Huawei CloudEngine S5736-S Series Switches Datasheet

Huawei CloudEngine S5736-S series switches are standard gigabit Ethernet switches that provide 24-port and 48-port models, and provide four 10GE ports and one extended slot.

Introduction

CloudEngine S5736-S series switches are developed based on next-generation high-performing hardware and the Huawei Versatile Routing Platform (VRP). CloudEngine S5736-S switches support simplified operations and maintenance (O&M), and flexible Ethernet networking. It also provides enhanced Layer 3 features and mature IPv6 features. CloudEngine S5736-S switches can be used in various scenarios. For example, it can be used as an access or aggregation switch on a campus network or as an access switch for Metropolitan Area Network.

Product Overview

Models and Appearances

Models and appearances of the CloudEngine S5736-S series

Models and Appearances	Description
 CloudEngine S5736-S24T4XC	• 24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports • One extended slot • 1+1 power supply backup • Forwarding performance: 240 Mpps • Switching capacity: 448 Gbps/1.28 Tbps
 CloudEngine S5736-S24U4XC	• 24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports • One extended slot • 1+1 power supply backup • PoE++ • Forwarding performance: 240 Mpps • Switching capacity: 448 Gbps/1.28 Tbps
 CloudEngine S5736-S48T4XC	• 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports • One extended slot • 1+1 power supply backup • Forwarding performance: 240 Mpps • Switching capacity: 496 Gbps/1.28 Tbps

Models and Appearances	Description
 CloudEngine S5736-S48U4XC	• 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports • One extended slot • 1+1 power supply backup • PoE++ • Forwarding performance: 240 Mpps • Switching capacity: 496 Gbps/1.28 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.

Subcards

The following table lists the subcards applicable to the CloudEngine S5736-S.

Technical specifications of the subcards applicable to the CloudEngine S5736-S series

Subcards	Technical Specifications	Applied Switch Model
 ES5D21Q02Q00	• 2*40GE QSFP+ • Operating temperature: 0°C to 45°C (32°F to 113°F) • Relative humidity: 5% to 95% • Storage temperature: -40°C to +70°C (-40°F to +158°F)	• CloudEngine S5736-H24T4XC • CloudEngine S5731-H24U4XC • CloudEngine S5731-H24S4XC • CloudEngine S5731-H48T4XC • CloudEngine S5731-H48U4XC • CloudEngine S5731-H48S4XC
 ES5D21Q04Q01	• 4*40GE QSFP+ • Operating temperature: 0°C to 45°C (32°F to 113°F) • Relative humidity: 5% RH to 95% RH • Storage temperature: -40°C to +70°C (-40°F to +158°F)	
 S7X08000	• 8*10GE SFP+ or 2*25GE SFP28 • Operating temperature: 0°C to 45°C (32°F to 113°F) • Relative humidity: 5% to 95% • Storage temperature: -40°C to +70°C (-40°F to +158°F) Note: The 8*10GE SFP+ subcard works as 8*10GE SFP+ by default, and can be changed to 2*25GE SFP28 as required.	

Fan Models

The following table lists the fan module applicable to the CloudEngine S5736-S.

Technical specifications of the fan module applicable to the CloudEngine S5736-S series

Fan Module	Technical Specifications	Applied Switch Model
	• 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	• CloudEngine S5736-H24T4XC • CloudEngine S5731-H24U4XC • CloudEngine S5731-H24S4XC • CloudEngine S5731-H48T4XC • CloudEngine S5731-H48U4XC

Fan Module	Technical Specifications	Applied Switch Model
FAN-031A-B	• Maximum fan speed: 24500±10% revolutions per minute (RPM) • Maximum wind rate: 31 cubic feet per minute (CFM) • Hot swap: Supported	• CloudEngine S5731-H48S4XC

Power Supply

Technical specifications of the power supplies applicable to the CloudEngine S5736-S series

Power Module	Technical Specifications	Applied Switch Model
 PAC150S12-R	• Dimensions (H x W x D): 40 mm x 90 mm x 215 mm (1.6 in. x 3.5 in. x 8.5 in.) • Weight: 0.8 kg (1.76 lb) • Rated input voltage range: 100 V AC to 240 V AC, 50/60 Hz • Maximum input voltage range: 90 V AC to 264 V AC, 47 Hz to 63 Hz • Maximum input current: 3 A • Maximum output current: 12.5 A • Maximum output power: 150 W • Hot swap: Supported	• CloudEngine S5736-S24T4XC • CloudEngine S5736-S48T4XC
 PDC180S12-CR	• Dimensions (H x W x D): 40 mm x 90 mm x 215 mm (1.6 in. x 3.5 in. x 8.5 in.) • Weight: 0.8 kg (1.76 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: 6 A • Maximum output current: 3.75 A • Maximum output power: 180 W • Hot swap: Supported	• CloudEngine S5736-S24T4XC • CloudEngine S5736-S48T4XC


PAC1000S56-DB/
PAC1000S56-CB
	• Dimensions (H x W x D): 40 mm x 90 mm x 215 mm (1.6 in. x 3.5 in. x 8.5 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
	  − 240 V DC
	• Maximum input voltage range:
	  − 90 V AC to 290 V AC, 45 Hz to 65 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:
		• CloudEngine S5736-S24U4XC
		• CloudEngine S5736-S48U4XC

Power Module	Technical Specifications	Applied Switch Model
	– 100 V AC to 130 V AC input: 16.08 A – 200 V AC to 240 V AC input and 240 V DC input: 17.86 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-CB	• Dimensions (H x W x D): 40 mm x 90 mm x 215 mm (1.6 in. x 3.5 in. x 8.5 in.) • Weight: 1.02 kg (2.25 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 • Maximum output current: 83.3 A • Maximum output power: 1000 W • Hot swap: Supported	• CloudEngine S5736-S24U4XC • CloudEngine S5736-S48U4XC
 PAC600S56-CB	• Dimensions (H x W x D): 40 mm x 90 mm x 215 mm (1.6 in. x 3.5 in. x 8.5 in.) • Weight: 1.1 kg (2.43 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: – 100 V AC to 130 V AC input: 5.36 A – 200–240 V AC and 240 V DC input: 10.72 A • Rated output voltage: 56 V • Rated output power: – 100 V AC to 130 V AC input: · Total power: 300 W – 200 V AC to 240 V AC input and 240 V DC input: · Total power: 600 W • Hot swap: Supported	• CloudEngine S5736-S24U4XC • CloudEngine S5736-S48U4XC

CloudEngine S5736-S24U4XC and S5736-S48U4XC are PoE switches, GE port can support 90W PoE++ power supply. They have two power module slots, each of which can have a 1000 W PoE power module installed.

The following table lists its power supply configurations.

