

CloudEngine S5735-L-V2 Series Switches Brochure

Huawei CloudEngine S5735-L-V2 series are simplified gigabit Ethernet switches that provide 8/10/16/24/48 x GE downlink ports, 4 x GE or 10GE uplink ports and 2 x 12GE dedicated stack ports.

Product Overview

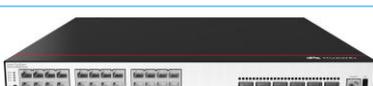
CloudEngine S5735-L-V2 series switches are ideal for scenarios such as enterprise campus network access and gigabit to the desktop. Built on next-generation, high-performance hardware and software platform, CloudEngine S5735-L-V2 switches stand out with compelling features such as intelligent stack (iStack), flexible Ethernet networking, and diversified security control. They support multiple Layer 3 routing protocols and provide high performance and service processing capabilities.

Models and Appearances

The following models are available in the CloudEngine S5735-L-V2 series.

Models and appearances of the CloudEngine S5735-L-V2 series

| Models and Appearances | Description |
|---|--|
|  CloudEngine S5735-L8T4S-A-V2 | <ul style="list-style-type: none"> • 8 x 10/100/1000Base-T ports, 4 x GE SFP ports • Built-in AC • Forwarding performance: 18 Mpps • Switching capacity: 24 Gbps/520 Gbps* |
|  CloudEngine S5735-L8P4S-A-V2 | <ul style="list-style-type: none"> • 8 x 10/100/1000Base-T ports, 4 x GE SFP ports • Built-in AC • PoE+ • Forwarding performance: 18 Mpps • Switching capacity: 24 Gbps/520 Gbps* |
|  CloudEngine S5735-L10T4X-A-V2 | <ul style="list-style-type: none"> • 10 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports • Built-in AC • Forwarding performance: 75 Mpps • Switching capacity: 100 Gbps/520 Gbps* |
|  CloudEngine S5735-L8P2T4X-A-V2 | <ul style="list-style-type: none"> • 8 x 10/100/1000Base-T ports(PoE+), 2 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports • Built-in AC • Forwarding performance: 75 Mpps • Switching capacity: 100 Gbps/520 Gbps* |

| Models and Appearances | Description |
|--|--|
|  <p>CloudEngine S5735-L10T4X-TA-V2**</p> | <ul style="list-style-type: none"> • 10 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports • Built-in AC • Forwarding performance: 75 Mpps • Switching capacity: 100 Gbps/520 Gbps* |
|  <p>CloudEngine S5735-L8P2T4X-TA-V2**</p> | <ul style="list-style-type: none"> • 8 x 10/100/1000Base-T ports(PoE+), 2 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports • Built-in AC • Forwarding performance: 75 Mpps • Switching capacity: 100 Gbps/520 Gbps* |
|  <p>CloudEngine S5735-L16T4S-A-V2</p> | <ul style="list-style-type: none"> • 16 x 10/100/1000Base-T ports, 4 x GE SFP ports • Built-in AC • Forwarding performance: 30 Mpps • Switching capacity: 40 Gbps/520 Gbps* |
|  <p>CloudEngine S5735-L24T4S-A-V2</p> | <ul style="list-style-type: none"> • 24 x 10/100/1000Base-T ports, 4 x GE SFP ports • Built-in AC • Forwarding performance: 42 Mpps • Switching capacity: 56 Gbps/520 Gbps* |
|  <p>CloudEngine S5735-L24P4S-A-V2</p> | <ul style="list-style-type: none"> • 24 x 10/100/1000Base-T ports, 4 x GE SFP ports • Built-in AC • PoE+ • Forwarding performance: 42 Mpps • Switching capacity: 56 Gbps/520 Gbps* |
|  <p>CloudEngine S5735-L24T4XE-A-V2</p> | <ul style="list-style-type: none"> • 24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 stack ports • Built-in AC • Forwarding performance: 132 Mpps • Switching capacity: 176 Gbps/520 Gbps* |
|  <p>CloudEngine S5735-L24T4XE-D-V2</p> | <ul style="list-style-type: none"> • 24 x 10/100/1000Base-T ports, 4 x 10GE SFP+ ports, 2 x 12GE stack ports • Built-in DC • Forwarding performance: 132 Mpps • Switching capacity: 176 Gbps/520 Gbps* |
|  <p>CloudEngine S5735-L24P4XE-A-V2</p> | <ul style="list-style-type: none"> • 24 x 10/100/1000Base-T ports, 4 x 10GE SFP+ ports, 2 x 12GE stack ports • Built-in AC • PoE+ • Forwarding performance: 132 Mpps • Switching capacity: 176 Gbps/520 Gbps* |
|  <p>CloudEngine S5735-L24P4XE-TA-V2**</p> | <ul style="list-style-type: none"> • 24 x 10/100/1000Base-T ports, 4 x 10GE SFP+ ports, 2 x 12GE stack ports • Built-in AC • PoE+ • Forwarding performance: 132 Mpps • Switching capacity: 176 Gbps/520 Gbps* |
|  | <ul style="list-style-type: none"> • 48 x 10/100/1000Base-T ports, 4 x GE SFP ports • Built-in AC |

