

# CloudEngine S5735-L Series Switches

CloudEngine S5735-L Series Switches

## **Product Overview**

CloudEngine S5735-L 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 the Huawei Versatile Routing Platform (VRP), CloudEngine S5735-L 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 series.

| Models and Appearances     | Description   |
|----------------------------|---|
| CloudEngine S5735-L8T4S-A1 | <ul> <li>8 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 18 Mpps</li> <li>Switching capacity: 24 Gbps/336 Gbps</li> </ul>                   |
| CloudEngine S5735-L8P4S-A1 | <ul> <li>8 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 18 Mpps</li> <li>Switching capacity: 24 Gbps/336 Gbps</li> </ul>     |
| CloudEngine S5735-L8T4X-A1 | <ul> <li>8 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 72 Mpps</li> <li>Switching capacity: 96 Gbps/336 Gbps</li> </ul>               |
| CloudEngine S5735-L8P4X-A1 | <ul> <li>8 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 72 Mpps</li> <li>Switching capacity: 96 Gbps/336 Gbps</li> </ul> |

| Models and Appearances       | Description  |
|------------------------------|--|
| CloudEngine S5735-L24T4S-A1  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 42 Mpps</li> <li>Switching capacity: 56 Gbps/336 Gbps</li> <li>24 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> </ul> |
| CloudEngine S5735-L24P4S-A1  | <ul> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 42 Mpps</li> <li>Switching capacity: 56 Gbps/336 Gbps</li> </ul>   |
| CloudEngine S5735-L24T4X-A1  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 96 Mpps</li> <li>Switching capacity: 128 Gbps/336 Gbps</li> </ul>  |
| CloudEngine S5735-L24T4X-D1  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>DC power supply</li> <li>Forwarding performance: 96 Mpps</li> <li>Switching capacity: 128 Gbps/336 Gbps</li> </ul>  |
| CloudEngine S5735-L24P4X-A1  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 96 Mpps</li> <li>Switching capacity: 128 Gbps/336 Gbps</li> </ul>                                      |
| CloudEngine S5735-L32ST4X-A1 | <ul> <li>24 x GE SFP ports, 8 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 108 Mpps</li> <li>Switching capacity: 144 Gbps/336 Gbps</li> </ul>                                 |
| CloudEngine S5735-L32ST4X-D1 | <ul> <li>24 x GE SFP ports, 8 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>DC power supply</li> <li>Forwarding performance: 108 Mpps</li> <li>Switching capacity: 144 Gbps/336 Gbps</li> </ul>                                 |
| CloudEngine S5735-L48T4S-A1  | <ul> <li>48 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 78 Mpps</li> <li>Switching capacity: 104 Gbps/432 Gbps</li> </ul>  |
| CloudEngine S5735-L48P4S-A1  | <ul> <li>48 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 78 Mpps</li> <li>Switching capacity: 104 Gbps/432 Gbps</li> </ul>  |
|                              | <ul> <li>48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 132 Mpps</li> </ul>  |

| Models and Appearances      | Description  |
|-----------------------------|--|
| CloudEngine S5735-L48T4X-A1 | Switching capacity: 176 Gbps/432 Gbps  |
| CloudEngine S5735-L48P4X-A1 | <ul> <li>48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 132 Mpps</li> <li>Switching capacity: 176 Gbps/432 Gbps</li> </ul> |
| CloudEngine S5735-L12T4S-A  | <ul> <li>12 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 24 Mpps</li> <li>Switching capacity: 32 Gbps/336 Gbps</li> </ul>                     |
| CloudEngine S5735-L12P4S-A  | <ul> <li>12 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 24 Mpps</li> <li>Switching capacity: 32 Gbps/336 Gbps</li> </ul>       |
| CloudEngine S5735-L24T4S-A  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 42 Mpps</li> <li>Switching capacity: 56 Gbps/336 Gbps</li> </ul>                     |
| CloudEngine S5735-L24P4S-A  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 42 Mpps</li> <li>Switching capacity: 56 Gbps/336 Gbps</li> </ul>       |
| CloudEngine S5735-L24T4X-A  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 96 Mpps</li> <li>Switching capacity: 128 Gbps/336 Gbps</li> </ul>                |
| CloudEngine S5735-L24T4X-D  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>DC power supply</li> <li>Forwarding performance: 96 Mpps</li> <li>Switching capacity: 128 Gbps/336 Gbps</li> </ul>                |
| CloudEngine S5735-L24P4X-A  | <ul> <li>24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 96 Mpps</li> <li>Switching capacity: 128 Gbps/336 Gbps</li> </ul>  |
| CloudEngine S5735-L48T4S-A  | <ul> <li>48 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 78 Mpps</li> <li>Switching capacity: 104 Gbps/432 Gbps</li> </ul>                    |

| Models and Appearances     | Description  |  |  |
|----------------------------|--|--|--|
| CloudEngine S5735-L48T4X-A | <ul> <li>48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 132 Mpps</li> <li>Switching capacity: 176 Gbps/432 Gbps</li> </ul>               |  |  |
| CloudEngine S5735-L48P4X-A | <ul> <li>48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>PoE+</li> <li>Forwarding performance: 132 Mpps</li> <li>Switching capacity: 176 Gbps/432 Gbps</li> </ul> |  |  |

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.

## **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 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 S5735-L supports Smart Link, which implements backup of uplinks. One CloudEngine S5735-L switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.
- CloudEngine S5735-L supports Ethernet OAM (IEEE 802.3ah/802.1ag) to fast-detect link faults.

### **Diversified Security Control**

- CloudEngine S5735-L supports 802.1X authentication, MAC address authentication, and hybrid authentication on a per port basis, as well as Portal authentication on a per VLANIF interface basis, and implements dynamic policy delivery (VLAN, QoS, and ACL) to users.
- CloudEngine S5735-L 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 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 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 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 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 supports the EasyDeploy function. Specifically, the Commander collects the topology information of the downstream clients and saves client startup information based on the topology. Clients can be replaced without configuration.

Configuration and scripts can be delivered to clients in batches. In addition, the configuration delivery result can be queried. The Commander can also collect and display power consumption information on the entire network.