Power supply configurations of CloudEngine S5736-S24U4XC

Power Module 1	Power Module 2	Available PoE Power	Maximum Number of Ports (Fully Loaded)
1000 W AC (220 V) 1000 W DC	–	867 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 14 • 802.3bt (90 W per port): 9
1000 W AC (110 V)	–	772 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 (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	1817 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)	1627 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
600 W AC (220 V)		487 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 16 • 802.3bt (60 W per port): 8 • 802.3bt (90 W per port): 5
600 W AC (110 V)		202 W	• 802.3af (15.4 W per port): 13 • 802.3at (30 W per port): 6 • 802.3bt (60 W per port): 3 • 802.3bt (90 W per port): 2
600 W AC (220 V)	600 W AC (220 V)	1057 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 17 • 802.3bt (90 W per port): 11
600 W AC (110 V)	600 W AC (110 V)	487 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 16 • 802.3bt (60 W per port): 8 • 802.3bt (90 W per port): 5
1000 W AC (220 V) 1000 W DC	600 W AC (220 V)	1437 W	• 802.3af (15.4 W per port): 24 • 802.3at (30 W per port): 24 • 802.3bt (60 W per port): 23 • 802.3bt (90 W per port): 15

Power supply configurations of CloudEngine S5736-S48U4XC

Power Module 1	Power Module 2	Available PoE Power	Maximum Number of Ports (Fully Loaded)
1000 W AC (220 V) 1000 W DC	–	859 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 28 • 802.3bt (60 W per port): 14 • 802.3bt (90 W per port): 9
1000 W AC (110 V)	–	764 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 25 • 802.3bt (60 W per port): 12 • 802.3bt (90 W per port): 8
1000 W AC (220 V) 1000 W DC	1000 W AC (220 V) 1000 W DC	1809 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 DC	1000 W AC (110 V)	1619 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 48 • 802.3bt (60 W per port): 26 • 802.3bt (90 W per port): 17
600 W AC (220 V)		479 W	• 802.3af (15.4 W per port): 31 • 802.3at (30 W per port): 15 • 802.3bt (60 W per port): 7 • 802.3bt (90 W per port): 5
600 W AC (110 V)		194 W	• 802.3af (15.4 W per port): 12 • 802.3at (30 W per port): 6 • 802.3bt (60 W per port): 3 • 802.3bt (90 W per port): 2
600 W AC (220 V)	600 W AC (220 V)	1049 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 34 • 802.3bt (60 W per port): 17 • 802.3bt (90 W per port): 11
600 W AC (110 V)	600 W AC (110 V)	479 W	• 802.3af (15.4 W per port): 31 • 802.3at (30 W per port): 15 • 802.3bt (60 W per port): 7 • 802.3bt (90 W per port): 5
1000 W AC (220 V) 1000 W DC	600 W AC (220 V)	1429 W	• 802.3af (15.4 W per port): 48 • 802.3at (30 W per port): 47 • 802.3bt (60 W per port): 23 • 802.3bt (90 W per port): 15

NOTE

When a switch has two power modules installed, the two power modules work in redundancy mode to provide power for the chassis and in load balancing mode to provide power for PDs.

Product Features and Highlights

Powerful Service Processing Capability

- CloudEngine S5736-S supports a broad set of Layer 2/Layer 3 multicast protocols, such as PIM SM, PIM DM, PIM SSM, MLD, and IGMP snooping. This capability is ideal for high-definition video backhaul and video conferencing access.
- CloudEngine S5736-S provides multiple Layer 3 features including OSPF, IS-IS, BGP, and VRRP, meeting enterprises' access and aggregation service needs and enabling a variety of voice, video, and data applications.

Multiple Security Control Mechanisms

- CloudEngine S5736-S supports MAC address authentication, 802.1X authentication, and Portal authentication, and implements dynamic delivery of policies (VLAN, QoS, and ACL) to users.
- CloudEngine S5736-S provides a series of mechanisms to defend against DoS attacks 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 changing of the DHCP CHADDR value.
- CloudEngine S5736-S sets up and maintains a DHCP snooping binding table, and discards the packets that do not match the table entries. The DHCP snooping trusted port feature ensures that users connect only to the authorized DHCP server.
- CloudEngine S5736-S supports strict ARP learning, which protects a network against ARP spoofing attacks to ensure that users can connect to the Internet normally.
- CloudEngine S5736-S supports Media Access Control Security (MACsec) with the ports of subcard (8*10GE SFP+ subcard) . It provides identity authentication, data encryption, integrity check, and replay protection to protect Ethernet frames and prevent attack packets.

Multiple Reliability Mechanisms

- CloudEngine S5736-S is equipped with two pluggable power modules that work in 1+1 redundancy backup mode. Mixed installation of AC and DC power modules is supported, allowing for flexible configuration of AC or DC power modules according to service requirements.
- In addition to supporting traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), CloudEngine S5736-S is also designed with Huawei-developed Smart Ethernet Protection (SEP) technology and the industry's latest Ethernet Ring Protection Switching (ERPS) technology. SEP is a ring protection protocol specific to the Ethernet link layer, and applies to various ring network topologies, such as open ring topology, closed ring topology, and cascading ring topology. This protocol is reliable, easy to maintain, and implements fast protection switching within 50 ms. ERPS is defined in ITU-T G.8032, and it implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.
- CloudEngine S5736-S supports Smart Link, which implements backup of uplinks. One CloudEngine S5736-S switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.
- CloudEngine S5736-S supports Ethernet OAM (IEEE 802.3ah/802.1ag) to fast-detect link faults.

Easy Network deployment

- CloudEngine S5736-S supports Super Virtual Fabric (SVF), which innovatively virtualizes the "core/aggregation switch + access switch + AP" into one logical device. This simplifies device management and achieves plug-and-play for access switches and APs. In addition, CloudEngine S5736-S supports service configuration templates. The templates are configured on core devices and automatically delivered to access devices, enabling centralized control, simplified service configuration, and flexible configuration adjustment. CloudEngine S5736-S functions as a client in an SVF system.
- CloudEngine S5736-S supports Huawei Easy Operation, a solution that provides zero-touch deployment, replacement of faulty devices without additional configuration, USB-based deployment, batch device configuration, and batch remote upgrade. The capabilities facilitate device deployment, upgrade, service provisioning, and other management and maintenance operations, and also greatly reduce O&M costs. CloudEngine S5736-S can be managed using SNMP v1/v2c/v3, CLI, web-based network management system, or SSH v2.0. Additionally, it supports RMON, multiple log hosts, port traffic statistics collection, and network quality analysis, which facilitate network optimization and reconstruction.

Mature IPv6 Technologies

- CloudEngine S5736-S uses the mature, stable VRP platform and supports IPv4/IPv6 dual stack, IPv6 RIPng, and IPv6 over IPv4 tunnels (including manual, 6-to-4, and ISATAP tunnels).