| Models and Appearances | Description |
|--|---|
| CloudEngine S5735-L48T4S-A-V2 | <ul style="list-style-type: none"> Forwarding performance: 78 Mpps Switching capacity: 104 Gbps/520 Gbps* |
|  CloudEngine S5735-L48LP4S-A-V2 | <ul style="list-style-type: none"> 48 x 10/100/1000Base-T ports, 4 x GE SFP ports Built-in AC PoE+ Forwarding performance: 78 Mpps Switching capacity: 104 Gbps/520 Gbps* |
|  CloudEngine S5735-L48T4XE-A-V2 | <ul style="list-style-type: none"> 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 x12GE stack ports Built-in AC Forwarding performance: 168 Mpps Switching capacity: 224 Gbps/520 Gbps* |
|  CloudEngine S5735-L48T4XE-TA-V2** | <ul style="list-style-type: none"> 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 x12GE stack ports Built-in AC Forwarding performance: 168 Mpps Switching capacity: 224 Gbps/520 Gbps* |
|  CloudEngine S5735-L48T4XE-D-V2 | <ul style="list-style-type: none"> 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 x12GE stack ports Built-in DC Forwarding performance: 168 Mpps Switching capacity: 224 Gbps/520 Gbps* |
|  CloudEngine S5735-L48P4XE-A-V2 | <ul style="list-style-type: none"> 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 x 12GE stack ports Built-in AC PoE+ Forwarding performance: 168 Mpps Switching capacity: 224 Gbps/520 Gbps* |
|  CloudEngine S5735-L48LP4XE-A-V2 | <ul style="list-style-type: none"> 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 x12GE stack ports Built-in AC PoE+ Forwarding performance: 168 Mpps Switching capacity: 224 Gbps/520 Gbps* |

*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.

**Note: '-T' means Hardware Trust Module(HTM), support hardware root of trust and measurement startup.

Features and Highlights

Flexible Ethernet Networking

- In addition to supporting traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), CloudEngine S5735-L-V2 is also designed with the industry's latest Ethernet Ring Protection Switching (ERPS) technology. ERPS is defined in ITU-T G.8032, and it implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.
- CloudEngine S5735-L-V2 supports Smart Link, which implements backup of uplinks. One CloudEngine S5735-L-V2 switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.

Diversified Security Control

- CloudEngine S5735-L-V2 supports 802.1X authentication, MAC address authentication, and hybrid authentication on a per port basis, and implements dynamic policy delivery (VLAN, QoS, and ACL) to users.
- CloudEngine S5735-L-V2 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 S5735-L-V2 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 S5735-L-V2 supports strict ARP learning. This feature prevents ARP spoofing attackers from exhausting ARP entries so that users can connect to the Internet normally.

Easy Operation and Maintenance

- CloudEngine S5735-L-V2 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 Easy Operation solution facilitates device deployment, upgrade, service provisioning, and other management and maintenance operations, and also greatly reduces O&M costs. CloudEngine S5735-L-V2 can be managed and maintained using Simple Network Management Protocol (SNMP) V1, V2, and V3, Command Line Interface (CLI), web-based network management system, or Secure Shell (SSH) V2.0. Additionally, it supports remote network monitoring (RMON), multiple log hosts, port traffic statistics collection, and network quality analysis, paving the way for network optimization and reconstruction.
- CloudEngine S5735-L-V2 supports MUX VLAN, which involves a principal VLAN and multiple subordinate VLANs. Subordinate VLANs are classified into group VLANs and separate VLANs. Ports in the principal VLAN can communicate with ports in subordinate VLANs. Ports in a subordinate group VLAN can communicate with each other, whereas ports in a subordinate separate VLAN cannot communicate with each other. CloudEngine S5735-L-V2 also supports VLAN-Based Spanning Tree (VBST) protocol.

Note: Only those switches with USB ports can USB-based deployment.

iStack

- CloudEngine S5735-L-V2 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 S5735-L-V2 support stacking through electrical ports.
- Some CloudEngine S5735-L-V2 supports two 12GE dedicated stack ports, which release uplink ports and do not need to be configured.

PoE Function

- **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.

Network Slicing Functions

- CloudEngine S5735-L-V2 provides a range of VLAN slicing functions to meet diversified SLA requirements of different services and customers. Service isolation and bandwidth guarantee are implemented based on QoS. Slices can be completely isolated from each other without affecting each other. Traffic is isolated at the physical layer, and network slicing is performed for services on the same physical network. The Network Slicing technology can be used at the access, aggregation, and core layers to meet differentiated SLA requirements of new services on campus networks.

Intelligent O&M

- CloudEngine S5735-L-V2 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.

Intelligent Upgrade

- CloudEngine S5735-L-V2 supports the intelligent upgrade feature. Specifically, CloudEngine S5735-L-V2 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

- CloudEngine S5735-L-V2 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 S5735-L-V2 switch through Python scripts to quickly innovate functions and implement intelligent O&M.