- CloudEngine S5735-L can use the GARP VLAN Registration Protocol (GVRP) to implement VLAN dynamic distribution, registration, and attribute propagation. GVRP reduces manual configuration workload and ensures correct configuration.
- CloudEngine S5735-L 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 also supports VLAN Central Management Protocol (VCMP) and VLAN-Based Spanning Tree (VBST) protocol.

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

#### **iStack**

- CloudEngine S5735-L 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 support stacking through electrical ports.

Note: Mixed stacking between CloudEngine S5735-L-A/D and CloudEngine S5735-L-A1/D1 is not supported.

### **Excellent Network Traffic Analysis**

CloudEngine S5735-L supports the 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.

### **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.

### **Intelligent O&M**

- CloudEngine S5735-L 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 S5735-L 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 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 S5735-L supports the intelligent upgrade feature. Specifically, CloudEngine S5735-L 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 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 switch through Python scripts to quickly innovate functions and implement intelligent O&M.

## **Licensing**

CloudEngine S5735-L 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<br>Software | N1 Foundation<br>Software Package | N1 Advanced<br>Software<br>Package |
|--|----------------------|-----------------------------------|------------------------------------|
| Basic network functions:   | V                    | V                                 | √                                  |
| Layer 2 functions, IPv4, IPv6, SVF, and others                                 |                      |                                   |                                    |
| Note: For details, see the Service Features                                    |                      |                                   |                                    |
| Basic network automation based on the iMaster NCE-Campus:                      | ×                    | V                                 | V                                  |
| 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 | ×                    | ×                                 | <b>√</b>                           |

Note: Only V200R019C10 and later versions can support N1 mode

## **Product Specifications**

CloudEngine S5735-L-A1/D1 series switches:

| Item                   | CloudEngine<br>S5735-L8T4S-<br>A1 | CloudEngine<br>S5735-L8P4S-<br>A1 | CloudEngine<br>S5735-L8T4X-<br>A1 | CloudEngine<br>S5735-L8P4X-<br>A1 | CloudEngine<br>S5735-L24T4S-A1 |
|------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--------------------------------|
| Fixed port             | 8 x                               | 8 x                               | 8 x                               | 8 x                               | 24 x                           |
|                        | 10/100/1000Base-                  | 10/100/1000Base-                  | 10/100/1000Base-                  | 10/100/1000Base-                  | 10/100/1000Base-T              |
|                        | T ports, 4 x GE                   | T ports(PoE+), 4 x                | T ports, 4 x 10 GE                | T ports(PoE+), 4 x                | ports, 4 x GE SFP              |
|                        | SFP ports                         | GE SFP ports                      | SFP+ ports                        | 10 GE SFP+ ports                  | ports                          |
| Dimensions (H x W x D) | 43.6 mm x 250                     | 43.6 mm x 300                     | 43.6 mm x 250                     | 43.6 mm x 300                     | 43.6 mm x 442 mm x             |
|                        | mm x 180 mm                       | mm x 220 mm                       | mm x 180 mm                       | mm x 220 mm                       | 220 mm                         |

| Item   | CloudEngine<br>S5735-L8T4S-<br>A1  | CloudEngine<br>S5735-L8P4S-<br>A1  | CloudEngine<br>S5735-L8T4X-<br>A1  | CloudEngine<br>S5735-L8P4X-<br>A1  | CloudEngine<br>S5735-L24T4S-A1   |
|--|--|--|--|--|--|
| Chassis height   | 1 U  | 1 U  | 1 U  | 1 U  | 1 U  |
| Chassis<br>weight<br>(including<br>packaging)          | 2.02 kg  | 3.17 kg  | 2.08 kg  | 3.17 kg  | 3.34 kg  |
| Power supply type                                      | Built-in AC power  |
| Rated voltage range                                    | 100 V AC to 240 V<br>AC, 50/60 Hz  | 100 V AC to 240 V<br>AC, 50/60 Hz  | 100 V AC to 240 V<br>AC, 50/60 Hz  | 100 V AC to 240 V<br>AC, 50/60 Hz  | 100 V AC to 240 V<br>AC, 50/60 Hz  |
| Maximum voltage range                                  | AC input: 90 V AC<br>to 264 V AC, 45<br>Hz to 65 Hz  | AC input: 90 V AC<br>to 264 V AC, 45<br>Hz to 65 Hz  | AC input: 90 V AC<br>to 264 V AC, 45<br>Hz to 65 Hz  | AC input: 90 V AC<br>to 264 V AC, 45<br>Hz to 65 Hz  | AC input: 90 V AC to<br>264 V AC, 45 Hz to<br>65 Hz  |
| Maximum<br>power<br>consumption                        | 26.3 W   | <ul> <li>38.6 W<br/>(without PD)</li> <li>162.6 W (with<br/>PD, PD power<br/>consumption<br/>of 124 W)</li> </ul>                            | 26.3 W   | <ul> <li>39.1 W (without PD)</li> <li>163.1 W (with PD, PD power consumption of 124 W)</li> </ul>  | 47.6 W   |
| Noise  | 43dB (A)   | 42.2dB (A)   | 43dB (A)   | 42.2dB (A)   | 39dB (A)   |
| Long-term operating temperature                        | O-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. | O-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. | O-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. | O-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. | O-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. |
| Short-term operating temperature                       | NA   | NA   | NA   | NA   | NA   |
| Storage temperature                                    | -40°C to +70°C   |
| Relative<br>humidity                                   | 5% to 95% (non-<br>condensing)   |
| Surge<br>protection<br>specification<br>(service port) | ±7 kV in common<br>mode  |
| Surge<br>protection<br>specification<br>(power port)   | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul>   | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul>   | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul>   | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul>   | <ul> <li>Differential mode:</li> <li>± 6 kV</li> <li>Common mode:</li> <li>± 6 kV</li> </ul>   |
| Heat   | Air-cooled heat  | Air-cooled heat  | Air-cooled heat  | Air-cooled heat  | Air-cooled heat  |

| Item              | CloudEngine<br>S5735-L8T4S-<br>A1  | CloudEngine<br>S5735-L8P4S-<br>A1            | CloudEngine<br>S5735-L8T4X-<br>A1            | CloudEngine<br>S5735-L8P4X-<br>A1            | CloudEngine<br>S5735-L24T4S-A1               |  |
|-------------------|--|--|--|--|--|--|
| dissipation       | dissipation and intelligent speed adjustment                                 | dissipation and intelligent speed adjustment | dissipation and intelligent speed adjustment | dissipation and intelligent speed adjustment | dissipation and intelligent speed adjustment |  |
| Physical security | One Kensington lock slot, can be used to lock the device to mounting bracket |  |  |  |  |  |