- CloudEngine S5736-S 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)

- CloudEngine S5736-S supports intelligent stack (iStack). This technology 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 ports, bandwidth, and processing capacity of a stack by simply adding member switches to the stack.
- iStack also simplifies device configuration and management. After a stack is set up, multiple physical switches are 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.
- CloudEngine S5736-S support stacking through fixed downlink/uplink ports or the extended port of subcard.

PoE Function

CloudEngine S5736-S PoE models can support PoE++(up to 90W power supply), Meeting high-power power supply requirements for Wi-Fi 6 APs, IP cameras, and Video phones.

- **Perpetual PoE**: When a PoE switch is abnormal Power-off or the software version is upgraded, the power supply to PDs is not interrupted. This capability ensures that PDs are not powered off during the switch 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 O&M

- CloudEngine S5736-S supports the Sampled Flow (sFlow) function. It uses a method defined in the sFlow standard to sample traffic passing through it and sends sampled traffic to the collector in real time. The collected traffic statistics are used to generate statistical reports, helping enterprises maintain their networks.
- CloudEngine S5736-S 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.
- CloudEngine S5736-S supports a variety of intelligent O&M features for audio and video services, including the enhanced Media Delivery Index (eMDI). With this eDMI function, the switch can function as a monitored node to periodically conduct statistics and report audio and video service indicators to the iMaster NCE-CampusInsight platform. In this way, the CampusInsight platform can quickly demarcate audio and video service quality faults based on the results of multiple monitored nodes.

Intelligent Upgrade

- CloudEngine S5736-S supports the intelligent upgrade feature. Specifically, CloudEngine S5736-S obtains the version upgrade path and downloads 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.

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).

OPS(Open Programmability System)

- CloudEngine S5736-S supports Open Programmability System (OPS), an open programmable system based on the Python language. IT administrators can program the O&M functions of a CloudEngine S5736-S switch through Python scripts to quickly innovate functions and implement intelligent O&M.

Licensing

CloudEngine S5736-S 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, SVF, and others Note: For details, see the Service Features	√	√	√
Basic network automation based on the iMaster NCE-Campus: • Basic automation: Plug-and-play • Basic monitoring: Application visualization • NE management: Image and topology management and discovery • User access authentication	×	√	√
Advanced network automation and intelligent O&M: CampusInsight basic functions	×	×	√

Note: Only V200R020C00 and later versions can support N1 mode

Product Specifications

Functions and Features

Function and feature metrics for the CloudEngine S5736-S series

Function and Feature		Description	CloudEngine S5736-S Series switch
Ethernet features	Ethernet basics	Full-duplex, half-duplex, and auto-negotiation	Yes
		Rate auto-negotiation on an interface	Yes
		Auto MDI and MDI-X	Yes
		Flow control on an interface	Yes
		Jumbo frames	Yes
		Link aggregation	Yes
		Load balancing among links of a trunk	Yes

Function and Feature		Description	CloudEngine S5736-S Series switch
		Transparent transmission of Layer 2 protocol packets	Yes
		Device Link Detection Protocol (DLDP)	Yes
		Link Layer Discovery Protocol (LLDP)	Yes
		Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED)	Yes
		Interface isolation	Yes
		Broadcast traffic suppression on an interface	Yes
		Multicast traffic suppression on an interface	Yes
		Unknown unicast traffic suppression on an interface	Yes
		VLAN broadcast traffic suppression	Yes
		VLAN multicast traffic suppression	Yes
		VLAN unknown unicast traffic suppression	Yes
	VLAN	VLAN specification	4094
		VLANIF interface specification	1024
		Access mode	Yes
		Trunk mode	Yes
		Hybrid mode	Yes
		QinQ mode	Yes
		Default VLAN	Yes
		VLAN assignment based on interfaces	Yes
		VLAN assignment based on protocols	Yes
		VLAN assignment based on IP subnets	Yes
		VLAN assignment based on MAC addresses	Yes
		VLAN assignment based on MAC address + IP address	Yes
		VLAN assignment based on MAC address + IP address + interface number	Yes
		Adding double VLAN tags to packets based on interfaces	Yes
		VLAN mapping	Yes
		Selective QinQ	Yes
		MUX VLAN	Yes
		Voice VLAN	Yes

Function and Feature		Description	CloudEngine S5736-S Series switch
		Guest VLAN	Yes
	GVRP	GARP	Yes
		GVRP	Yes
	VCMP	VCMP	Yes
	MAC	MAC address	32K
		Automatic learning of MAC addresses	Yes
		Automatic aging of MAC addresses	Yes
		Static, dynamic, and blackhole MAC address entries	Yes
		Interface-based MAC address learning limiting	Yes
		Sticky MAC	Yes
		MAC address flapping detection	Yes
		MAC address spoofing defense	Yes
		Port bridge	Yes
	ARP	Static ARP	Yes
		Dynamic ARP	Yes
		ARP entry	20000
		ARP aging detection	Yes
		Intra-VLAN proxy ARP	Yes
		Routed proxy ARP	Yes
Ethernet loop protection	MSTP	STP	Yes
		RSTP	Yes
		MSTP	Yes
		VBST	Yes
		BPDU protection	Yes
		Root protection	Yes
		Loop protection	Yes
		Defense against TC BPDU attacks	Yes
	Loopback detection	Loop detection on an interface	Yes
	SEP	SEP	Yes
	Smart Link	Smart Link	Yes
		Smart Link multi-instance	Yes
		Monitor Link	Yes
	RRPP	RRPP	Yes

Function and Feature		Description	CloudEngine S5736-S Series switch
		Single RRPP ring	Yes
		Tangent RRPP ring	Yes
		Intersecting RRPP ring	Yes
		Hybrid networking of RRPP rings and other ring networks	Yes
	ERPS	G.8032 v1	Yes
		G.8032 v2	Yes
		ERPS semi-ring topology	Yes
		ERPS closed-ring topology	Yes
IPv4/IPv6 forwarding	IPv4 and unicast routing	IPv4 static routing	Yes
		VRF	Yes
		DHCP client	Yes
		DHCP server	Yes
		DHCP relay	Yes
		Routing policies	Yes
		IPv4 routes	8K
		RIPv1	Yes
		RIPv2	Yes
		OSPF	Yes
		BGP/BGP4+	Yes
		IS-IS v4/IS-IS v6	Yes
		Policy-based routing (PBR)	Yes
	Multicast routing features	IGMPv1/v2/v3	Yes
		PIM-DM	Yes
		PIM-SM	Yes
		MSDP	Yes
		IPv4 multicast routes	1500
		IPv6 multicast routes	500
		Multicast routing policies	Yes
		RPF	Yes
	IPv6 features	IPv6 protocol stack	Yes
		ND	Yes
		ND entry	10K
		ND snooping	Yes

