

CloudEngine S12700E Series Switches Brochure

Huawei CloudEngine S12700E series switches are new core switches designed for next-generation high-quality campus networks. These purpose-built switches help create a campus network that improves user experiences, reduces operating costs, and delivers un

Product Overview

Huawei CloudEngine S12700E series switches ("CloudEngine S12700E") are flagship core switches in Huawei's CloudCampus Solution. By building an intelligent campus core, these feature-rich switches help customers head towards a service experience-centric campus network that is intelligent and simplified.

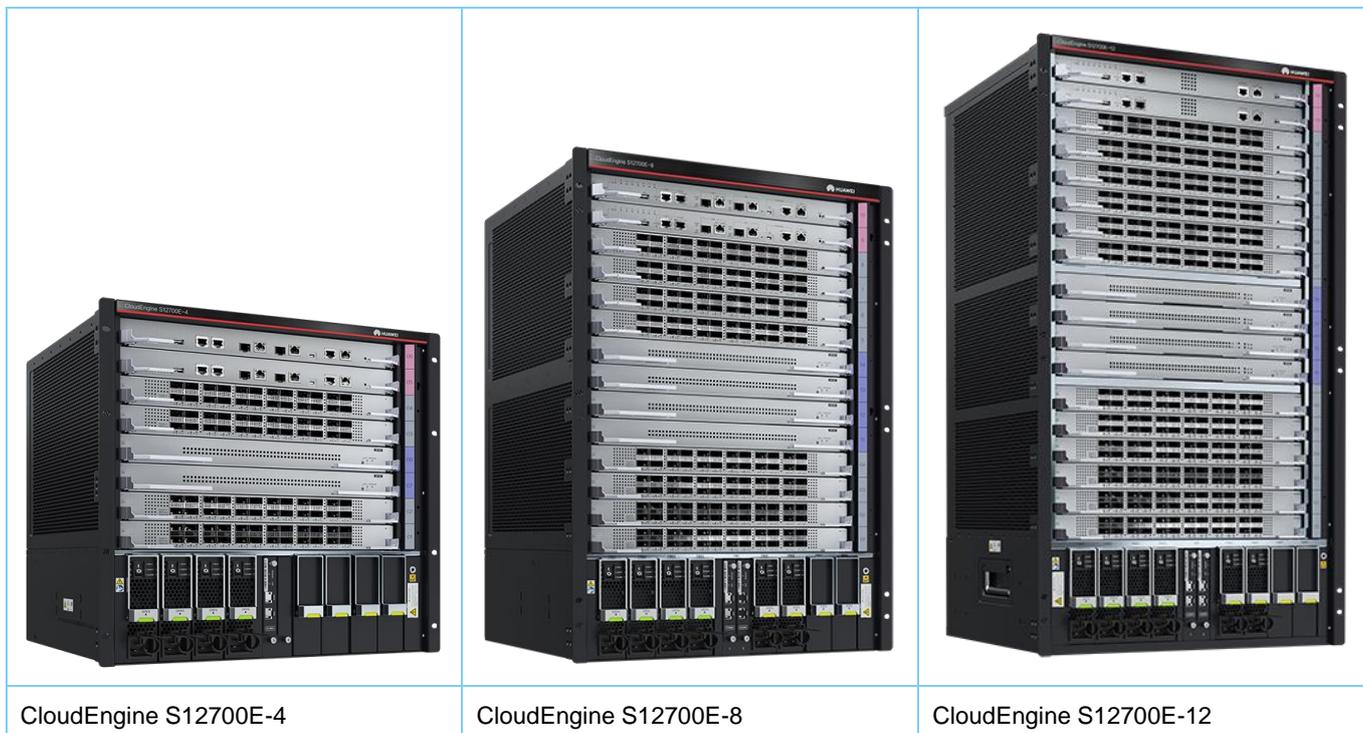
CloudEngine S12700E stands out with massive capacity expansion and flexible service upgrade capabilities to protect customer investments and facilitate their long-term network evolution. Built on Huawei's high-performance full-programmable chipsets, CloudEngine S12700E delivers 4.8 Tbps of single-slot bandwidth, which can easily scale to 7.2 Tbps simply by upgrading SFUs in the future. CloudEngine S12700E also offers a broad range of line cards, including 100GE, 40GE, 25GE, 10GE, and GE line cards, and provides up to 288 x 100GE ports, the unmatched port density in the industry. These give customers flexible choices to meet their capacity expansion and upgrade needs.