| Item  | CloudEngine<br>S5735-L24P4S-<br>A1   | CloudEngine<br>S5735-L24T4X-<br>A1                           | CloudEngine<br>S5735-L24T4X-<br>D1                           | CloudEngine<br>S5735-L24P4X-<br>A1   | CloudEngine<br>S5735-L32ST4X-<br>A1  |
|---|--|--|--|--|--|
| Fixed port                                    | 24 x<br>10/100/1000Base-<br>T ports(PoE+), 4 x<br>GE SFP ports   | 24 x<br>10/100/1000Base-<br>T ports, 4 x 10 GE<br>SFP+ ports | 24 x<br>10/100/1000Base-<br>T ports, 4 x 10 GE<br>SFP+ ports | 24 x<br>10/100/1000Base-<br>T ports(PoE+), 4 x<br>10 GE SFP+ ports   | 24 x GE SFP ports,<br>8 x<br>10/100/1000Base-T<br>ports, 4 x 10 GE<br>SFP+ ports   |
| Dimensions (H x W x D)                        | 43.6 mm x 442<br>mm x 220 mm   | 43.6 mm x 442 mm<br>x 220 mm                                 | 43.6 mm x 442<br>mm x 220 mm                                 | 43.6 mm x 442<br>mm x 220 mm   | 43.6 mm x 442 mm<br>x 220 mm   |
| Chassis height                                | 1 U  | 1 U  | 1 U  | 1 U  | 1 U  |
| Chassis<br>weight<br>(including<br>packaging) | 3.91 kg  | 3.48 kg  | 3.28 kg  | 3.93 kg  | 4.03 kg  |
| Power supply type                             | Built-in AC power  | Built-in AC power  | Built-in DC power  | Built-in AC power  | Built-in AC power  |
| Rated voltage range                           | 100 V AC to 240 V<br>AC, 50/60 Hz  | 100 V AC to 240 V<br>AC, 50/60 Hz                            | -48V DC∼-60V<br>DC   | 100 V AC to 240 V<br>AC, 50/60 Hz  | 100 V AC to 240 V<br>AC, 50/60 Hz  |
| Maximum<br>voltage range                      | <ul> <li>AC input: 90 V<br/>AC to 290 V<br/>AC, 45 Hz to<br/>65 Hz</li> <li>High-voltage<br/>DC input: 190<br/>V DC to 290 V<br/>DC (meeting<br/>240 V high-voltage DC<br/>certification)</li> </ul> | AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz                | -38.4V DC∼-72V<br>DC   | <ul> <li>AC input: 90 V<br/>AC to 290 V<br/>AC, 45 Hz to<br/>65 Hz</li> <li>High-voltage<br/>DC input: 190<br/>V DC to 290 V<br/>DC (meeting<br/>240 V high-voltage DC<br/>certification)</li> </ul> | <ul> <li>AC input: 90 V<br/>AC to 264 V AC,<br/>47 Hz to 63 Hz</li> <li>High-voltage DC<br/>input: 190 V DC<br/>to 290 V DC<br/>(meeting 240 V<br/>high-voltage DC<br/>certification)</li> </ul> |
| Maximum<br>power<br>consumption               | <ul> <li>53.2W(without PD)</li> <li>433.2W(with PD,PD Power consumption of :380W)</li> </ul>   | 45.6 W   | 37.3 W   | <ul> <li>53.8W(without PD)</li> <li>433.8W(with PD,PD Power consumption of :380W)</li> </ul>   | 66.8 W   |
| Noise   | 50dB (A)   | 39dB (A)   | 39dB (A)   | 50dB (A)   | 46.8 dB(A)   |
| Long-term operating temperature               | 0-1800 m     altitude: -5°C     to +50°C   | • 0-1800 m<br>altitude: -5°C to<br>+50°C                     | • 0-1800 m<br>altitude: -5°C to<br>+50°C                     | • 0-1800 m<br>altitude: -5°C<br>to +50°C   | • 0-1800 m<br>altitude: -5°C to<br>+50°C   |

| Item   | CloudEngine<br>S5735-L24P4S-<br>A1   | CloudEngine<br>S5735-L24T4X-<br>A1   | CloudEngine<br>S5735-L24T4X-<br>D1   | CloudEngine<br>S5735-L24P4X-<br>A1   | CloudEngine<br>S5735-L32ST4X-<br>A1  |
|--|--|--|--|--|--|
|  | 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.                                   | 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.                                       | 1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.                                       |
| Short-term<br>operating<br>temperature                 | O-1800 m altitude: -5°C to +55°C  1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | NA   | NA   | 0-1800 m altitude: -5°C to +55°C      1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. | 0-1800 m altitude: -5°C to +55°C      1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m. |
| Storage<br>temperature                                 | -40°C to +70°C   | -40°C to +70°C   | -40°C to +70°C   | -40°C to +70°C   | -40°C to +70°C   |
| Relative<br>humidity                                   | 5% to 95% (non-<br>condensing)   | 5% to 95% (non-<br>condensing)   | 5% to 95% (non-<br>condensing)   | 5%-95%(non-<br>condensing)   | 5% to 95% (non-<br>condensing)   |
| Surge<br>protection<br>specification<br>(service port) | ±7 kV in common mode   | ±7 kV in common<br>mode  | ±7 kV in common<br>mode  | ±7 kV in common<br>mode  | ±7 kV in common<br>mode  |
| Surge<br>protection<br>specification<br>(power port)   | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul>   | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul>                         | <ul> <li>Differential<br/>mode: ± 2 kV</li> <li>Common<br/>mode: ± 4 kV</li> </ul>                         | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul>   | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common mode:<br/>± 6 kV</li> </ul>   |
| Heat<br>dissipation                                    | Air-cooled heat dissipation and intelligent speed adjustment   | Air-cooled heat<br>dissipation and<br>intelligent speed<br>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 k   | ock the device to mou  | nting bracket  |  |

