# Huawei CloudEngine S5735-L-V2 Series 2.5GE Switches Datasheet

Huawei CloudEngine S5735-L-V2 series 2.5GE switches are simplified 2.5G Ethernet switches that provide 24/48 x GE downlink ports, 4 x 10GE uplink ports and 2 x 12GE dedicated stack ports.

## Introduction

CloudEngine S5735-L-V2 series 2.5GE switches are ideal for scenarios such as enterprise campus network access and 2.5G 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.

## Product Overview

### Models and Appearances

The following models are available in the CloudEngine S5735-L-V2 series 2.5GE.

Models and appearances of the CloudEngine S5735-L-V2 series 2.5GE

| Models and Appearances | Description |
|---|---|
| <br>CloudEngine S5735-L24PN4XE-A-V2 | • 24 x 10/100/1000/2.5G Base-T ports, 4 x 10GE SFP+ ports, 2 x 12GE stack ports<br>• Built-in AC power supply<br>• PoE+<br>• Forwarding performance: 144 Mpps<br>• Switching capacity: 248 Gbps/520 Gbps* |
| <br>CloudEngine S5735-L48LPN4XE-A-V2 | • 48 x 10/100/1000/2.5G Base-T ports, 4 x 10 GE SFP+ ports, 2 x 12GE stack ports<br>• Built-in AC power supply<br>• PoE+<br>• Forwarding performance: 276 Mpps<br>• Switching capacity: 368 Gbps/520 Gbps* |
| <br>CloudEngine S5735-L48PN4XE-A-V2 | • 48 x 10/100/1000/2.5G Base-T ports, 4 x 10 GE SFP+ ports, 2 x 12GE stack ports<br>• 1 pluggable power supply<br>• PoE+<br>• Forwarding performance: 276 Mpps |

| Models and Appearances | Description |
| --- | --- |
| | • Switching capacity: 368 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.

## Power Supply

Power supply configurations of CloudEngine S5735-L24PN4XE-A-V2 & S5735-L48LPN4XE-A-V2 & S5735-L48PN4XE-A-V2

| Power Module | Power Module | Available PoE Power | Maximum Number of Ports (Fully Loaded) |
| --- | --- | --- | --- |
| S5735-L24PN4XE-A-V2 | | 400 W | • 802.3af (15.4 W per port): 24<br>• 802.3at (30 W per port): 13 |
| S5735-L48LPN4XE-A-V2 | | 360W | • 802.3af (15.4 W per port): 23<br>• 802.3at (30 W per port): 12 |
| S5735-L48PN4XE-A-V2 | 1000 W AC (220 V) | 828 W | • 802.3af (15.4 W per port): 48<br>• 802.3at (30 W per port): 27 |
| S5735-L48PN4XE-A-V2 | 1000 W AC (110 V) | 738 W | • 802.3af (15.4 W per port): 48<br>• 802.3at (30 W per port): 24 |

# Product Features and Highlights

## Flexible Ethernet Networking

- In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), the CloudEngineS5735-L-V2 supports Huawei-developed Smart Ethernet Protection (SEP) technology and the latest Ethernet Ring Protection Switching (ERPS) standard. 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. 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

- Huawei switches support post-quantum cryptography (PQC) algorithms and encryption capabilities within transport security protocols, effectively defending against decryption threats posed by quantum computing to deliver future-proof quantum-resistant security for network infrastructure.
- CloudEngine S5735-L-V2 supports Portal authentication, 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 SDN-based automatic deployment of policies for wired and wireless users on the entire network and refined management and control, implementing free mobility.
- 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:**<br>Layer 2 functions, IPv4, IPv6 and others<br>Note: For details, see the Service Features | √ | √ | √ |
| **Basic network automation based on the iMaster NCE-Campus:**<br>• NE management: Device management, topology management and discovery<br>• User access authentication | × | √ | √ |
| **Automation and intelligent O&M:**<br>Basic functions for intelligent network analysis of CampusInsight. | × | √ | √ |
| **Advanced network automation and intelligent O&M:**<br>Endpoint plug&play of iMaster NCE-Campus and Application analysis function of CampusInsight. | × | × | √ |