By integrating large-capacity WLAN AC capabilities, a single CloudEngine S12700E can manage up to 10,240 WLAN APs. This capability, combined with free mobility functionality, achieves fully converged wired and wireless networks and policies, greatly simplifying network management with users and services at the core.

With a holistic set of reliability, security, and trusted features, CloudEngine S12700E is ideal for building a reliable, secure, and trustworthy campus core. By using a next-generation cell switching architecture, CloudEngine S12700E ensures non-blocking service data forwarding on core nodes and guarantees service quality in high-concurrency, large-capacity, and high-load environments.

Models and Appearances

CloudEngine S12700E is available in three models: S12700E-4, S12700E-8, and S12700E-12.



Features and Highlights

Switch Highlights

Fully-programmable Architecture

- Built on chipsets with a fully-programmable architecture, CloudEngine S12700E adapts to the changing forwarding processes driven by protocol evolution and technology advances. It enables fast and flexible provisioning of new services simply by upgrading software, without having to replace hardware, thereby protecting customers' investment. In contrast, traditional ASIC chips use a fixed forwarding architecture and follow a fixed forwarding process; as a result, new services cannot be provisioned until new hardware is developed to support the services, which may take 1 to 3 years.

Wired and Wireless Convergence

- By integrating WLAN AC capabilities, CloudEngine S12700E eliminates the need to purchase additional WLAN AC hardware. Each CloudEngine S12700E can manage up to 10,240 APs. With up to 4 Tbps WLAN AC forwarding capacity, CloudEngine S12700E avoids the performance bottleneck on independent WLAN AC devices. As such, organizations are well poised to cope with challenges in the high-speed wireless era.
- CloudEngine S12700E supports the unified user management function that 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. CloudEngine S12700E supports various authentication methods, including PPPoE, 802.1X, MAC address, and Portal authentication, and is capable of managing users based on user groups, domains, and time ranges. These functions intuitively control user and service management and enable the transformation from data switching-centered management to service experience-centered management.

Note: The CloudEngine S12700E series switches can manage 16 APs by default. You can purchase licenses for more AP management on demand.

Service Experience Assurance

- CloudEngine S12700E supports a 4 GB buffer to cope with the burst data traffic pressure caused by massive concurrent users. This alleviates the data packet loss and even connection interruption caused by traffic burst.
- In addition, based on the industry-leading HQoS, hierarchical scheduling is performed on network-wide data traffic on the core nodes of the network to provide differentiated services for different users and applications, fully ensuring the service quality of key users and key applications and ensuring service experience.

Refined Network Management

- Packet Conservation Algorithm for Internet (iPCA) changes the traditional method that uses simulated traffic for fault location. iPCA technology monitors network quality for any service flow at any network node, at any time, and without extra costs. It can quickly detect intermittent service interruptions and accurately identify faulty ports. This cutting-edge fault detection technology turns "extensive management" into "fine granular management."
- Super Virtual Fabric 2.0 (SVF 2.0) technology can not only virtualize fixed-configuration switches into modular switch line cards but also virtualize APs as switch ports. With this virtualization technology, a physical network with core/aggregation switches, access switches, and APs can be virtualized into a "super switch", simplifying network management.
- CloudEngine S12700E series manages access switches in a similar way a WLAN AC manages APs, saving the trouble of laborious configuration on access switches. It manages access switches and APs uniformly, allowing them to connect to the network with zero configuration.

System Openness Capability

- CloudEngine S12700E supports NETCONF/YANG through which users can perform automated configuration.
- CloudEngine S12700E supports the Open Programmability System (OPS), an open programmable system based on the Python language. IT administrators can program the O&M functions of CloudEngine S12700E through Python scripts to quickly innovate functions and implement intelligent O&M.

Secure and Trustworthy System

- Digital signatures of codes are used to identify software sources and the real identities of software developers to ensure that code is not tampered with after being signed. To protect software, CloudEngine S12700E uses two levels of signature mechanisms: inner signature and outer signature.
- CloudEngine S12700E supports secure boot based on the hardware trust root. Starting from the trusted hardware anchor, the software code to be loaded is checked level by level. This approach ensures that the MPUs, line cards, and SFUs are not intruded since the boot phase.
- The chipsets provide a secure Random Number Generator (RNG) module certified by NIST SP 800-90A and NIST SP 800-90B to generate true secure random numbers for system running, thereby ensuring secure and trustworthy encryption.