Licensing

CloudEngine S5735-L-V2 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: <ul style="list-style-type: none">● 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 | × | × | √ |

Product Specifications

| Item | CloudEngine S5735-L8T4S-A-V2 | CloudEngine S5735-L8P4S-A-V2 | CloudEngine S5735-L10T4X-A-V2 CloudEngine S5735-L10T4X-TA-V2 | CloudEngine S5735-L8P2T4X-A-V2 CloudEngine S5735-L8P2T4X-TA-V2 |
|--------------------------------------|---|---|---|---|
| Fixed port | 8 x 10/100/1000BASE-T ports, 4 x GE SFP ports | 8 x 10/100/1000Base-T ports(PoE+), 4 x GE SFP ports | 10 x 10/100/1000Base-T ports , 4 x 10GE SFP+ ports | 8 x 10/100/1000Base-T ports(PoE+), 2 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports |
| Dimensions (H x W x D) | 43.6 mm x 250 mm x 180 mm | 43.6 mm x 320 mm x 210 mm | 43.6 mm x 250 mm x 180 mm | 43.6 mm x 320 mm x 210 mm |
| Chassis height | 1 U | 1 U | 1 U | 1 U |
| Chassis weight (including packaging) | 2.22 kg | 3.05 kg | 2.22kg | 3.06kg |
| Power supply type | Built-in AC power | Built-in AC power | Built-in AC power | Built-in AC power |
| Rated input voltage | 100 V AC to 240 V AC, 50/60 Hz | 100 V AC to 240 V AC, 50/60 Hz | 100 V AC to 240 V AC, 50/60 Hz | 100 V AC to 240 V AC, 50/60 Hz |
| Input voltage range | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz |
| Maximum power consumption | 21.52 W | <ul style="list-style-type: none"> 25.09 W (without PD) 166.65 W (with PD, PD power consumption of 125 W) | 29.54 W | <ul style="list-style-type: none"> 32.33 W (without PD) 151.85 W (with PD, PD power consumption of 125 W) |
| Noise | <ul style="list-style-type: none"> Under normal temperature (sound power): 44.5dB (A) Under high temperature (sound power): 53dB (A) Under normal temperature (sound pressure): 32.5dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 47dB (A) Under high temperature (sound power): 57.3dB (A) Under normal temperature (sound pressure): 35dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 44.5dB (A) Under high temperature (sound power): 53dB (A) Under normal temperature (sound pressure): 32.5dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 47dB (A) Under high temperature (sound power): 57.3dB (A) Under normal temperature (sound pressure): 35dB (A) |
| Long-term operating temperature | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by |

| Item | CloudEngine S5735-L8T4S-A-V2 | CloudEngine S5735-L8P4S-A-V2 | CloudEngine S5735-L10T4X-A-V2 CloudEngine S5735-L10T4X-TA-V2 | CloudEngine S5735-L8P2T4X-A-V2 CloudEngine S5735-L8P2T4X-TA-V2 |
|---|--|--|--|--|
| | altitude increases by 220 m. | altitude increases by 220 m. | altitude increases by 220 m. | 220 m. |
| Storage temperature | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C |
| Relative humidity | 5% to 95% (non-condensing) | 5% to 95% (non-condensing) | 5% to 95% (non-condensing) | 5% to 95% (non-condensing) |
| Surge protection specification (service port) | ±7 kV in common mode | ±7 kV in common mode | ±7 kV in common mode | ±7 kV in common mode |
| Surge protection specification (power port) | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV |
| Heat dissipation | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment |
| Physical security | One Kensington lock slot, can be used to lock the device to mounting bracket | | | |

| Item | CloudEngine S5735-L16T4S-A-V2 | CloudEngine S5735-L24T4S-A-V2 | CloudEngine S5735-L24P4S-A-V2 | CloudEngine S5735-L24T4XE-A-V2 |
|--------------------------------------|---|---|---|---|
| Fixed port | 16 x 10/100/1000Base-T ports, 4 x GE SFP ports | 24 x 10/100/1000Base-T ports, 4 x GE SFP ports | 24 x 10/100/1000Base-T ports (PoE+), 4 x GE SFP ports | 24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 stack ports |
| Dimensions (H x W x D) | 43.6 mm x 442 mm x 220 mm | 43.6 mm x 442 mm x 220 mm | 43.6 mm x 442 mm x 220 mm | 43.6 mm x 442 mm x 220 mm |
| Chassis height | 1 U | 1 U | 1 U | 1 U |
| Chassis weight (including packaging) | 3.34kg | 3.44 kg | 3.79 kg | 3.46 kg |
| Power supply type | Built-in AC power | Built-in AC power | Built-in AC power | Built-in AC power |
| Rated voltage range | 100 V AC to 240 V AC, 50/60 Hz | 100 V AC to 240 V AC, 50/60 Hz | AC input: 100 V AC to 240 V AC, 50/60 Hz | 100 V AC to 240 V AC, 50/60 Hz |
| Maximum voltage range | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 264 V AC, 47 Hz to 63 Hz |
| Maximum power consumption | 28.84 W | 33.04 W | <ul style="list-style-type: none"> 43.35 W (without PD) 484.91 W(with | 37.03 W |

| Item | CloudEngine S5735-L16T4S-A-V2 | CloudEngine S5735-L24T4S-A-V2 | CloudEngine S5735-L24P4S-A-V2 | CloudEngine S5735-L24T4XE-A-V2 |
|---|---|---|---|--|
| | | | PD,PD Power consumption of :400W) | |
| Noise | <ul style="list-style-type: none"> Under normal temperature (sound power): 47dB (A) Under high temperature (sound power): 51dB (A) Under normal temperature (sound pressure): 35dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 47dB (A) Under high temperature (sound power): 51dB (A) Under normal temperature (sound pressure): 35dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 49.3dB (A) Under high temperature (sound power): 63dB (A) Under normal temperature (sound pressure): 37.3dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 47dB (A) Under high temperature (sound power):51dB (A) Under normal temperature (sound pressure): 35dB (A) |
| Long-term operating temperature | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. |
| Storage temperature | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C |
| Relative humidity | 5% to 95% (non-condensing) | 5%-95%(non-condensing) | 5%-95%(non-condensing) | 5% to 95% (non-condensing) |
| Surge protection specification (service port) | ±7 kV in common mode | ±7 kV in common mode | ±7 kV in common mode | ±7 kV in common mode |
| Surge protection specification (power port) | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV |
| Heat dissipation | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment |
| Physical security | One Kensington lock slot, can be used to lock the device to mounting bracket | | | |