## Product Specifications

### Functions and Features

| Item | Service Feature |
|---|---|
| MAC address table | Automatic MAC address learning, synchronization, and aging |
| | Up to 32K MAC address entries |
| | Static MAC address and dynamic MAC address management |

| Item | Service Feature |
| --- | --- |
| | Static, dynamic, and blackhole MAC address entries |
| | Packet filtering based on source MAC addresses |
| | MAC address learning limiting based on ports |
| VLAN | Support for 4K VLANs simultaneously |
| | Voice VLAN |
| | MUX VLAN |
| | VLAN stacking and VLAN mapping |
| | LNP, VCMP, and GVRP |
| | Basic QinQ and selective QinQ |
| Layer 2 ring network protocol | Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protective switchover |
| | ERPS (G.8032) support, enabling less than 50 ms switchover upon a fault |
| | STP (IEEE 802.1d), RSTP (IEEE 802.1w), MSTP (IEEE 802.1s), and VBST |
| | BPDU protection, root protection, and loop protection |
| | BPDU tunnel |
| | SEP |
| Detection protocol | LBDT, L2PT, and DLDP |
| | Smart Link and Monitor Link |
| | 802.1ag, 802.3ah, and Y.1731 |
| Multicast | PIM DM, PIM SM, and PIM SSM |
| | IGMP v1/v2/v3, IGMP v1/v2/v3 snooping, and MLD snooping |
| | IPv4/IPv6 multicast routing and multicast load balancing |
| | Multicast traffic statistics on a per-port basis |
| | Multicast VLAN and static multicast MAC |
| IP services | Dual-stack IPv4 and IPv6 |
| | ARP |
| | Neighbor discovery (ND) |
| | DNS，mDNS |
| | DHCPv4 client, DHCPv4 relay, and DHCPv4 snooping |
| | DHCPv6 client, DHCPv6 relay, and DHCPv6 snooping |
| | IPv4/v6 ping, tracert, and telnet |
| IP routing | Static route, routing policy, and policy-based routing |
| | RIPv1/v2, RIPng, OSPFv2, OSPFv3 |
| Reliability | LACP |
| | VRRP |

| Item | Service Feature |
| --- | --- |
| | BFD |
| | LLDP |
| | Eth-Trunk, 128 Eth-Trunks, 8 Eth-Trunk members |
| User access and authentication | Multiple authentication methods, including AAA, RADIUS, and HWTACACS |
| | Policy association |
| | Endpoint identification and unauthorized access prevention |
| | Scanning-based identification, flow information identification, and fingerprint identification. |
| | 802.1X, MAC address, and Portal authentication |
| QoS/ACL | Rate limiting on packets sent and received by a port |
| | Packet redirection |
| | Port-based traffic policing and two-rate three-color CAR |
| | Eight queues on each port |
| | SP, DRR, WDRR, SP+DRR, and SP+WDRR queue scheduling algorithms |
| | WRED |
| | 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 source port number/destination port number, protocol type, and VLAN ID |
| | Rate limiting in each queue and traffic shaping on ports |
| | Device buffer (byte)：Up to 4MB |
| | Network Slicing（VLAN） |
| Security features | Hierarchical user management and password protection |
| | DoS attack defense, ARP attack defense, and ICMP attack defense |
| | Binding of the IP address, MAC address, port number, and VLAN ID |
| | Port isolation, port security, and sticky MAC |
| | ARP security features, including ARP snooping, ND snooping, ARP conflict detection, Dynamic ARP Inspection (DAI), and Egress ARP Inspection (EAI). |
| | Blackhole MAC addresses |
| | Unknown unicast, unknown multicast, and broadcast storm control on a per-port basis |
| | IEEE 802.1X authentication, with per-port maximum user limits |
| | IP Source Guard (IPSG) |
| | Public Key Infrastructure (PKI) |
| | SSH v2.0 |
| | HTTPS |
| | CPU protection and attack defense |
| | Blacklist and whitelist mechanisms |