Network-Level Reliability

- CloudEngine S12700E uses link detection technologies such as hardware Eth-OAM and BFD, and adopts standard/standards-compatible link switching technologies like G.8032 and Smart Ethernet Protection (SEP). These technologies achieve end-to-end 50 ms hardware-level switchover and help build highly responsive campus network that provides highly reliable services.
- CloudEngine S12700E supports High-speed Self Recovery (HSR) technology that implements end-to-end IP MPLS transmission network protection switchover within 50 ms, improving network reliability.

Easy Operation

CloudEngine S12700E supports EasyDeploy that implements plug-and-play for newly deployed devices and centrally manages all devices running on the network. Typical Easy Deploy functions include the following:

- Implementing Zero Touch Provisioning (ZTP) to automatically load the boot files such as version files, configuration files, and patches
- Upgrading network devices and delivering configurations in batches
- Quickly replacing old devices with new ones that are plug-and-play without configuration

Intelligent Diagnosis

- CloudEngine S12700E supports Open Intelligent Diagnosis System (OIDS). By integrating the device health monitoring and fault diagnosis functions – that are typically deployed on a Network Management System (NMS) – into the switch software, OIDS implements intelligent diagnosis on a single switch.
- After OIDS is deployed on a switch, the switch periodically collects and records the running information and automatically determines whether a fault occurs. If a fault occurs, the switch automatically locates the fault or helps locate the fault. All these merits increase fault locating efficiency of O&M staff while improving device maintainability.

Solution Benefits

Simplified Management

- Deployment automation: CloudEngine S12700E supports VXLAN and BGP-EVPN, and builds a Unified Virtual Fabric (UVF) to automate deployment of up to 512 Virtual Networks (VNs). In this way, multiple service networks or tenant networks can be deployed and isolated from each other on the same physical network, truly achieving one network for multiple purposes.
- Policy automation: CloudEngine S12700E automates deployment of wired and wireless user policies on the entire network and implements refined management and control based on SDN to achieve free mobility.

Intelligent O&M

- CloudEngine S12700E provides telemetry technology to collect device data in real time and send the data to the CampusInsight (a campus network analysis component of Huawei iMaster NCE). The CampusInsight then 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 experiences.
- CloudEngine S12700E supports a variety of intelligent O&M features for audio and video services, including the enhanced Media Delivery Index (eMDI). With the eMDI function, the switch can function as a monitored node to periodically conduct statistics and report audio and video service indicators to the CampusInsight. In this way, the CampusInsight can quickly demarcate audio and video service quality faults based on the results of multiple monitored nodes.

Big Data Security Collaboration

- CloudEngine S12700E uses 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(or Agile Controller). The iMaster NCE-Campus(or Agile Controller) then delivers such policies to switches that will handle security events accordingly. All these ensure campus network security.

Licensing

CloudEngine S12700E 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, MPLS, SVF, and others Note: For details, see the Functions and Features	√	√	√
Basic network automation based on the Agile Controller: <ul style="list-style-type: none"> ● Basic automation: Plug-and-play, SSID, and AP group management ● Basic monitoring: Application visualization ● NE management: Image and topology management and discovery ● WLAN enhancement: Roaming and optimization for up to 128 APs 	×	√	√
Advanced network automation and intelligent O&M: VXLAN, user access authentication, free mobility, and	×	×	√

Switch Functions	N1 Basic Software	N1 Foundation Software Package	N1 Advanced Software Package
CampusInsight basic functions			

Note: Only V200R019C00 and later versions can support N1 mode

Product Specifications

Functions and Features

Except for special instructions, the following features are supported by CloudEngine S12700E with N1 basic software.