| Item | CloudEngine S5735-L24T4XE-D-V2 | CloudEngine S5735-L24P4XE-A-V2 CloudEngine S5735-L24P4XE-TA-V2 | CloudEngine S5735-L48T4S-A-V2 | CloudEngine S5735-L48LP4S-A-V2 |
|------------|--------------------------------|---|-------------------------------|--------------------------------|
| Fixed port | 24 x 10/100/1000Base- | 24 x 10/100/1000Base- | 48 x 10/100/1000Base- | 48 x 10/100/1000Base- |

| Item | CloudEngine S5735-L24T4XE-D-V2 | CloudEngine S5735-L24P4XE-A-V2 CloudEngine S5735-L24P4XE-TA-V2 | CloudEngine S5735-L48T4S-A-V2 | CloudEngine S5735-L48LP4S-A-V2 |
|--------------------------------------|---|---|---|---|
| | T ports, 4 x GE SFP ports, 2 stack ports | T ports (PoE+), 4 x 10 GE SFP+ ports, 2 stack ports | T ports, 4 x GE SFP ports | T ports(PoE+), 4 x GE SFP ports |
| Dimensions (H x W x D) | 43.6 mm x 442 mm x 220 mm | 43.6 mm x 442 mm x 220 mm | 43.6 mm x 442 mm x 220 mm | 43.6 mm x 442 mm x 220 mm |
| Chassis height | 1 U | 1 U | 1 U | 1 U |
| Chassis weight (including packaging) | 3.44 kg | 3.81 kg | 3.59 kg | 4.29 kg |
| Power supply type | Built-in DC power | Built-in AC power | Built-in AC power | Built-in AC power |
| Rated voltage range | -48V DC~-60V DC | 100 V AC to 240 V AC, 50/60 Hz | 100 V AC to 240 V AC, 50/60 Hz | 100 V AC to 240 V AC, 50/60 Hz |
| Maximum voltage range | -38.4V DC~-72V DC | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz |
| Maximum power consumption | 36.33 W | <ul style="list-style-type: none"> 55.4 W (without PD) 496.08 W(with PD,PD Power consumption of :400W) | 43.3 W | <ul style="list-style-type: none"> 63.7 W (without PD) 462.8 W(with PD,PD Power consumption of :380W) |
| Noise | <ul style="list-style-type: none"> Under normal temperature (sound power): 47dB (A) Under high temperature (sound power): 51dB (A) Under normal temperature (sound pressure): 35dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 49.3dB (A) Under high temperature (sound power): 63dB (A) Under normal temperature (sound pressure): 37.3dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 46.6dB (A) Under high temperature (sound power): 54.3dB (A) Under normal temperature (sound pressure): 34.6dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 49.3dB (A) Under high temperature (sound power): 63dB (A) Under normal temperature (sound pressure): 37.3dB (A) |
| Long-term operating temperature | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. |
| Storage temperature | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C |
| Relative humidity | 5% to 95% (non- | 5% to 95% (non- | 5% to 95% (non- | 5% to 95% (non- |

| Item | CloudEngine S5735-L24T4XE-D-V2 | CloudEngine S5735-L24P4XE-A-V2 CloudEngine S5735-L24P4XE-TA-V2 | CloudEngine S5735-L48T4S-A-V2 | CloudEngine S5735-L48LP4S-A-V2 |
|---|---|--|---|---|
| | condensing) | condensing) | condensing) | condensing) |
| Surge protection specification (service port) | ±7 kV in common mode | ±7 kV in common mode | ±7 kV in common mode | ±4 kV in common mode |
| Surge protection specification (power port) | <ul style="list-style-type: none"> Differential mode: ± 2 kV Common mode: ±4 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ± 6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ±6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ±6 kV |
| Heat dissipation | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment |
| Physical security | One Kensington lock slot, can be used to lock the device to mounting bracket | | | |

| Item | CloudEngine S5735-L48T4XE-A-V2 CloudEngine S5735-L48T4XE-TA-V2 | CloudEngine S5735-L48T4XE-D-V2 | CloudEngine S5735-L48P4XE-A-V2 | CloudEngine S5735-L48LP4XE-A-V2 |
|--------------------------------------|---|---|---|---|
| Fixed port | 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 stack ports | 48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports, 2 stack ports | 48 x 10/100/1000Base-T ports(PoE+), 4 x 10GE SFP ports, 2 stack ports | 48 x 10/100/1000Base-T ports, 4 x 10GE SFP ports, 2 stack ports |
| Dimensions (H x W x D) | 43.6 mm x 442 mm x 220 mm | 43.6 mm x 442 mm x 220 mm | 43.6 mm x 442 mm x 420 mm | 43.6 mm x 442 mm x 220 mm |
| Chassis height | 1 U | 1 U | 1 U | 1 U |
| Chassis weight (including packaging) | 3.62 kg | 3.6 kg | 8.9 kg | 4.32 kg |
| Power supply type | Built-in AC power | Built-in DC power | 1000W AC (pluggable) | Built-in AC power |
| Rated voltage range | 100 V AC to 240 V AC, 50/60 Hz | -48V DC~-60V DC | 100 V AC to 240 V AC, 50/60 Hz | 100 V AC to 240 V AC, 50/60 Hz |
| Maximum voltage range | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | -38.4V DC~-72V DC | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz | <ul style="list-style-type: none"> AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz |
| Maximum power consumption | 49.48 W | 48.42 W | <ul style="list-style-type: none"> 76.66 W (without PD) 993.74 W(with PD,PD Power | <ul style="list-style-type: none"> 65.7 W (without PD) 464.8 W(with PD,PD Power |