Function and Feature		Description	CloudEngine S5736-S Series switch
		DHCPv6 snooping	Yes
		RIPng	Yes
		DHCPv6 server	Yes
		DHCPv6 relay	Yes
		OSPFv3	Yes
		IPv6 routes	4K
		VRRP6	Yes
		MLDv1/v2	Yes
		PIM-DM for IPv6	Yes
		PIM-SM for IPv6	Yes
Layer 2 multicast features	-	IGMPv1/v2/v3 snooping	Yes
		IGMP snooping proxy	Yes
		MLD snooping	Yes
		Multicast traffic suppression	Yes
		Inter-VLAN multicast replication	Yes
Device reliability	Stacking	Service interface-based stacking	Yes
		Maximum number of stacked devices	9
		Stack bandwidth (Bidirectional)	400Gbps(MAX)
	VRRP	VRRP standard protocol	Yes
Ethernet OAM	EFM (802.3ah)	Automatic discovery of links	Yes
		Link fault detection	Yes
		Link troubleshooting	Yes
		Remote loopback	Yes
	CFM (802.1ag)	Software-level CCM	Yes
		802.1ag MAC ping	Yes
		802.1ag MAC trace	Yes
	OAM association	Association between 802.1ag and 802.3ah	Yes
	Y.1731	Unidirectional delay and jitter measurement	Yes
		Bidirectional delay and jitter measurement	Yes
QoS features	Traffic classification	Traffic classification based on ACLs	Yes
		Configuring traffic classification priorities	Yes
		Matching the simple domains of packets	Yes
	Traffic behavior	Traffic filtering	Yes
		Traffic policing (CAR)	Yes

Function and Feature		Description	CloudEngine S5736-S Series switch
		Modifying the packet priorities	Yes
		Modifying the simple domains of packets	Yes
		Modifying the packet VLANs	Yes
	Traffic shaping	Traffic shaping on an egress interface	Yes
		Traffic shaping on queues on an interface	Yes
	Congestion avoidance	Tail drop	Yes
	Congestion management	Priority Queuing (PQ)	Yes
		Weighted Deficit Round Robin (WDRR)	Yes
		PQ+WDRR	Yes
		Weighted Round Robin (WRR)	Yes
		PQ+WRR	Yes
ACL	Packet filtering at Layer 2 to Layer 4	Number of rules per IPv4 ACL	1K
		Number of rules per IPv6 ACL	1K
		Basic IPv4 ACL	Yes
		Advanced IPv4 ACL	Yes
		Basic IPv6 ACL	Yes
		Advanced IPv6 ACL	Yes
		Layer 2 ACL	Yes
		User-defined ACL	Yes
Configuration and maintenance	Login and configuration management	Command line interface (CLI)-based configuration	Yes
		Console terminal service	Yes
		Telnet terminal service	Yes
		SSH v1.5	Yes
		SSH v2.0	Yes
		SNMP-based NMS for unified configuration	Yes
		Web page-based configuration and management	Yes
		EasyDeploy (client)	Yes
		SVF	Yes
		Cloud management	Yes
		OPS	Yes
	File system	Directory and file management	Yes
		File upload and download	Yes
	Monitoring and	eMDI	Yes

Function and Feature		Description	CloudEngine S5736-S Series switch
	maintenance	Hardware monitoring	Yes
		Log information output	Yes
		Alarm information output	Yes
		Debugging information output	Yes
		Port mirroring	Yes
		Flow mirroring	Yes
		Remote mirroring	Yes
		Energy saving	Yes
	Version upgrade	Version upgrade	Yes
		Version rollback	Yes
Security	ARP security	ARP packet rate limiting	Yes
		ARP anti-spoofing	Yes
		Association between ARP and STP	Yes
		Dynamic ARP Inspection (DAI)	Yes
		Static ARP Inspection (SAI)	Yes
		Egress ARP Inspection (EAI)	Yes
	IP security	ICMP attack defense	Yes
		IPSG for IPv4	Yes
		IPSG user capacity	1K
		IPSG for IPv6	Yes
		IPSGv6 user capacity	512
	MACSEC	MACSec-256	Yes
	Local attack defense	CPU attack defense	Yes
	MFF	MFF	Yes
	DHCP snooping	DHCP snooping	Yes
		Option 82 function	Yes
		Dynamic rate limiting for DHCP packets	Yes
	Attack defense	Defense against malformed packet attacks	Yes
		Defense against UDP flood attacks	Yes
		Defense against TCP SYN flood attacks	Yes
		Defense against ICMP flood attacks	Yes
		Defense against packet fragment attacks	Yes
		Local URPF	Yes
User access and	AAA	Local authentication	Yes

Function and Feature		Description	CloudEngine S5736-S Series switch
authentication		Local authorization	Yes
		RADIUS authentication	Yes
		RADIUS authorization	Yes
		RADIUS accounting	Yes
		HWTACACS authentication	Yes
		HWTACACS authorization	Yes
		HWTACACS accounting	Yes
	NAC	802.1X authentication	Yes
		MAC address authentication	Yes
		Portal authentication	Yes
		Hybrid authentication	Yes
	Policy association	Functioning as the access device	Yes
Network management	-	Ping	Yes
		Tracert	Yes
		NQA	Yes
		NTP	Yes
		sFlow	Yes
		SNMP v1	Yes
		SNMP v2c	Yes
		SNMP v3	Yes
		HTTP	Yes
		HTTPS	Yes
		NETCONF/YANG	Yes
		RMON	Yes
Interoperability	-	VLAN-based Spanning Tree (VBST)	Yes
		Link-type Negotiation Protocol (LNP)	Yes
		VLAN Central Management Protocol (VCMP)	Yes

Hardware Specifications

Hardware specifications of the CloudEngine S5736-S24T4XC/-S24U4XC models

Item		CloudEngine S5736-S24T4XC	CloudEngine S5736-S24U4XC
Physical specifications	Dimensions (H x W x D, mm)	43.6 mm x 442 mm x 420 mm	43.6 mm x 442 mm x 420 mm
	Chassis height	1 U	1 U

Item		CloudEngine S5736-S24T4XC	CloudEngine S5736-S24U4XC
	Chassis weight (including packaging)	8 kg	8.1 kg
Fixed port	GE port	24	24(PoE++)
	10GE port	4	4
Extended slot		One extended slot, support 4 x 40GE QSFP+, 2 x 40GE QSFP+ and 8 x 10GE SFP+ cards*	
Management port	ETH management port	Supported	Supported
	Console port (RJ45)	Supported	Supported
	USB port	USB 2.0	USB 2.0
CPU	Frequency	1.2GHz	1.2GHz
	Cores	4	4
Storage	Memory (RAM)	2 GB	2 GB
	Flash memory	1 GB	1 GB
Power supply system	Power supply type	• 150 W AC • 180 W DC	• 1000 W AC PoE • 1000 W DC PoE • 600 W AC PoE
	Power supply redundancy	1+1 **NOTE** The backup power supply is optional.	1+1 **NOTE** The backup power supply is optional.
	Rated voltage range	• AC input : 100 V AC to 240 V AC, 50/60 Hz • 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 V DC～-60 V DC
	Maximum voltage range	• AC input : 90 V AC to 290 V AC, 45 Hz to 65 Hz • 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 (meeting 240 V high-voltage DC certification) • DC input:-38.4V DC～-72V DC
	Maximum input current	• 150W AC：3A • 180W DC：6A	AC 1000W: • 110V：12A • 220V：8A • 240V：8A DC 1000W : 30A AC 600W: • 110V：8A • 220V：8A • 240V：4A
	Maximum power consumption of the	55W	• 102W (without PD) • 1919W (with PD, PD power