| Item       | CloudEngine   | CloudEngine  | CloudEngine  | CloudEngine  | CloudEngine   |
|------------|---|--|--|--|---|
|            | S5735-  | S5735-L48T4S-  | S5735-L48P4S-  | S5735-L48T4X-  | S5735-L48P4X-   |
|            | L32ST4X-D1  | A1   | A1   | A1   | A1  |
| Fixed port | 24 x GE SFP<br>ports, 8 x<br>10/100/1000Base<br>-T ports, 4 x 10<br>GE SFP+ ports | 48 x<br>10/100/1000Base-<br>T ports, 4 x GE<br>SFP ports | 48 x<br>10/100/1000Base-<br>T ports(PoE+), 4 x<br>GE SFP ports | 48 x<br>10/100/1000Base<br>-T ports, 4 x 10<br>GE SFP+ ports | 48 x<br>10/100/1000Base-T<br>ports(PoE+), 4 x 10<br>GE SFP+ ports |

| Item                                   | CloudEngine<br>S5735-<br>L32ST4X-D1  | CloudEngine<br>S5735-L48T4S-<br>A1   | CloudEngine<br>S5735-L48P4S-<br>A1   | CloudEngine<br>S5735-L48T4X-<br>A1   | CloudEngine<br>S5735-L48P4X-<br>A1   |
|--|--|--|--|--|--|
| Dimensions (H x W x D)                 | 43.6 mm x 442<br>mm x 220 mm   | 43.6 mm x 442 mm<br>x 220 mm   | 43.6 mm x 442 mm<br>x 220 mm   | 43.6 mm x 442<br>mm x 220 mm   | 43.6 mm x 442 mm<br>x 220 mm   |
| Chassis height                         | 1 U  | 1 U  | 1 U  | 1 U  | 1 U  |
| Chassis weight (including packaging)   | 3.85 kg  | 3.74 kg  | 4.28 kg  | 3.79 kg  | 4.28 kg  |
| Power supply type                      | Built-in DC power  | Built-in AC power  | Built-in AC power  | Built-in AC power  | Built-in AC power  |
| Rated voltage range                    | -48V DC∼-60V<br>DC   | 100 V AC to 240 V<br>AC, 50/60 Hz  | AC input : 100 V<br>AC to 240 V AC,<br>50/60 Hz  | 100 V AC to 240<br>V AC, 50/60 Hz  | AC input : 100 V AC<br>to 240 V AC, 50/60<br>Hz  |
| Maximum<br>voltage range               | -38.4V DC∼-72V<br>DC   | AC input: 90 V     AC to 264 V     AC, 47 Hz to 63     Hz  | <ul> <li>AC input: 90 V         AC to 290 V         AC, 45 Hz to 65         Hz</li> <li>High-voltage         DC input: 190 V         DC to 290 V DC         (meeting 240 V         high-voltage DC         certification)</li> </ul> | AC input: 90     V AC to 264 V     AC, 47 Hz to     63 Hz  | <ul> <li>AC input: 90 V<br/>AC to 290 V AC,<br/>45 Hz to 65 Hz</li> <li>High-voltage DC<br/>input: 190 V DC<br/>to 290 V DC<br/>(meeting 240 V<br/>high-voltage DC<br/>certification)</li> </ul> |
| Maximum<br>power<br>consumption        | 61.9 W   | 50.4 W   | <ul> <li>76.1W(without PD)</li> <li>456.1W(with PD,PD Power consumption of :380W)</li> </ul>   | 51.9 W   | <ul> <li>76.1W(without PD)</li> <li>456.1W(with PD,PD Power consumption of :380W)</li> </ul>   |
| Noise                                  | 46.8 dB(A)   | 48dB (A)   | 50dB (A)   | 48dB (A)   | 50dB (A)   |
| Long-term<br>operating<br>temperature  | O-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. | O-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.         | O-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.   | 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. | 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.   |
| Short-term<br>operating<br>temperature | 0-1800 m     altitude: -5°C     to +55°C      1800-5000 m     altitude: The     operating     temperature     reduces by                     | <ul> <li>0-1800 m<br/>altitude: -5°C to<br/>+55°C</li> <li>1800-5000 m<br/>altitude: The<br/>operating<br/>temperature<br/>reduces by 1°C</li> </ul> | <ul> <li>0-1800 m<br/>altitude: -5°C to<br/>+55°C</li> <li>1800-5000 m<br/>altitude: The<br/>operating<br/>temperature<br/>reduces by 1°C</li> </ul>   | <ul> <li>0-1800 m<br/>altitude: -5°C<br/>to +55°C</li> <li>1800-5000 m<br/>altitude: The<br/>operating<br/>temperature<br/>reduces by</li> </ul> | <ul> <li>0-1800 m<br/>altitude: -5°C to<br/>+55°C</li> <li>1800-5000 m<br/>altitude: The<br/>operating<br/>temperature<br/>reduces by 1°C</li> </ul>   |

| Item   | CloudEngine<br>S5735-<br>L32ST4X-D1  | CloudEngine<br>S5735-L48T4S-<br>A1   | CloudEngine<br>S5735-L48P4S-<br>A1   | CloudEngine<br>S5735-L48T4X-<br>A1   | CloudEngine<br>S5735-L48P4X-<br>A1   |
|--|--|--|--|--|--|
|  | 1°C every<br>time the<br>altitude<br>increases by<br>220 m.                        | every time the<br>altitude<br>increases by<br>220 m.                               | every time the<br>altitude<br>increases by<br>220 m.                               | 1°C every<br>time the<br>altitude<br>increases by<br>220 m.                        | every time the<br>altitude<br>increases by 220<br>m.                               |
| Storage temperature                                    | -40°C to +70°C   |
| Relative<br>humidity                                   | 5% to 95% (non-<br>condensing)   | 5% to 95% (non-<br>condensing)   | 5%-95%(non-<br>condensing)   | 5% to 95% (non-<br>condensing)   | 5%-95%(non-<br>condensing)   |
| Surge<br>protection<br>specification<br>(service port) | ±7 kV in common mode   |
| Surge<br>protection<br>specification<br>(power port)   | <ul> <li>Differential<br/>mode: ± 2 kV</li> <li>Common<br/>mode: ± 4 kV</li> </ul> | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul> | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common mode:<br/>± 6 kV</li> </ul> | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common<br/>mode: ± 6 kV</li> </ul> | <ul> <li>Differential<br/>mode: ± 6 kV</li> <li>Common mode:<br/>± 6 kV</li> </ul> |
| Heat<br>dissipation                                    | Air-cooled heat<br>dissipation and<br>intelligent speed<br>adjustment              | Air-cooled heat dissipation and intelligent speed adjustment                       | Air-cooled heat<br>dissipation and<br>intelligent speed<br>adjustment              | Air-cooled heat<br>dissipation and<br>intelligent speed<br>adjustment              | Air-cooled heat dissipation and intelligent speed adjustment                       |
| Physical security                                      | One Kensington loa   | ck slot, can be used to  | lock the device to mou   | ınting bracket   |  |