| Item | CloudEngine S5735-L48T4XE-A-V2 CloudEngine S5735-L48T4XE-TA-V2 | CloudEngine S5735-L48T4XE-D-V2 | CloudEngine S5735-L48P4XE-A-V2 | CloudEngine S5735-L48LP4XE-A-V2 |
|---|---|---|---|---|
| | | | consumption of :846 W) | consumption of :380 W) |
| Noise | <ul style="list-style-type: none"> Under normal temperature (sound power): 46.6dB (A) Under high temperature (sound power): 54.3dB (A) Under normal temperature (sound pressure): 34.6dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 46.6dB (A) Under high temperature (sound power): 54.3dB (A) Under normal temperature (sound pressure): 34.6dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 49.3dB (A) Under high temperature (sound power): 63dB (A) Under normal temperature (sound pressure): 37.3dB (A) | <ul style="list-style-type: none"> Under normal temperature (sound power): 49.3dB (A) Under high temperature (sound power): 63dB (A) Under normal temperature (sound pressure): 37.3dB (A) |
| Long-term operating temperature | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | <ul style="list-style-type: none"> 0-1800 m altitude: -5°C to +50°C 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. |
| Storage temperature | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C |
| Relative humidity | 5% to 95% (non-condensing) | 5% to 95% (non-condensing) | 5% to 95% (non-condensing) | 5% to 95% (non-condensing) |
| Surge protection specification (service port) | ±7 kV in common mode | ±7 kV in common mode | ±6 kV in common mode | ±6 kV in common mode |
| Surge protection specification (power port) | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ±6 kV | <ul style="list-style-type: none"> Differential mode: ± 2 kV Common mode: ±4 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ±6 kV | <ul style="list-style-type: none"> Differential mode: ± 6 kV Common mode: ±6 kV |
| Heat dissipation | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment | Air-cooled heat dissipation and intelligent speed adjustment |
| Physical security | One Kensington lock slot, can be used to lock the device to mounting bracket | | | |

Service Features

| Item | Description |
|------|-------------|
|------|-------------|

| Item | Description |
|--------------------------|---|
| MAC address table | MAC address learning and aging |
| | 32K MAC entries (MAX) |
| | Static, dynamic, and blackhole MAC address entries |
| | Packet filtering based on source MAC addresses |
| | Interface-based MAC learning limiting |
| VLAN features | 4K VLANs |
| | Voice VLAN |
| | MUX VLAN |
| | VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and interfaces |
| | VLAN Stacking |
| Ethernet loop protection | Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protection switchover |
| | ERPS (G.8032) |
| | STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s) |
| | BPDU protection, root protection, and loop protection |
| | BPDU tunnel |
| | LLDP, LLDP-MED |
| Multicast | PIM DM, PIM SM, PIM SSM |
| | IGMPv1/v2/v3, IGMPv1/v2/v3 snooping, MLD snooping |
| | Multicast load balancing among member ports of a trunk |
| | Interface-based multicast traffic statistics |
| | Multicast VLAN |
| IP routing | Static route, RIP, RIPng, OSPF, OSPFv3, VRRP, VRRP6, Routing Policy, Policy-Based Routing |
| | Up to 4096 FIBv4 entries (MAX) |
| | Up to 1024 FIBv6 entries (MAX) |
| IPv6 features | Up to 1024 ND entries (MAX) |
| | Path MTU (PMTU) |
| | IPv6 ping, IPv6 tracert, and IPv6 Telnet |
| Reliability | LACP |
| | VRRP |
| | BFD |
| | LLDP |
| QoS/ACL | 2K rules per IPv4 ACL |
| | 2K rules per IPv6 ACL |
| | Rate limiting on packets sent and received by an interface |