| Item | Service Feature |
|---|---|
| | Host Intrusion Prevention System (HIPS) and Federal Information Processing Standard (FIPS) |
| | Source Address Validation Improvement (SAVI) |
| Network management and monitoring | iStack, stack bandwidth: 80Gbps |
| | Maximum number of stacked devices: 9(4 if the cloud management platform is used to manage and maintain the stack) |
| | SNMPv1/v2c/v3 |
| | NETCONF/YANG-based cloud management |
| | Management via the eSight or web system |
| | Remote configuration and maintenance using Telnet |
| | RMON |
| | iPCA, sFlow, NQA and Telemetry |
| | Port mirroring, traffic mirroring, RSPAN, and ERSPAN |
| | USB-based deployment, deployment through the registration query center, and SZTP |
| | RESTCONF, gRPC, and EVA |
| Network maintenance | Telnet for remote configuration and maintenance |
| | Ping and traceroute |
| | Virtual Cable Test (VCT) |
| | FTP, SFTP, and TFTP file management |
| | Time management |
| | CPU and memory resource monitoring |
| | System logs and hierarchical alarms |
| | Hot patching |
| | User operation logs |
| | IEEE 802.3az Energy-Efficient Ethernet (EEE) |
| | Configuration rollback |
| | Webmaster-based management |
| Interoperability | VBST (compatible with PVST/PVST+/RPVST) |

## Hardware Specifications

Hardware specifications of CloudEngine S5735-L24PN4XE-A-V2/S5735-L48LPN4XE-A-V2/S5735-L48PN4XE-A-V2 models

| Item | | CloudEngine S5735-L24PN4XE-A-V2 | CloudEngine S5735-L48LPN4XE-A-V2 | CloudEngine S5735-L48PN4XE-A-V2 |
|---|---|---|---|---|
| Physical specifications | Dimensions (H x W x D) | 43.6 mm x 442 mm x 420 mm | 43.6 mm x 442 mm x 420 mm | 43.6 mm x 442 mm x 420 mm |
| | Chassis height | 1 U | 1 U | 1 U |

| Item | | CloudEngine S5735-L24PN4XE-A-V2 | CloudEngine S5735-L48LPN4XE-A-V2 | CloudEngine S5735-L48PN4XE-A-V2 |
|---|---|---|---|---|
| | Chassis weight (including packaging) | 6.89 kg | 7.42 kg | 8.29 kg |
| Fixed port | GE port | 24 | 48(PoE+) | 48(PoE+) |
| | GE SFP pot | 4 | 4 | 4 |
| | 10GE port | 4 | 4 | 4 |
| | 12GE stack port | 2 | 2 | 2 |
| Management port | Console port (RJ45) | Supported | Supported | Supported |
| | USB Port | NA | NA | NA |
| CPU | Frequency | 1.1 GHz | 1.1 GHz | 1.1 GHz |
| | Core | 2 | 2 | 2 |
| Storage | Memory (DRAM) | 2 GB | 2 GB | 2 GB |
| Ingress protection level | IP level | IP20 | IP20 | IP20 |
| Power supply system | Power supply type | Built-in AC power supply | Built-in AC power supply | 1000 W PoE AC (pluggable), Quantity: 1 |
| | Rated voltage range | • AC input: 100 V AC to 240 V AC, 50/60 Hz<br>• High-voltage DC input: 240 V DC | • AC input: 100 V AC to 240 V AC, 50/60 Hz<br>• High-voltage DC input: 240 V DC | • AC input: 100 V AC to 240 V AC, 50/60 Hz<br>• High-voltage DC input: 240 V DC |
| | Maximum voltage range | • AC input: 90 V AC to 290 V AC; 45 Hz to 65 Hz<br>• High-voltage DC input: 190 V DC to 290 V DC | • AC input: 90 V AC to 290 V AC; 45 Hz to 65 Hz<br>• High-voltage DC input: 190 V DC to 290 V DC | • AC input: 90 V AC to 290 V AC; 45 Hz to 65 Hz<br>• High-voltage DC input: 190 V DC to 290 V DC |
| | Maximum input current | 6 A | 6 A | Depending on power module |
| | Power consumption in the case of 30% traffic load[1] | 54.8 W | 89.15 W | 82.19 W |
| | Power consumption in the case of 100% traffic load[1] | • Without PoE: 77.70 W<br>• Full PoE load: 517.30 W (PoE: 400 W) | • Without PoE: 117.20 W<br>• Full PoE load: 512.50 W (PoE: 360 W) | • Without PoE: 110.81 W<br>• Full PoE load: 978.5 W (PoE: 828 W) |
| | Power consumption in the case of 0% traffic load[1] | 37.1 W | 54.9 W | 55.57W |
| Heat dissipation | Heat dissipation mode | Air cooling for heat dissipation, intelligent fan | Air cooling for heat dissipation, intelligent fan | Air cooling for heat dissipation, intelligent |