Category	Service Features	CloudEngine S12700E
User management	Unified user management	Yes
	PPPoE, 802.1X, MAC, and Portal authentication	Yes
	Traffic- and duration-based accounting	Yes
	User authorization based on user groups, domains, and time ranges	Yes
MAC address	Number of MAC address entries	1M(MAX)
	Automatic MAC address learning and aging	Yes
	Static, dynamic, and blackhole MAC address entries	Yes
	Source MAC address filtering	Yes
	MAC address learning limiting based on ports and VLANs	Yes
VLAN	4K VLANs	Yes
	Access, trunk, and hybrid interface types; auto-negotiation of LNP link types	Yes
	Default VLAN	Yes
	VLAN switching	Yes
	QinQ and enhanced selective QinQ	Yes
	Dynamic VLAN assignment based on MAC addresses	Yes
ARP	Maximum number of ARP entries	384K(MAX)
	ARP Snooping	√
IP routing	Maximum number of IPv4 routing entries	3M(MAX)
	Maximum number of IPv6 routing entries	1M(MAX)
	IPv4 dynamic routing protocols such as RIP, OSPF, IS-IS, and BGP	Yes
	IPv6 dynamic routing protocols such as RIPng, OSPFv3, ISISv6, and BGP4+	Yes
Multicast	Maximum number of multicast routing entries(IPv4)	64K(MAX)
	Maximum number of multicast routing entries(IPv6)	64K(MAX)
	IGMPv1/v2/v3 and IGMP v1/v2/v3 Snooping	Yes

Category	Service Features	CloudEngine S12700E
	PIM-DM, PIM-SM, and PIM-SSM	Yes
	MSDP and MBGP	Yes
	Fast-leave mechanism	Yes
	Multicast traffic control	Yes
	Multicast querier	Yes
	Multicast protocol packet suppression	Yes
	Multicast Call Admission Control (CAC)	Yes
	Multicast ACL	Yes
MPLS	Basic MPLS functions	Yes
	MPLS OAM	Yes
	MPLS TE	Yes
	MPLS VPN/VLL/VPLS	Yes
VXLAN	VXLAN Layer 2 gateway	Yes, require additional license
	VXLAN Layer 3 gateway	Yes, require additional license
	Centralized gateway	Yes, require additional license
	Distributed gateway	Yes, require additional license
	BGP-EVPN	Yes, require additional license
	Configures VXLANs through NETCONF	Yes, require additional license
QoS	Number of ACL rules(IPv4)	32K(MAX)
	Number of ACL rules(IPv6)	16K(MAX)
	Traffic classification based on Layer 2 headers, Layer 3 protocols, Layer 4 protocols, and 802.1p priority	Yes
	Actions such as ACL, Committed Access Rate (CAR), re-marking, and scheduling	Yes
	Queuing algorithms, such as PQ, WRR, DRR, PQ+WRR, and PQ+DRR	Yes
	Congestion avoidance mechanisms such as WRED and tail drop	Yes
	HQoS	Yes
	Traffic shaping	Yes
iPCA	Marks the real service packets to obtain real-time count of dropped packets and packet loss ratio	Yes
	Counts the number of dropped packets and packet loss ratio on devices and L2/L3 networks	Yes

Category	Service Features	CloudEngine S12700E
SVF 2.0	Up to 10K clients (access switches and APs) virtualized into a single device	Yes
	Two layers of ASs allowed in an SVF system	Yes
	Third-party devices allowed between SVF parent and clients	Yes
Ring network protection	STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s).	Yes
	SEP	Yes
	BPDU protection, root protection, and loop protection	Yes
	BPDU tunnel	Yes
	G.8032 Ethernet Ring Protection Switching (ERPS)	Yes
Reliability	Link Aggregation Control Protocol (LACP) and E-Trunk	Yes
	Virtual Router Redundancy Protocol (VRRP) and Bidirectional Forwarding Detection (BFD) for VRRP	Yes
	BFD for BGP/IS-IS/OSPF/static routes	Yes
	Non-Stop Forwarding (NSF) and Graceful Restart (GR) for BGP/IS-IS/OSPF/LDP	Yes
	TE Fast ReRoute (FRR) and IP FRR	Yes
	Eth-OAM 802.3ah and 802.1ag (hardware-based)	Yes
	High-speed Self Recovery (HSR)	Yes
	ITU-Y.1731	Yes
	Device Link Detection Protocol (DLDP)	Yes
	Smart Link	Yes
	Monitor Link	Yes
Configuration and maintenance	Easy Operation	Yes
	Terminal access services such as console port login, Telnet, and SSH	Yes
	Network management protocols, such as SNMPv1/v2/v3	Yes
	File uploading and downloading through FTP and TFTP	Yes
	BootROM upgrade and remote in-service upgrade	Yes
	Hot patches	Yes
	User operation logs	Yes
	Open Programmability System (OPS)	Yes
	Streaming Telemetry	Yes
	eMDI	Yes
Security and management	MAC address, Portal, 802.1X, and DHCP snooping-triggered authentication	Yes
	MACsec	Yes