## CloudEngine S5735-L-A/D series switches:

| Item                                 | CloudEngine<br>S5735-L12T4S-A                          | CloudEngine<br>S5735-L12P4S-A                               | CloudEngine<br>S5735-L24T4S-A                           | CloudEngine S5735-<br>L24P4S-A   |
|--------------------------------------|--|---|---|--|
| Fixed port                           | 12 x 10/100/1000Base-<br>T ports, 4 x GE SFP<br>ports  | 12 x 10/100/1000Base-<br>T ports(PoE+), 4 x GE<br>SFP ports | 24 x<br>10/100/1000Base-T<br>ports, 4 x GE SFP<br>ports | 24 x 10/100/1000Base-T ports(PoE+), 4 x GE SFP ports                     |
| Dimensions (H x<br>W x D)            | 43.6 mm x 442 mm x<br>220 mm                           | 43.6 mm x 442 mm x<br>220 mm                                | 43.6 mm x 442 mm x<br>220 mm                            | 43.6 mm x 442 mm x 220<br>mm   |
| Chassis height                       | 1 U  | 1 U   | 1 U   | 1 U  |
| Chassis weight (including packaging) | 3.83 kg  | 4.24 kg   | 4.08 kg   | 4.31 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,<br>50/60 Hz                      | 100 V AC to 240 V AC,<br>50/60 Hz                           | 100 V AC to 240 V<br>AC, 50/60 Hz                       | 100 V AC to 240 V AC,<br>50/60 Hz  |
| Maximum voltage range                | AC input: 90 V AC     to 264 V AC, 47 Hz     to 63 Hz  | AC input: 90 V AC     to 290 V AC, 45 Hz     to 65 Hz       | AC input: 90 V     AC to 264 V AC,     47 Hz to 63 Hz   | AC input: 90 V AC to<br>290 V AC, 45 Hz to 65<br>Hz                      |
|                                      | <ul> <li>High-voltage DC input: 190 V DC to</li> </ul> | <ul> <li>High-voltage DC input: 190 V DC to</li> </ul>      | <ul> <li>High-voltage DC input: 190 V DC</li> </ul>     | <ul> <li>High-voltage DC input:</li> <li>190 V DC to 290 V DC</li> </ul> |

| Item  | CloudEngine<br>S5735-L12T4S-A  | CloudEngine<br>S5735-L12P4S-A   | CloudEngine<br>S5735-L24T4S-A  | CloudEngine S5735-<br>L24P4S-A  |
|---|--|---|--|---|
|   | 290 V DC (meeting<br>240 V high-voltage<br>DC certification)   | 290 V DC (meeting<br>240 V high-voltage<br>DC certification)  | to 290 V DC<br>(meeting 240 V<br>high-voltage DC<br>certification)   | (meeting 240 V high-<br>voltage DC<br>certification)  |
| Maximum power consumption                     | 29 W   | <ul> <li>49 W (without PD)</li> <li>441 W (with PD, PD power consumption of 360 W)</li> </ul>   | 34 W   | <ul> <li>53 W (without PD)</li> <li>451 W (with PD, PD power consumption of 380 W)</li> </ul>   |
| Noise   | Noise-free (no fans)   | 57.7dB (A)  | Noise-free (no fans)   | 57.7dB (A)  |
| Long-term<br>operating<br>temperature         | 0-1800 m altitude: -5°C to +45°C      1800-5000 m altitude: The operating temperature reduces by 1°C 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 1°C 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 1°C 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 1°C every time the     altitude increases by     220 m.                         |
| Short-term<br>operating<br>temperature        | NA   | <ul> <li>0-1800 m altitude: -<br/>5°C to +55°C</li> <li>1800-5000 m<br/>altitude: The<br/>operating<br/>temperature<br/>reduces by 1°C<br/>every time the<br/>altitude increases by<br/>220 m.</li> </ul> | NA   | <ul> <li>0-1800 m altitude: -<br/>5°C to +55°C</li> <li>1800-5000 m altitude:<br/>The operating<br/>temperature reduces<br/>by 1°C every time the<br/>altitude increases by<br/>220 m.</li> </ul> |
| 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-<br>condensing)   | 5% to 95% (non-<br>condensing)  | 5% to 95% (non-<br>condensing)   | 5% to 95% (non-<br>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> <li>Differential mode: ±<br/>6 kV</li> <li>Common mode: ±6<br/>kV</li> </ul>  | <ul> <li>Differential mode: ±<br/>6 kV</li> <li>Common mode: ±6<br/>kV</li> </ul>   | <ul> <li>Differential mode:<br/>± 6 kV</li> <li>Common mode:<br/>±6 kV</li> </ul>  | <ul> <li>Differential mode: ± 6 kV</li> <li>Common mode: ±6 kV</li> </ul>   |
| Heat dissipation                              | Natural heat dissipation   | Air-cooled heat dissipation and intelligent speed adjustment  | Natural heat dissipation   | 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-<br>L24T4X-A   | CloudEngine<br>S5735-L24T4X-D  | CloudEngine<br>S5735-L24P4X-A  | CloudEngine S5735-<br>L48T4S-A  |
|---------------------------------------|--|--|--|---|
| Fixed port                            | 24 x 10/100/1000Base-T<br>ports, 4 x 10 GE SFP+<br>ports   | 24 x 10/100/1000Base-<br>T ports, 4 x 10 GE<br>SFP+ ports  | 24 x<br>10/100/1000Base-T<br>ports(PoE+), 4 x 10<br>GE SFP+ ports  | 48 x 10/100/1000Base-T<br>ports, 4 x GE SFP ports   |
| Dimensions (H<br>x W x D)             | 43.6 mm x 442 mm x<br>220 mm   | 43.6 mm x 442 mm x<br>220 mm   | 43.6 mm x 442 mm x<br>220 mm   | 43.6 mm x 442 mm x 220<br>mm  |
| Chassis height                        | 1 U  | 1 U  | 1 U  | 1 U   |
| Chassis weight (including packaging)  | 4 kg   | 4 kg   | 4.31 kg  | 4.42 kg   |
| Power supply type                     | Built-in AC power  | Built-in DC power  | Built-in AC power  | Built-in AC power   |
| Rated voltage range                   | 100 V AC to 240 V AC,<br>50/60 Hz  | -48V DC∼-60V DC  | 100 V AC to 240 V<br>AC, 50/60 Hz  | 100 V AC to 240 V AC,<br>50/60 Hz   |
| Maximum<br>voltage range              | <ul> <li>AC input: 90 V AC to<br/>264 V AC, 47 Hz to<br/>63 Hz</li> <li>High-voltage DC<br/>input: 190 V DC to<br/>290 V DC (meeting<br/>240 V high-voltage<br/>DC certification)</li> </ul> | -38.4V DC∼-72V DC  | <ul> <li>AC input: 90 V<br/>AC to 290 V AC,<br/>45 Hz to 60 Hz</li> <li>High-voltage DC<br/>input: 190 V DC<br/>to 290 V DC<br/>(meeting 240 V<br/>high-voltage DC<br/>certification)</li> </ul> | <ul> <li>AC input: 90 V AC to<br/>264 V AC, 47 Hz to 63<br/>Hz</li> <li>High-voltage DC input:<br/>190 V DC to 290 V DC<br/>(meeting 240 V high-<br/>voltage DC<br/>certification)</li> </ul> |
| Maximum<br>power<br>consumption       | 43 W   | 43 W   | <ul> <li>56 W (without PD)</li> <li>458 W (with PD, PD power consumption of 380 W)</li> </ul>  | 53 W  |
| Noise                                 | 50.8dB (A)   | 47.3dB (A)   | 57.7dB (A)   | 53.3dB (A)  |
| Long-term<br>operating<br>temperature | O-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.  | O-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. | O-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.   | O-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.   |
| Short-term operating temperature      | O-1800 m altitude: -5°C to +55°C  1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.   | O-1800 m altitude: - 5°C to +55°C  1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by       | 0-1800 m     altitude: -5°C to     +55°C      1800-5000 m     altitude: The     operating     temperature     reduces by 1°C     every time the  | O-1800 m altitude: - 5°C to +55°C  1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.   |