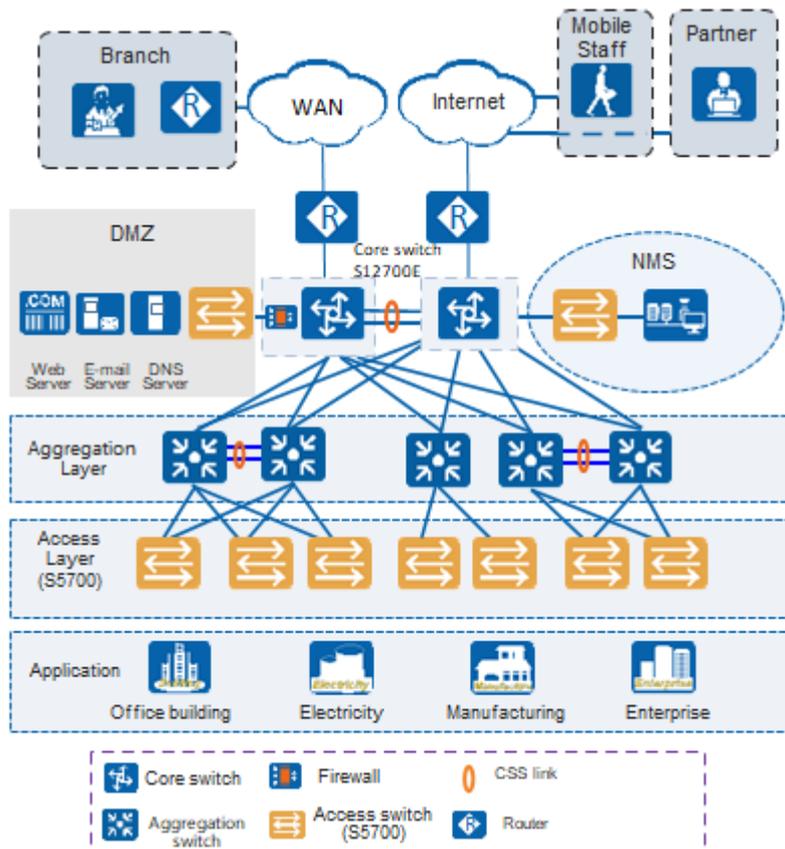
| Item | Description |
|----------------------------|---|
| | Packet redirection |
| | Interface-based traffic policing and two-rate and three-color CAR |
| | Eight queues on each interface |
| | DRR, SP, and DRR+SP queue scheduling algorithms |
| | Re-marking of the 802.1p priority and DSCP priority |
| | 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 port number, protocol type, and VLAN ID |
| | Rate limiting in each queue and traffic shaping on interfaces |
| | Network Slicing (VLAN) |
| Security | Hierarchical user management and password protection |
| | DoS attack defense, ARP attack defense, and ICMP attack defense |
| | Binding of the IP address, MAC address, interface number, and VLAN ID |
| | Port isolation, port security, and sticky MAC |
| | Blackhole MAC address entries |
| | Limit on the number of learned MAC addresses |
| | IEEE 802.1x authentication and limit on the number of users on an interface |
| | AAA authentication, RADIUS authentication, HWTACACS authentication, and NAC |
| | SSH V2.0 |
| | Hypertext Transfer Protocol Secure (HTTPS) |
| | CPU defense |
| | Blacklist and whitelist |
| | DHCP client, DHCP relay, DHCP server, DHCP snooping |
| | DHCPv6 client, DHCPv6 relay |
| Management and maintenance | iStack |
| | Cloud management based on Netconf/Yang |
| | Virtual Cable Test (VCT) |
| | Remote configuration and maintenance using Telnet |
| | SNMPv1/v2/v3 |
| | RMON |
| | eSight and web-based NMS |
| | HTTPS |
| | LLDP/LLDP-MED |
| | System logs and multi-level alarms |
| | 802.3az EEE |

| Item | Description |
|------------------|--|
| | IFIT |
| | Port mirroring |
| | Registration Center Deployment |
| Interoperability | Supports VBST (Compatible with PVST/PVST+/RPVST) |

Networking and Applications

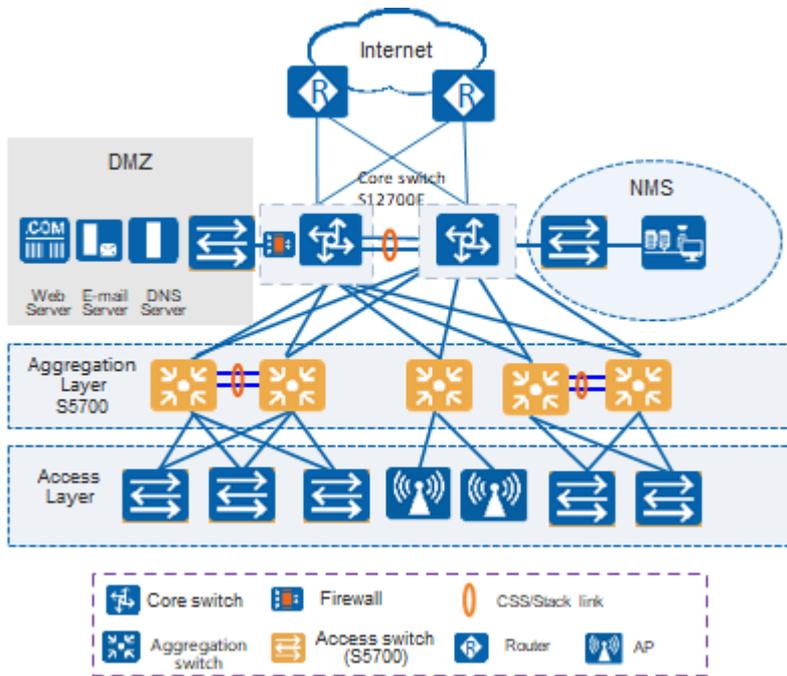
Large-Scale Enterprise Campus Network

CloudEngine S5735-L-V2 series switches can be deployed at the access layer of a campus network to build a high-performance and highly reliable enterprise network.