Category	Service Features	CloudEngine S12700E
	NAC	Yes
	RADIUS and HWTACACS authentication for login users	Yes
	Command line authority control based on user levels, preventing unauthorized users from using command configurations	Yes
	Defense against DoS attacks, Transmission Control Protocol (TCP) SYN Flood attacks, User Datagram Protocol (UDP) Flood attacks, broadcast storms, and heavy traffic attacks	Yes
	1K CPU hardware queues to implement hierarchical scheduling and protection for protocol packets on the control plane	Yes
	Remote Network Monitoring (RMON)	Yes
	Secure boot (need to use MPU that supports secure boot)	Yes
	Big data security collaboration	Yes
Wireless management (integrated WLAN AC): Basic WLAN services	Mesh networking	Yes
	N+N cold backup for devices with integrated WLAN AC functionality	Yes
	Hot backup for devices with integrated WLAN AC functionality in cluster mode	Yes
	WLAN terminal location	Yes
	Locating of interference sources	Yes
	Spectrum analysis function	Yes
	2.4G & 5G load balancing	Yes
	5G-prior access	Yes
Wireless management (integrated WLAN AC): AP management	Total number of managed APs	10K
	An IPv4 network between an AP and a WLAN AC	Yes
	AP blacklist	Yes
	AP whitelist	Yes
	Sets the AP access control mode	Yes
	AP configuration and management	Yes
	AP energy saving	Yes
	AP LLDP topology awareness	Yes
	Adjustable priority of traffic on wired interfaces of APs	Yes
	Rate limiting on wired interfaces of APs	Yes
Wireless management (integrated WLAN AC): Wireless user management	User roaming within a WLAN AC	Yes
	AP-based user location	Yes
	User roaming between WLAN ACs	Yes
	802.1X authentication	Yes
	Portal authentication	Yes

Category	Service Features	CloudEngine S12700E
	MAC address authentication	Yes
Wireless management (integrated WLAN AC): CAPWAP	Direct data forwarding on L2/L3 networks	Yes
	Tunnel-based data forwarding on L2/L3 networks	Yes
	Dual-link load balancing for CAPWAP tunnels	Yes
	CAPWAP tunnel encryption	Yes
Wireless management (integrated WLAN AC): RF management	802.11 a/b/g/n	Yes
	802.11 ac wave1/wave2	Yes
	802.11 ax	Yes
	Sets RF interference monitoring and avoidance	Yes
	Detects co-channel interference, adjacent interference, and interference from other devices and STAs	Yes
	Automatically selects channels and power when APs go online	Yes
	Dynamic power and channel optimization	Yes
Wireless management (integrated WLAN AC): WLAN QoS	Mapping from wireless-side priority to wired-side priority	Yes
	Mapping from wireless-side priority to CAPWAP channel priority	Yes
	Rate limiting of upstream and downstream traffic on the air interface based on the VAP	Yes
	Rate limiting of upstream and downstream traffic on the air interface based on users	Yes
	SSID-based CAR	Yes
	CAR for WLAN users	Yes
Interoperability	Interoperable with VBST (compatible with PVST/PVST+/RPVST)	Yes
	Interoperable with LNP (similar to DTP)	Yes
	Interoperable with VCMP (similar to VTP)	Yes

Hardware Specifications

Item	CloudEngine S12700E-4	CloudEngine S12700E-8	CloudEngine S12700E-12
Switching capacity	19.2 Tbps	38.4 Tbps	57.6Tbps
Forwarding performance	14,400 Mpps	28,800 Mpps	43,200 Mpps
MPU slots	2	2	2
SFU slots	2	4	4
LPU slots	4	8	12
Fan trays	2	4	5
Power	4	6	6
Buffering capacity	Up to 200 ms data buffering per port	Up to 200 ms data buffering per port	Up to 200 ms data buffering per port