Item		CloudEngine S5736-S24T4XC	CloudEngine S5736-S24U4XC
	device		consumption of 1817 W)
	Power consumption in the case of 30% traffic load[1]	39 W	59 W
	Power consumption in the case of 100% traffic load[1]	40 W	60 W
Heat dissipation system	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	2	2
	Airflow	Air flows in from the left,right sides and front panel, exhausts from the rear panel	Air flows in from the left,right sides and front panel, exhausts from the rear panel
	Maximum heat dissipation of the device (BTU/hour)	187.67	• Without PDs: 348.03 • With PDs: 6547.82
Environment parameters	Long-term operating temperature	• 0-1800 m altitude: -5°C to +45°C • 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m.	• 0-1800 m altitude: -5°C to +45°C • 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m.
	Short-term operating temperature[3]	• 0-1800 m altitude: -5°C to +50°C • 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m.	• 0-1800 m altitude: -5°C to +50°C • 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m.
	Storage temperature	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)
	Operating altitude	5000 m	5000 m
	Noise under normal temperature (sound power)	47.4 db(A)	70 db(A)
	Noise under high temperature (sound power)	73.9 db(A)	82.6 db(A)
	Noise under normal temperature (sound pressure)	35.4 db(A)	58 db(A)
	Surge protection specification (RJ45 service port)	±6 kV in common mode	±6 kV in common mode
	Surge protection specification (power port)	• AC power port: ±6 kV in differential mode, ±6 kV in common mode • DC power port: ±2 kV in differential mode, ±4 kV in common mode	• AC power port: ±6 kV in differential mode, ±6 kV in common mode • DC power port: ±2 kV in differential mode, ±4 kV in common mode

Item		CloudEngine S5736-S24T4XC	CloudEngine S5736-S24U4XC
Reliability	MTBF (year)[2]	83.79	70.89
	MTTR (hour)	2	2
	Availability	> 0.99999	> 0.99999
Certification		• EMC certification • Safety certification • Manufacturing certification	• EMC certification • Safety certification • Manufacturing certification

Hardware specifications of the CloudEngine S5736-S48T4XC/-S48U4XC models

Item		CloudEngine S5736-S48T4XC	CloudEngine S5736-S48U4XC
Physical specifications	Dimensions (W x D x H, mm)	43.6 mm x 442 mm x 420 mm	43.6 mm x 442 mm x 420 mm
	Chassis height	1 U	1 U
	Chassis weight (including packaging)	8.2kg	8.3kg
Fixed port	GE port	48	48(PoE++)
	10GE port	4	4
Extended slot		One extended slot, support 4 x 40GE QSFP+, 2 x 40GE QSFP+ and 8 x 10GE SFP+ cards*	
Management port	ETH management port	Supported	Supported
	Console port (RJ45)	Supported	Supported
	USB port	USB 2.0	USB 2.0
CPU	Frequency	1.2GHz	1.2GHz
	Cores	4	4
Storage	Memory (RAM)	2 GB	2 GB
	Flash memory	1 GB	1 GB
Power supply system	Power supply type	• 150 W AC • 180 W DC	• 1000 W AC PoE • 1000 W DC PoE • 600 W AC PoE
	Power supply redundancy	1+1 **NOTE** The backup power supply is optional.	1+1 **NOTE** The backup power supply is optional.
	Rated voltage range	• AC input (150 W AC): 100 V AC to 240 V AC, 50/60 Hz • DC input (180 W DC): -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 V DC～-60 V DC
	Maximum voltage range	• AC input (150 W AC): 90 V AC to 290 V AC, 45 Hz to 65 Hz • DC input (180 W DC): -38.4 V DC	• AC input : 90 V AC to 290 V AC, 45 Hz to 65 Hz • High-voltage DC input : 190 V DC

Item		CloudEngine S5736-S48T4XC	CloudEngine S5736-S48U4XC
		to -72 V DC	to 290 V DC (meeting 240 V high-voltage DC certification) • DC input:-38.4V DC～-72V DC
	Maximum input current	• 150W AC: 3A • 180W DC: 6A	AC 1000W: • 110V：12A • 220V：8A • 240V：8A DC 1000W : 30A AC 600W: • 110V：8A • 220V：8A • 240V：4A
	Maximum power consumption of the device	68W	• 115W (without PD) • 1924W (with PD, PD power consumption of 1809 W)
	Power consumption in the case of 30% traffic load[1]	53 W	75 W
	Power consumption in the case of 100% traffic load[1]	55 W	81 W
Heat dissipation system	Heat dissipation mode	Air-cooled heat dissipation and intelligent fan speed adjustment	Air-cooled heat dissipation and intelligent fan speed adjustment
	Number of fan modules	2	2
	Airflow	Air flows in from the left,right sides and front panel, exhausts from the rear panel	Air flows in from the left,right sides and front panel, exhausts from the rear panel
	Maximum heat dissipation of the device (BTU/hour)	232.02	• Without PDs: 392.40 • With PDs: 6564.88
Environment parameters	Long-term operating temperature	• 0-1800 m altitude: -5°C to +45°C • 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m.	• 0-1800 m altitude: 0°C to +45°C • 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m.
	Short-term operating temperature[3]	• 0-1800 m altitude: -5°C to +50°C • 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m.	• 0-1800 m altitude: -5°C to +50°C • 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m.
	Storage temperature	-40°C to +70°C	-40°C to +70°C
	Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)
	Operating altitude	5000 m	5000 m
	Noise under normal	44.7 db(A)	70 db(A)

Item		CloudEngine S5736-S48T4XC	CloudEngine S5736-S48U4XC
	temperature (sound power)		
	Noise under high temperature (sound power)	73.9 db(A)	82.6 db(A)
	Noise under normal temperature (sound pressure)	32.6 db(A)	58 db(A)
	Surge protection specification (RJ45 service port)	±6 kV in common mode	±6 kV in common mode
	Surge protection specification (power port)	• AC power port: ±6 kV in differential mode, ±6 kV in common mode • DC power port: ±2 kV in differential mode, ±4 kV in common mode	• AC power port: ±6 kV in differential mode, ±6 kV in common mode • DC power port: ±2 kV in differential mode, ±4 kV in common mode
Reliability	MTBF (year)[2]	70.89	65.32
	MTTR (hour)	2	2
	Availability	> 0.99999	> 0.99999
Certification		• EMC certification • Safety certification • Manufacturing certification	• EMC certification • Safety certification • Manufacturing certification

*Note: The 8*10GE SFP+ subcard works as 8*10GE SFP+ by default, and can be changed to 2*25GE SFP28 as required.