| Item   | CloudEngine S5735-<br>L24T4X-A   | CloudEngine<br>S5735-L24T4X-D   | CloudEngine<br>S5735-L24P4X-A   | CloudEngine S5735-<br>L48T4S-A  |
|--|--|---|---|---|
|  |  | 220 m.  | altitude increases<br>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<br>humidity                                   | 5% to 95% (non-<br>condensing)   | 5% to 95% (non-<br>condensing)  | 5% to 95% (non-<br>condensing)  | 5% to 95% (non-<br>condensing)  |
| Surge<br>protection<br>specification<br>(service port) | ±7 kV in common mode   | ±7 kV in common mode  | ±7 kV in common mode  | ±7 kV in common mode  |
| Surge<br>protection<br>specification<br>(power port)   | <ul> <li>Differential mode: ± 6 kV</li> <li>Common mode: ±6 kV</li> </ul>    | <ul> <li>Differential mode: ± 2 kV</li> <li>Common mode: ±4 kV</li> </ul> | <ul> <li>Differential mode:</li> <li>± 6 kV</li> <li>Common mode:</li> <li>±6 kV</li> </ul> | <ul> <li>Differential mode: ± 6 kV</li> <li>Common mode: ±6 kV</li> </ul> |
| Heat dissipation                                       | Air-cooled heat<br>dissipation and intelligent<br>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-L48T4X-A   | CloudEngine S5735-L48P4X-A   |
|--------------------------------------|--|--|
| Fixed port                           | 48 x 10/100/1000Base-T ports, 4 x 10 GE<br>SFP+ ports  | 48 x 10/100/1000Base-T ports(PoE+), 4 x 10 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 420 mm  |
| Chassis height                       | 1 U  | 1 U  |
| Chassis weight (including packaging) | 4.42 kg  | 8.7 kg   |
| Power supply type                    | Built-in AC power  | <ul><li>600 W PoE AC (pluggable)</li><li>1000 W PoE AC (pluggable)</li><li>1000 W PoE DC (pluggable)</li></ul>   |
| Rated voltage range                  | 100 V AC to 240 V AC, 50/60 Hz   | <ul> <li>AC input(600 /1000W AC PoE): 100 V AC to 130 V AC, 200 V AC to 240 V AC, 50/60 Hz</li> <li>High-Voltage DC input(600 /1000W AC PoE): 240 V DC</li> <li>DC input(1000 W DC PoE): -48 V DC to -60 V DC</li> </ul> |
| Maximum voltage range                | <ul> <li>AC input: 90 V AC to 264 V AC, 47 Hz to 63 Hz</li> <li>High-voltage DC input: 190 V DC to 290 V DC (meeting 240 V high-voltage DC certification)</li> </ul> | <ul> <li>AC input(600 /1000W AC PoE): 90 V AC to 290 V AC, 45 Hz to 65 Hz</li> <li>High-Voltage DC input(600 /1000W AC PoE): 190 V DC to 290 V DC</li> <li>DC input(1000 W DC PoE): -38.4 V DC to -72 V DC</li> </ul>    |