Item	CloudEngine S12700E-4	CloudEngine S12700E-8	CloudEngine S12700E-12
Redundancy design	MPU, SFU, power module, and fan module	MPU, SFU, power module, and fan module	MPU, SFU, power module, and fan module
Virtualization	CSS service port clustering	CSS service port clustering	CSS service port clustering
Dimensions (H x W x D)	441.7*442*517.4,10U	663.95*442*517.4, 15U	841.75*442*517.4, 19U
Weight (empty/fully configured)	24.5kg/66kg Note <ul style="list-style-type: none"> Empty configuration indicates that the switch has no line card, MPU, or power supply installed. Filler panels are used, instead. Full configuration indicates that the switch is fully configured with MPUs, SFUs, line cards, and power supplies. Their maximum weights are used during calculation. 	42.5kg/114kg Note <ul style="list-style-type: none"> Empty configuration indicates that the switch has no line card, MPU, or power supply installed. Filler panels are used, instead. Full configuration indicates that the switch is fully configured with MPUs, SFUs, line cards, and power supplies. Their maximum weights are used during calculation. 	71.8kg/184kg Note <ul style="list-style-type: none"> Empty configuration indicates that the switch has no line card, MPU, or power supply installed. Filler panels are used, instead. Full configuration indicates that the switch is fully configured with MPUs, SFUs, line cards, and power supplies. Their maximum weights are used during calculation.
Operating voltage	DC: -48V~-60V AC: 90V~290V		
Maximum power consumption	3344W	6950W	8981W
Operating temperature	<ul style="list-style-type: none"> -60 m to +1800 m: 0°C to 45°C 1800 m to 4000 m: The maximum operating temperature decreases by 1°C each time the altitude increases by 220 m. 4000 m: 0°C to 35°C 		
Relative humidity	5% to 95% (non-condensing)		
Heat dissipation mode	Left-to-rear airflow, air-cooled heat dissipation, and intelligent fan speed adjustment		

Networking and Applications

In a Campus Network

CloudEngine S12700E series switches are deployed on the core layer of an enterprise campus network. ACs are built in to the switches to achieve the following purposes:

- Wireless networks can be constructed without any additional AC devices, reducing network construction costs.
- With the wired and wireless convergence capability, they can deliver a consistent experience to wired and wireless users through uniform device management, user management, and service management.
- The T-bit AC capability avoids performance bottlenecks on independent ACs and enables a migration to 802.11ax networks.

In a MAN

CloudEngine S12700E series switches can be used as core or aggregation switches on a metro television broadcasting or education network.

- Providing millions of FIB entries for large-scale routing on the network.
- Supporting comprehensive L2/L3 MPLS VPN features, ensuring high reliability, security, and scalability on the metropolitan bearer network.
- Single-link 100G hardware clustering technology delivers carrier-grade reliability.

In a Data Center

CloudEngine S12700E series switches can be deployed on the core or aggregation layer of an enterprise data center network

- Providing large throughput using high-density line cards, such as 24*100GE, 6*100GE, 40*25GE and 48*10GE/GE cards.
- CloudEngine S12700E series switches support single-link 100G hardware clustering. This technology helps to build a data center network with high performance, high reliability, and low latency.

In an Education Campus Network

CloudEngine S12700E series switches are deployed on the core layer of a college campus network.

- Allowing for a large number of concurrent access users.
- As they support unified user management, you do not need to buy additional hardware components, reducing network construction costs.
- The H-QoS feature implements fine granular user and service management.
- With the wired and wireless convergence capability, they can deliver a consistent experience to wired and wireless users through uniform device management, user management, and service management.

In a Bearer Network for Video Conferencing, Desktop Cloud, and Video Surveillance Applications

- CloudEngine S12700E series switches have a large buffer to prevent packet loss when traffic bursts occur, delivering high-quality video streams.
- CloudEngine S12700E series switches support millions of hardware entries, which allow for a large number of terminals and facilitate evolution to IPv6 and the Internet of Things.
- Employing end-to-end hardware reliability technologies and iPCA, CloudEngine S12700E series switches offer a highly reliable, high-quality, scalable video conferencing and surveillance solution.

