN4Y2CZ（24*10/100/1000/2.5G Ethernet ports, 4*25G SFP28 ports, 2*100G QSFP28 ports, 1*expansion slot, PoE++, without power module）
CloudEngine S5755-H48UN4Y2CZ	S5755-H48UN4Y2CZ（48*10/100/1000/2.5G Ethernet ports, 4*25G SFP28 ports, 2*100G QSFP28 ports, 1*expansion slot, PoE++, without power module）
PAC600S56-EB	600W PoE AC&240 V DC Power Module
PAC1000S56-EB	1000 W PoE AC&240 V DC Power Module
PDC1000S56-EB	1000 W PoE DC Power Module

Model	Product Description
FAN-031A-B	Fan module
HSIC-X08S000	Interface card with 8*10GE SFP+ ports or 4*25GE SFP28 ports (only ports 1 to 4 support 25GE)
HSIC-Y08S000	Interface card with 8*25GE SFP28 ports
HSIC-Q04S000	Interface card with 4*40GE QSFP ports or 2*100GE QSFP28 ports (only ports 1/3 support 100GE)
N1-S57H-M-Lic	S57XX-H Series Basic SW, Per Device
N1-S57H-M-SnS1Y	S57XX-H Series Basic SW,SnS, Per Device,1Year
N1-S57H-F-Lic	N1-CloudCampus, Foundation, S57XX-H Series, Per Device
N1-S57H-F-SnS1Y	N1-CloudCampus, Foundation, S57XX-H Series, SnS, Per Device,1Year
N1-S57H-A-Lic	N1-CloudCampus, Advanced, S57XX-H Series, Per Device
N1-S57H-A-SnS1Y	N1-CloudCampus, Advanced, S57XX-H Series,SnS, Per Device,1Year
N1-S57H-FToA-Lic	N1-Upgrade-Foundation to Advanced, S57XX-H, Per Device
N1-S57H-FToA-SnS1Y	N1-Upgrade-Foundation to Advanced, S57XX-H, SnS, Per Device,1Year
N1-S57H-A-NVXLAN-Lic	N1-CloudCampus, Advanced non-vxlan, S57XX-H Series, Per Device
N1-S57H-A-NVXLAN-SnS1Y	N1-CloudCampus, Advanced non-vxlan, S57XX-H Series, SnS, Per Device,1 Year
N1-S57H-F2A-NVXLAN-Lic	N1-Upgrade-Foundation to Advanced non-vxlan, S57XX-H, Per Device
N1-S57H-F2A-NVXLAN-SnS1Y	N1-Upgrade-Foundation to Advanced non-vxlan, S57XX-H, SnS, Per Device,1 Year

More Information

For more information about Huawei Campus Switches, visit http://e.huawei.com or contact us in the following ways:

- Global service hotline: http://e.huawei.com/en/service-hotline
- Logging in to the Huawei Enterprise technical support website: http://support.huawei.com/enterprise/
- Sending an email to the customer service mailbox: support_e@huawei.com

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