| Item  | CloudEngine S5735-L48T4X-A   | CloudEngine S5735-L48P4X-A   |  |
|---|--|--|--|
| Maximum power consumption                     | 54 W   | <ul><li>80 W (without PD)</li><li>914 W (with PD, PD power consumption of 870 W)</li></ul>   |  |
| Noise   | 53.3dB (A)   | 58.9dB (A)   |  |
| Long-term operating temperature               | <ul> <li>0-1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul> | <ul> <li>0-1800 m altitude: -5°C to +50°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul> |  |
| Short-term operating temperature              | <ul> <li>0-1800 m altitude: -5°C to +55°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul> | <ul> <li>0-1800 m altitude: -5°C to +55°C</li> <li>1800-5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.</li> </ul> |  |
| Storage temperature                           | -40°C to +70°C   | -40°C to +70°C   |  |
| Relative humidity                             | 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   |  |
| Surge protection specification (power port)   | <ul><li>Differential mode: ± 6 kV</li><li>Common mode: ±6 kV</li></ul>   | <ul> <li>Differential mode: ± 6 kV</li> <li>Common mode: ±6 kV</li> </ul>  |  |
| Heat dissipation                              | 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   |
|---------------|---|
| MAC address   | MAC address learning and aging  |
| table         | 32896 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  |
|               | Guest VLAN and voice VLAN   |
|               | GVRP  |
|               | MUX VLAN  |
|               | VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and interfaces                   |
|               | 1: 1 and N: 1 VLAN mapping  |
| Ethernet loop | RRPP ring topology and RRPP multi-instance  |
| protection    | Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protection switchover |

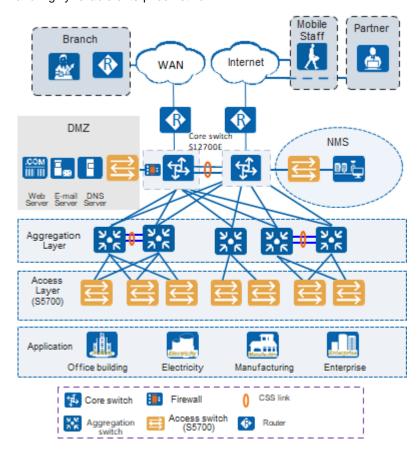
| Item          | Description   |
|---------------|---|
|               | SEP   |
|               | ERPS (G.8032)   |
|               | STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s)   |
|               | BPDU protection, root protection, and loop protection   |
|               | BPDU tunnel   |
| Multicast     | PIM DM, PIM SM, PIM SSM   |
|               | IGMPv1/v2/v3 and IGMPv1/v2/v3 snooping  |
|               | MLD v1/v2 and MLDv1/v2 snooping   |
|               | Multicast forwarding in a VLAN and multicast replication between VLANs  |
|               | Multicast load balancing among member ports of a trunk  |
|               | Controllable multicast  |
|               | Interface-based multicast traffic statistics  |
| IP routing    | Static route, RIP, RIPng, OSPF, OSPFv3  |
|               | 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   | EFM OAM (802.3ah)   |
|               | CFM OAM (802.1ag)   |
|               | ITU-Y.1731  |
|               | DLDP  |
|               | LACP  |
| QoS/ACL       | Rate limiting on packets sent and received by an interface  |
|               | Packet redirection  |
|               | Interface-based traffic policing and two-rate and three-color CAR   |
|               | Eight queues on each interface  |
|               | WRR, DRR, SP, WRR+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   |
| Security      | Hierarchical user management and password protection  |
|               | DoS attack defense, ARP attack defense, and ICMP attack defense   |

| Item                          | Description   |
|-------------------------------|---|
|                               | Binding of the IP address, MAC address, interface number, and VLAN ID         |
|                               | Port isolation, port security, and sticky MAC                                 |
|                               | MFF   |
|                               | 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 relay, DHCP server, DHCP snooping  |
|                               | DHCPv6 relay, DHCPv6 server, DHCPv6 snooping                                  |
|                               | Supports separation between user authentication and policy enforcement points |
| Super Virtual<br>Fabric (SVF) | Working as an SVF client that is plug-and-play with zero configuration        |
| Tablic (GVT)                  | Automatically loading the system software packages and patches of SVF clients |
|                               | Automatically delivering service configurations in a one-click manner         |
|                               | Independent running of SVF clients  |
| Management and maintenance    | iStack  |
| maintenance                   | Cloud management based on Netconf/Yang  |
|                               | Virtual Cable Test (VCT)  |
|                               | Remote configuration and maintenance using Telnet                             |
|                               | SNMPv1/v2c/v3   |
|                               | RMON  |
|                               | eSight and web-based NMS  |
|                               | HTTPS   |
|                               | LLDP/LLDP-MED   |
|                               | System logs and multi-level alarms  |
|                               | 802.3az EEE   |
| Interoperability              | Supports VBST (Compatible with PVST/PVST+/RPVST)                              |
|                               | Supports LNP (Similar to DTP)   |
|                               | Supports VCMP (Similar to VTP)  |

## **Networking and Applications**

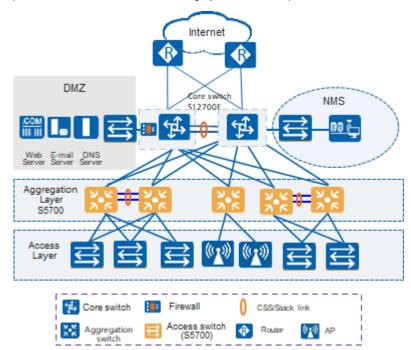
## **Large-Scale Enterprise Campus Network**

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



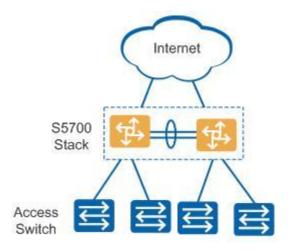
### **Small- or Medium-scale Enterprise Campus Network**

CloudEngine S5735-L 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.