Ordering Information

CloudEngine S12700E Basic Configuration	
LE2BN66ED000	N66E DC assembly cabinet (eight 60A outputs, maximum 2200W, 600 × 600 × 2200 mm)
LE2BN66EA000	N66E AC assembly cabinet (four 16 A outputs, a maximum of 2500W, 600 × 600 × 2200 mm)
ET1BS12704E0	S12700E-4 assembly chassis
ET1BS12708E0	S12700E-8 assembly chassis
ET1BS12712E1	S12700E-12 assembly chassis
FAN-770A-B	Fan box (-5degC–55degC, 48V, 400W, 2, indoors, VA)

Main Processing Unit	
LST7MPUE0000	S12700E Main Processing Unit E
LST7MPUE0001	S12700E Main Processing Unit E

Monitoring Unit

EH1D200CMU00	Centralized Monitoring Unit
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Switch Fabric Unit

LST7SFUEX100	S12700E Switch Fabric Unit E(X1)
LST7SFUHX100	S12700E Switch Fabric Unit H(X1)
LST7SFUMX100	S12700E Switch Fabric Unit M(X1)

100G Ethernet optical interface card

LST7C02BX6E0	2-port 100GE QSFP28 interface and 4-port 40GE QSFP28 interface card (X6E,QSFP28)
LST7C06HX6E0	6-port 100GE QSFP28 interface card (X6E,QSFP28)
LST7C06HX6S0	6-port 100GE QSFP28 interface card (X6S,QSFP28)
LST7C24HX6E0	24-port 100GE QSFP28 interface card (X6E,QSFP28)

25GE optical interface card

LST7Y40SX6H0	40-port 25GE SFP28 interface card (X6H,SFP28)
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10GE optical interface card

LST7X48SX6E0	48-port 10GE SFP+ interface card (X6E,SFP+)
LST7X48SX6S0	48-port 10GE SFP+ interface card (X6S,SFP+)

10GE/1000M Ethernet optical interface card

LST7X24BX6E0	24-port 10GE SFP+ interface and 24-port GE SFP interface card (X6E,SFP+)
LST7X24BX6S0	24-port 10GE SFP+ interface and 24-port GE SFP interface card (X6S,SFP+)

Gigabit Ethernet optical interface card

LST7G48SX6E0	48-port GE SFP interface card (X6E,SFP)
LST7G48SX6S0	48-port GE SFP interface card (X6S,SFP)

Gigabit Ethernet electrical interface card

LST7G48TX5E1	48-port 10/100/1000BASE-T interface card (X5E,RJ45)
LST7G48TX5S1	48-port 10/100/1000BASE-T Interface Card (X5S,RJ45)

Power supply		Supported Version
W2PSD2200	2200W DC power module	
PAC3KS54-CE	3000W AC power module (black)	V200R019C00 and later versions
PAC3KS54-NE	3000W AC power module (black)	V200R020C10 and later versions

License	
L-1AP-S127E	S127E Series,Wireless Access Controller AP Resource License-1AP
L-VxLAN-S127E	S127E Series,VxLAN License, Per Device
RTU-800G-S127E	S127E Series,800G Capacity Right to Use License,Per Device
N1-S127E-F-Lic	N1-CloudCampus,Foundation,S127E Series,Per Device
N1-S127E-F-SnS1Y	N1-CloudCampus,Foundation,S127E Series,SnS,Per Device,1Year
N1-S127E-A-Lic	N1-CloudCampus,Advanced,S127E Series,Per Device
N1-S127E-A-SnS1Y	N1-CloudCampus,Advanced,S127E Series,SnS,Per Device,1Year
N1-S127E-FToA-Lic	N1-Upgrade-Foundation to Advanced,S127E,Per Device
N1-S127E-FToA-SnS1Y	N1-Upgrade-Foundation to Advanced,S127E,SnS,Per Device,1Year
N1-S127E-M-Lic	N1-CloudCampus,Device Management,S127E Series,Per Device
N1-S127E-M-SnS1Y	N1-CloudCampus,Device Management,S127E Series,,SnS,Per Device,1Year
N1-AC1.0-AM-15-Lic	N1-CloudCampus,Access Management-AC1.0,15 Terminals
N1-AC1.0-AM-15-SnS1Y	N1-CloudCampus,Access Management-AC1.0,15 Terminals,SnS,1Year
CI-X7MSwitch-U	CampusInsight-Upgrade-Foundation to Advanced, X7 Series Modular Switch, Per Device
CI-X7MSwitch-U-SnS1Y	CampusInsight-Upgrade-Foundation to Advanced, X7 Series Modular Switch, 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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