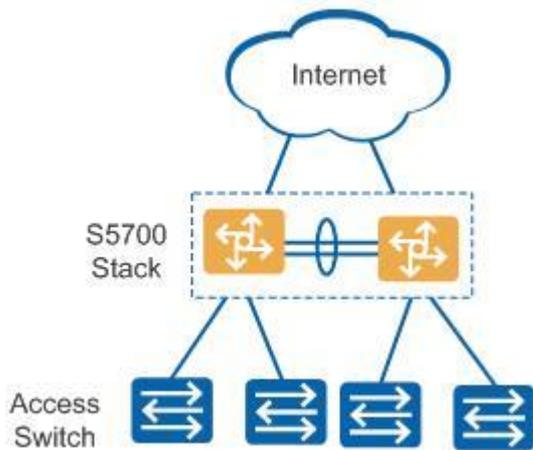
Small- or Medium-scale Enterprise Campus Network

CloudEngine S5735-L-V2 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.



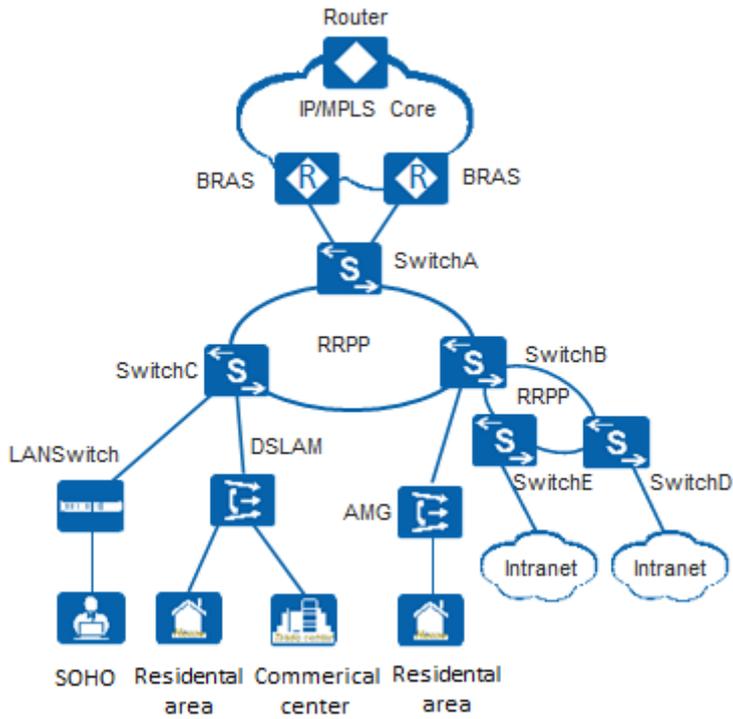
Small-scale Enterprise Campus Network

With powerful aggregation and routing capabilities of CloudEngine S5735-L-V2 series switches make them suitable for use as core switches in a small-scale enterprise network. Two or more S5735-L-V2 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

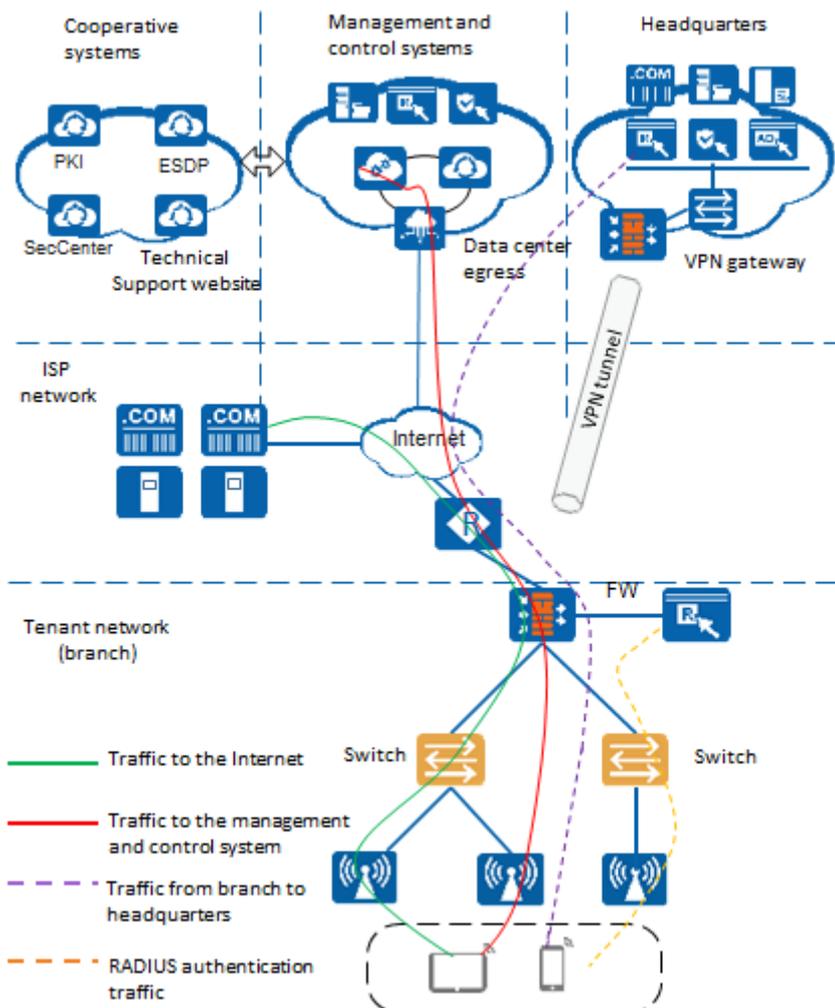
CloudEngine S5735-L-V2 series switches can be deployed at the access layer of a MAN (Metropolitan Area Network) to build a high-performance, multi-service, and highly reliable ISP MAN network.