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.

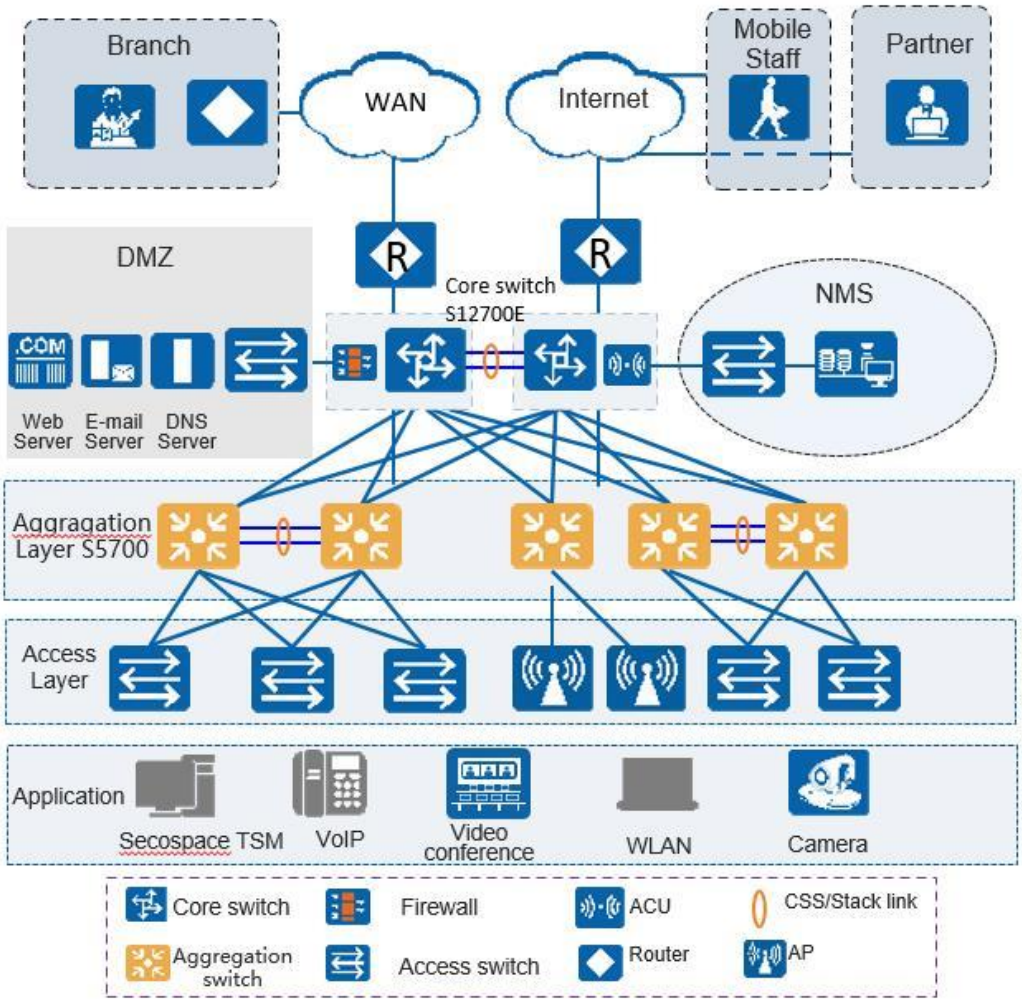
2: The reliability parameter values are calculated based on the typical configuration of the device. The parameter values vary according to the modules configured by the customer.

3: Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45° C is no more than 15 in a year.

Networking and Applications

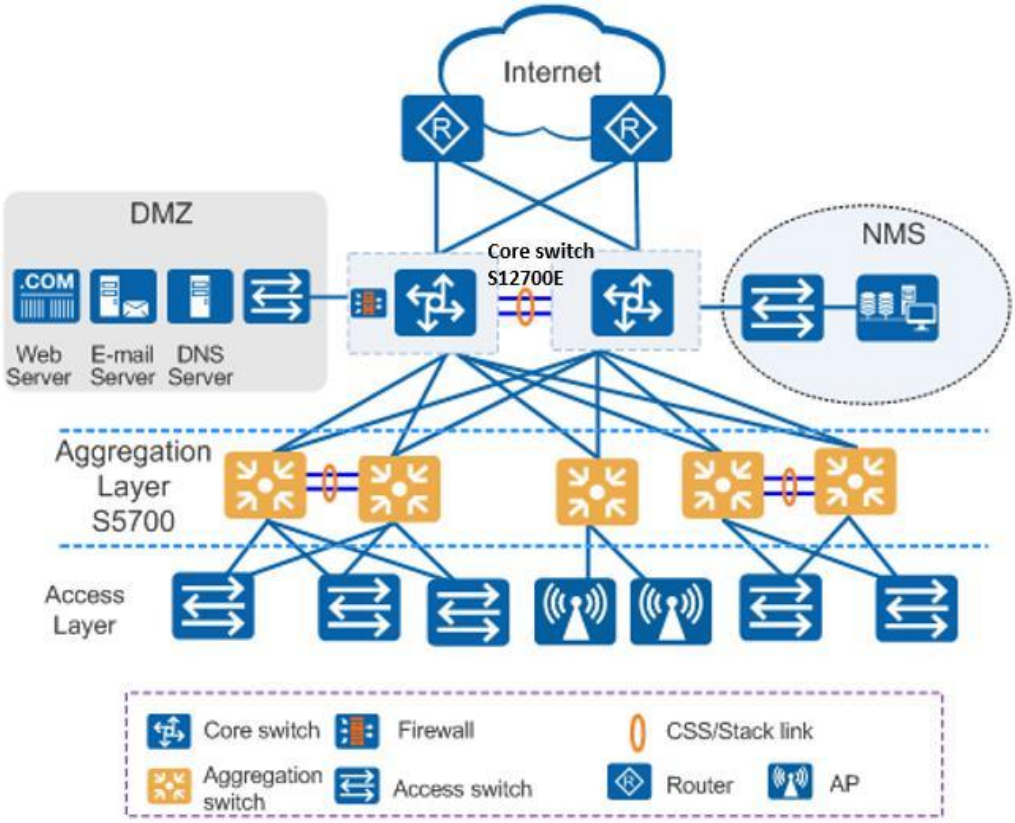
Large-Scale Enterprise Campus Network

CloudEngine S5736-S series switches can be deployed at the access layer of a campus network to build a high-performance and highly reliable enterprise network.