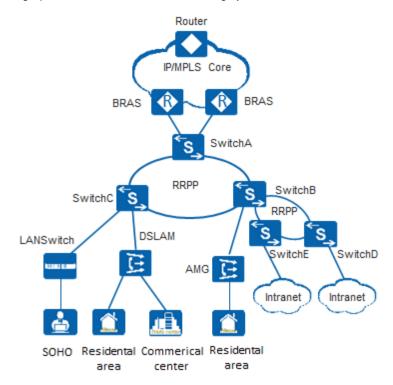
### **Small-scale Enterprise Campus Network**

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

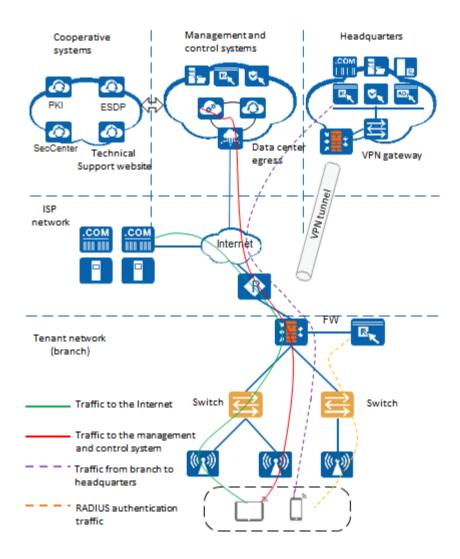
CloudEngine S5735-L series switches can be deployed at the access layer of a MAN(Metropolitan Area Network) to build a high-performance, multi-service, and highly reliable ISP MAN network.



### **Application in Public Cloud**

CloudCampus Solution is a network solution suite based on Huawei public cloud. CloudEngine S5735-L 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 (CloudCampus@AC-Campus for switches running V200R019C00 and earlier versions; iMaster NCE-Campus for switches running V200R019C10 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.



# **Ordering Information**

| Model                           | Product Description   |
|---------------------------------|---|
| CloudEngine S5735-L8T4S-A1      | CloudEngine S5735-L8T4S-A1 (8*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)          |
| CloudEngine S5735-L8P4S-A1      | CloudEngine S5735-L8P4S-A1 (8*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power)    |
| CloudEngine S5735-L8T4X-A1      | CloudEngine S5735-L8T4X-A1 (8*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power)       |
| CloudEngine S5735-L8P4X-A1      | CloudEngine S5735-L8P4X-A1 (8*10/100/1000BASE-T ports, 4*10GE SFP+ ports, PoE+, AC power) |
| CloudEngine S5735-<br>L24T4S-A1 | CloudEngine S5735-L24T4S-A1 (24*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)        |
| CloudEngine S5735-<br>L24P4S-A1 | CloudEngine S5735-L24P4S-A1 (24*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power)  |
| CloudEngine S5735-<br>L24T4X-A1 | CloudEngine S5735-L24T4X-A1 (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power)     |
| CloudEngine S5735-<br>L24T4X-D1 | CloudEngine S5735-L24T4X-D1 (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, DC power)     |
| CloudEngine S5735-              | CloudEngine S5735-L24P4X-A1 (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, PoE+,         |

| Model                            | Product Description   |
|----------------------------------|---|
| L24P4X-A1                        | AC power)   |
| CloudEngine S5735-<br>L32ST4X-A1 | CloudEngine S5735-L32ST4X-A1 (24*GE SFP ports, 8*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power, front access)      |
| CloudEngine S5735-<br>L32ST4X-D1 | CloudEngine S5735-L32ST4X-D1 (24*GE SFP ports, 8*10/100/1000BASE-T ports, 4*10GE SFP+ ports, DC power, front access)      |
| CloudEngine S5735-<br>L48T4S-A1  | CloudEngine S5735-L48T4S-A1 (48*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)  |
| CloudEngine S5735-<br>L48P4S-A1  | CloudEngine S5735-L48P4S-A1 (48*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power)                                  |
| CloudEngine S5735-<br>L48T4X-A1  | CloudEngine S5735-L48T4X-A1 (48*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power)                                     |
| CloudEngine S5735-<br>L48P4X-A1  | CloudEngine S5735-L48P4X-A1 (48*10/100/1000BASE-T ports, 4*10GE SFP+ ports, PoE+, AC power)                               |
| CloudEngine S5735-<br>L12T4S-A   | CloudEngine S5735-L12T4S-A (12 x 10/100/1000BASE-T ports, 4 x GE SFP ports, AC power)                                     |
| CloudEngine S5735-<br>L12P4S-A   | CloudEngine S5735-L12P4S-A (12 x 10/100/1000BASE-T ports, 4 x GE SFP ports, PoE+, AC power)                               |
| CloudEngine S5735-<br>L24T4S-A   | CloudEngine S5735-L24T4S-A (24 x 10/100/1000BASE-T ports, 4 x GE SFP ports, AC power)                                     |
| CloudEngine S5735-<br>L24P4S-A   | CloudEngine S5735-L24P4S-A (24 x 10/100/1000BASE-T ports, 4 x GE SFP ports, PoE+, AC power)                               |
| CloudEngine S5735-<br>L24T4X-A   | CloudEngine S5735-L24T4X-A (24 x 10/100/1000BASE-T ports, 4 x 10 GE SFP+ ports, AC power)                                 |
| CloudEngine S5735-<br>L24T4X-D   | CloudEngine S5735-L24T4X-D (24 x 10/100/1000BASE-T ports, 4 x 10 GE SFP+ ports, DC power)                                 |
| CloudEngine S5735-<br>L24P4X-A   | CloudEngine S5735-L24P4X-A (24 x 10/100/1000BASE-T ports, 4 x 10 GE SFP+ ports, PoE+, AC power)                           |
| CloudEngine S5735-<br>L48T4S-A   | CloudEngine S5735-L48T4S-A (48 x 10/100/1000BASE-T ports, 4 x GE SFP ports, AC power)                                     |
| CloudEngine S5735-<br>L48T4X-A   | CloudEngine S5735-L48T4X-A (48 x 10/100/1000BASE-T ports, 4 x 10 GE SFP+ ports, AC power)                                 |
| CloudEngine S5735-<br>L48P4X-A   | CloudEngine S5735-L48P4X-A bundle (48 x 10/100/1000BASE-T ports, 4 x 10 GE SFP+ ports, PoE+, 1*1000W PoE AC power module) |
| PAC600S56-CB                     | 600W AC PoE power module,can be used in CloudEngine S5735-L48P4X-A  |
| PAC1000S56-CB                    | 1000W AC PoE power module,can be used in CloudEngine S5735-L48P4X-A   |
| PAC1000S56-DB                    | 1000W AC PoE power module,can be used in CloudEngine S5735-L48P4X-A   |
| PDC1000S56-CB                    | 1000W DC PoE power module,can be used in CloudEngine S5735-L48P4X-A   |
| 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   |

| Model            | Product Description                                      |
|------------------|--|
| 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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