Application in Public Cloud

CloudCampus Solution is a network solution suite based on Huawei public cloud. CloudEngine S5735-L-V2 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, 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.



Ordering Information

| Model | Product Description |
|---------------------------------|--|
| CloudEngine S5735-L8T4S-A-V2 | CloudEngine S5735-L8T4S-A-V2 (8*10/100/1000BASE-T ports, 4*GE SFP ports, AC power) |
| CloudEngine S5735-L8P4S-A-V2 | CloudEngine S5735-L8P4S-A-V2 (8*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power) |
| CloudEngine S5735-L10T4X-A-V2 | CloudEngine S5735-L10T4X-TA-V2 (10*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power) |
| CloudEngine S5735-L10T4X-TA-V2 | CloudEngine S5735-L10T4X-TA-V2 (10*10/100/1000BASE-T ports, 4*10GE SFP+ ports, HTM, AC power) |
| CloudEngine S5735-L8P2T4X-A-V2 | CloudEngine S5735-L8P2T4X-A-V2 (8*10/100/1000BASE-T ports(PoE+), 2*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power) |
| CloudEngine S5735-L8P2T4X-TA-V2 | CloudEngine S5735-L8P2T4X-TA-V2 (8*10/100/1000BASE-T ports(PoE+), 2*10/100/1000BASE-T ports, 4*10GE SFP+ ports, HTM, AC power) |
| CloudEngine S5735-L16T4S-A-V2 | CloudEngine S5735-L16T4S-A-V2 (16*10/100/1000BASE-T ports, 4*GE SFP ports, AC power) |
| CloudEngine S5735-L24T4S-A-V2 | CloudEngine S5735-L24T4S-A-V2 (24*10/100/1000BASE-T ports, 4*GE SFP ports, AC power) |
| CloudEngine S5735-L24P4S- | CloudEngine S5735-L24P4S-A-V2 (24*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, |

| Model | Product Description |
|---------------------------------|---|
| A-V2 | AC power) |
| CloudEngine S5735-L24T4XE-A-V2 | CloudEngine S5735-L24T4XE-A-V2 (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, 2*stack ports, AC power) |
| CloudEngine S5735-L24T4XE-D-V2 | CloudEngine S5735-L24T4XE-D-V2 (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, 2*stack ports, DC power) |
| CloudEngine S5735-L24P4XE-A-V2 | CloudEngine S5735-L24P4XE-A-V2 (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, 2*stack ports, PoE+, AC power) |
| CloudEngine S5735-L24P4XE-TA-V2 | CloudEngine S5735-L24P4XE-TA-V2 (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, 2*stack ports, PoE+, HTM, AC power) |
| CloudEngine S5735-L48T4S-A-V2 | CloudEngine S5735-L48T4S-A-V2 (48*10/100/1000BASE-T ports, 4*GE SFP ports, AC power) |
| CloudEngine S5735-L48LP4S-A-V2 | CloudEngine S5735-L48LP4S-A-V2 (48*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power) |
| CloudEngine S5735-L48T4XE-TA-V2 | CloudEngine S5735-L48T4XE-TA-V2 (48*10/100/1000BASE-T ports, 4*10GE SFP+ ports, 2*stack ports, PoE+, HTM, AC power) |
| CloudEngine S5735-L48T4XE-D-V2 | CloudEngine S5735-L48T4XE-D-V2 (48*10/100/1000BASE-T ports, 4*10GE SFP+ ports, 2*stack ports, PoE+, PoE+, DC power) |
| CloudEngine S5735-L48P4XE-A-V2 | CloudEngine S5735-L48P4XE-A-V2 (48*10/100/1000BASE-T ports, 4*10GE SFP+ ports, 2*stack ports, PoE+, AC power) |
| CloudEngine S5735-L48LP4XE-A-V2 | CloudEngine S5735-L48LP4XE-A-V2 (48*10/100/1000BASE-T ports, 4*10GE SFP+ ports, 2*stack ports, PoE+, 1*AC power) |
| PAC1000S56-EB | 1000W AC PoE power module, can be used in CloudEngine S5735-L48P4XE-A-V2 |
| N1-S57L-M-Lic | S57XX-L Series Basic SW, Per Device |
| N1-S57L-M-SnS1Y | S57XX-L Series Basic SW, SnS, Per Device, 1Year |
| N1-S57L-F-Lic | N1-CloudCampus, Foundation, S57XX-L Series, Per Device |
| N1-S57L-F-SnS | N1-CloudCampus, Foundation, S57XX-L Series, SnS, Per Device |
| N1-S57L-A-Lic | N1-CloudCampus, Advanced, S57XX-L Series, Per Device |
| N1-S57L-A-SnS | N1-CloudCampus, Advanced, S57XX-L Series, SnS, Per Device |
| N1-S57L-FToA-Lic | N1-Upgrade-Foundation to Advanced, S57XX-L, Per Device |
| N1-S57L-FToA-SnS | N1-Upgrade-Foundation to Advanced, S57XX-L, SnS, Per Device |

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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