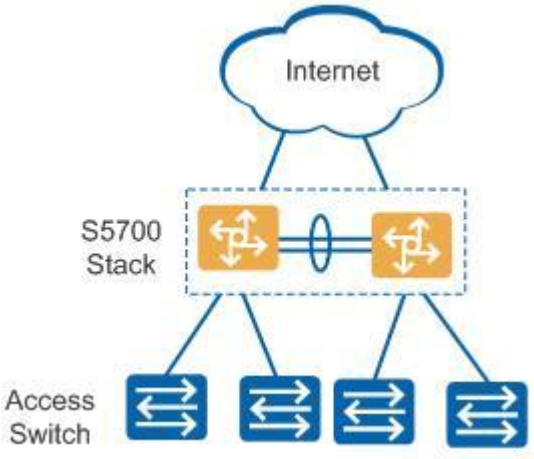
Small- or Medium-scale Enterprise Campus Network

CloudEngine S5736-S 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.



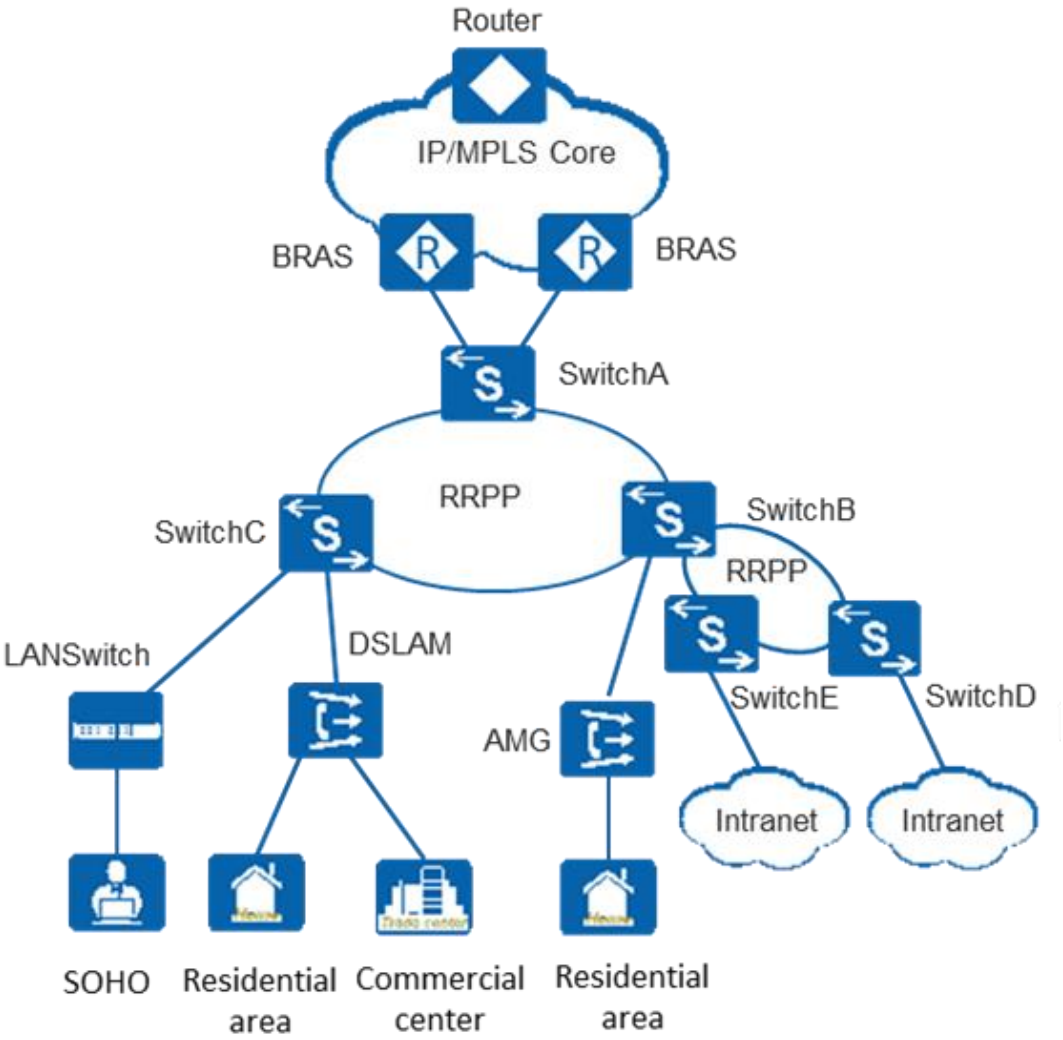
Small-scale Enterprise Campus Network

With powerful aggregation and routing capabilities of CloudEngine S5736-S series switches make them suitable for use as core switches in a small-scale enterprise network. Two or more S5736-S switches use iStack technology to ensure high reliability. They provide a variety of access control policies to achieve centralized management and simplify configuration.



Application on a MAN

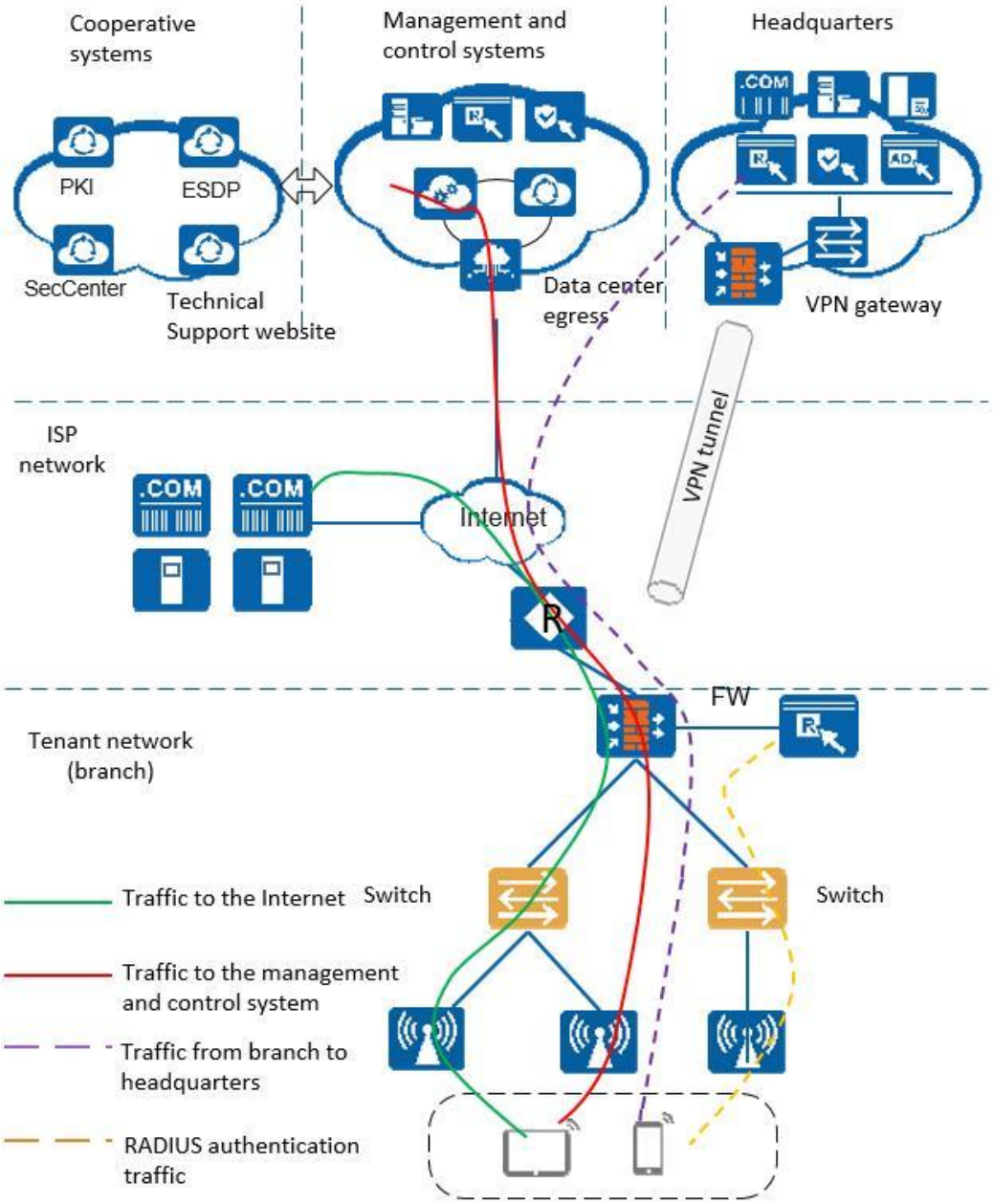
CloudEngine S5736-S series switches can be deployed at the access layer of a MAN(Metropolitan Area Network) to build a high-performance, multi-service, and highly reliable ISP MAN network.



Application in Public Cloud

CloudCampus Solution is a network solution suite based on Huawei public cloud.CloudEngine S5736-S series switches can be located at the access layer.

The switches are plug-and-play. They go online automatically after being powered on and connected with network cables, without the need for complex configurations. The switches can connect to the management and control system (iMaster NCE-Campus for switches running V200R020C00 and later versions), and use bidirectional certificate authentication to ensure management channel security. The switches provide the NETCONF and YANG interfaces, through which the management and control system delivers configurations to them. In addition, remote maintenance and fault diagnosis can be performed on the management and control system.



Safety and Regulatory Compliance

Certification Category	Description
Safety	• IEC 60950-1 • EN 60950-1/A11/A12 • UL 60950-1 • CSA C22.2 No 60950-1 • AS/NZS 60950.1 • CNS 14336-1 • IEC60825-1 • IEC60825-2 • EN60825-1 • EN60825-2

Certification Category	Description
Electromagnetic Compatibility (EMC)	• CISPR22 Class A • CISPR24 • EN55022 Class A • EN55024 • ETSI EN 300 386 Class A • CFR 47 FCC Part 15 Class A • ICES 003 Class A • AS/NZS CISPR22 Class A • VCCI Class A • IEC61000-4-2 • ITU-T K 20 • ITU-T K 21 • ITU-T K 44 • CNS13438
Environment	• RoHS • REACH • WEEE

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

Category	MIB
Public MIB	• BRIDGE-MIB • DISMAN-NSLOOKUP-MIB • DISMAN-PING-MIB • DISMAN-TRACEROUTE-MIB • ENTITY-MIB

Category	MIB
	• EtherLike-MIB • IF-MIB • IP-FORWARD-MIB • IPv6-MIB • LAG-MIB • LLDP-EXT-DOT1-MIB • LLDP-EXT-DOT3-MIB • LLDP-MIB • NOTIFICATION-LOG-MIB • NQA-MIB • OSPF-TRAP-MIB • P-BRIDGE-MIB • Q-BRIDGE-MIB • RFC1213-MIB • RIPv2-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 • 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

Category	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 • HUAWEI-LLDP-MIB • HUAWEI-MAC-AUTHEN-MIB • HUAWEI-MEMORY-MIB • HUAWEI-MFF-MIB • HUAWEI-MFLP-MIB • HUAWEI-MSTP-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

Category	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

NOTE

For more detailed information of MIBs supported by the CloudEngine S5736-S series, visit https://support.huawei.com/enterprise/en/switches/s5700-pid-6691579?category=reference-guides&subcategory=mib-reference.

Standard Compliance

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) • 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)

Standard Organization	Standard or Protocol
	• 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 • 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+
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 Networks • 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 802.3ad 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 802.3ah Ethernet in the First Mile • 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 802.3af DTE Power via MIDI • IEEE 802.3at DTE Power via the MDI Enhancements
ITU	• ITU SG13 Y.17ethoam • ITU SG13 QoS control Ethernet-Based IP Access • ITU-T Y.1731 ETH OAM performance monitor
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

Standard Organization	Standard or Protocol
	• 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/YMODEM Protocol Reference

Ordering Information

The following table lists ordering information of the CloudEngine S5736-S series switches.

Model	Product Description
CloudEngine S5736-S24T4XC	CloudEngine S5736-S24T4XC (24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 1*expansion slot, without power module)
CloudEngine S5736-S24U4XC	CloudEngine S5736-S24U4XC (24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 1*expansion slot, PoE++, without power module)
CloudEngine S5736-S48T4XC	CloudEngine S5736-S48T4XC (48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 1*expansion slot, without power module)
CloudEngine S5736-S48U4XC	CloudEngine S5736-S48U4XC (48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 1*expansion slot, PoE++, without power module)
PAC150S12-R	150 W AC power module
PDC180S12-CR	180 W DC power module
PAC1000S56-DB	1000 W AC PoE power module
PDC1000S56-DB	1000 W DC PoE power module
PAC600S12-CB	600 W AC PoE power module
S7X08000	8-port 10GE SFP+ interface card
ES5D21Q02Q00	2-port 40GE QSFP+ interface card
ES5D21Q04Q01	4-port 40GE QSFP+ interface card
FAN-031A-B	Fan module
N1-S57S-M-Lic	S57XX-S Series Basic SW,Per Device
N1-S57S-M-SnS1Y	S57XX-S Series Basic SW,SnS,Per Device,1Year
N1-S57S-F-Lic	N1-CloudCampus,Foundation,S57XX-S Series,Per Device
N1-S57S-F-SnS1Y	N1-CloudCampus,Foundation,S57XX-S Series,SnS,Per Device,1Year
N1-S57S-A-Lic	N1-CloudCampus,Advanced,S57XX-S Series,Per Device
N1-S57S-A-SnS1Y	N1-CloudCampus,Advanced,S57XX-S Series,SnS,Per Device,1Year
N1-S57S-FToA-Lic	N1-Upgrade-Foundation to Advanced,S57XX-S,Per Device
N1-S57S-FToA-SnS1Y	N1-Upgrade-Foundation to Advanced,S57XX-S,SnS,Per Device,1Year

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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