| Item | | CloudEngine S5735-L24PN4XE-A-V2 | CloudEngine S5735-L48LPN4XE-A-V2 | CloudEngine S5735-L48PN4XE-A-V2 |
|---|---|---|---|---|
| system | | speed adjustment | speed adjustment | fan speed adjustment |
| | Number of fan modules | 2 | 2 | 2 |
| | Airflow | Air intake from left and front, air exhaustion from right | Air intake from left and front, air exhaustion from right | Air intake from left, front, and right and air exhaust from rear |
| | Maximum heat dissipation of the device (BTU/hour) | • Without PoE: 265.12<br>• Full PoE load: 1765.08 | • Without PoE: 399.90<br>• Full PoE load: 1748.70 | - Without PoE: 378.10<br>- Full PoE load: 3338.74 |
| Environment parameters | Long-term operating temperature | • 0-1800 m altitude: -5°C to +45°C<br>• 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m. | • 0-1800 m altitude: -5°C to +45°C<br>• 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m. | • 0-1800 m altitude: -5°C to +50°C<br>• 1800-5000 m altitude: The operating temperature reduces by 1ºC every time the altitude increases by 220 m. |
| | Short-term operating temperature | NA | NA | NA |
| | Storage temperature | -40°C to +70°C | -40°C to +70°C | -40°C to +70°C |
| | Relative humidity | 5%-95%(non-condensing) | 5%-95%(non-condensing) | 5%-95%(non-condensing) |
| | Operating altitude | 5000 m | 5000 m | 5000 m |
| | Noise under normal temperature (sound power) | 47.9dB (A) | 51.4dB (A) | 67dB (A) |
| | Noise under normal temperature (sound pressure) | 34.22dB (A) | 37.72dB (A) | 55dB (A) |
| | Surge protection specification (power port) | • Differential mode: ± 6 kV<br>• Common mode: ± 6 kV | • Differential mode: ± 6 kV<br>• Common mode: ± 6 kV | • Differential mode: ± 6 kV<br>• Common mode: ± 6 kV |
| Reliability | MTBF (year) | 54.48 | 43.36 | 32.22 |
| | MTTR (hour) | 2 | 2 | 2 |
| | Availability | > 0.99999 | > 0.99999 | > 0.99999 |
| Certification | | • EMC certification<br>• Safety certification<br>• Manufacturing certification | • EMC certification<br>• Safety certification<br>• Manufacturing certification | • EMC certification<br>• Safety certification<br>• Manufacturing certification |

NOTE

1: The Typical power consumption is calculated under 30% service traffic load conditions according to the ATIS standard. Additionally, the EEE function is enabled and there is no PoE power output.

The Static power consumption is calculated under 0% service traffic load conditions according to the ATIS standard. Additionally, the EEE function is enabled and there is no PoE power output.

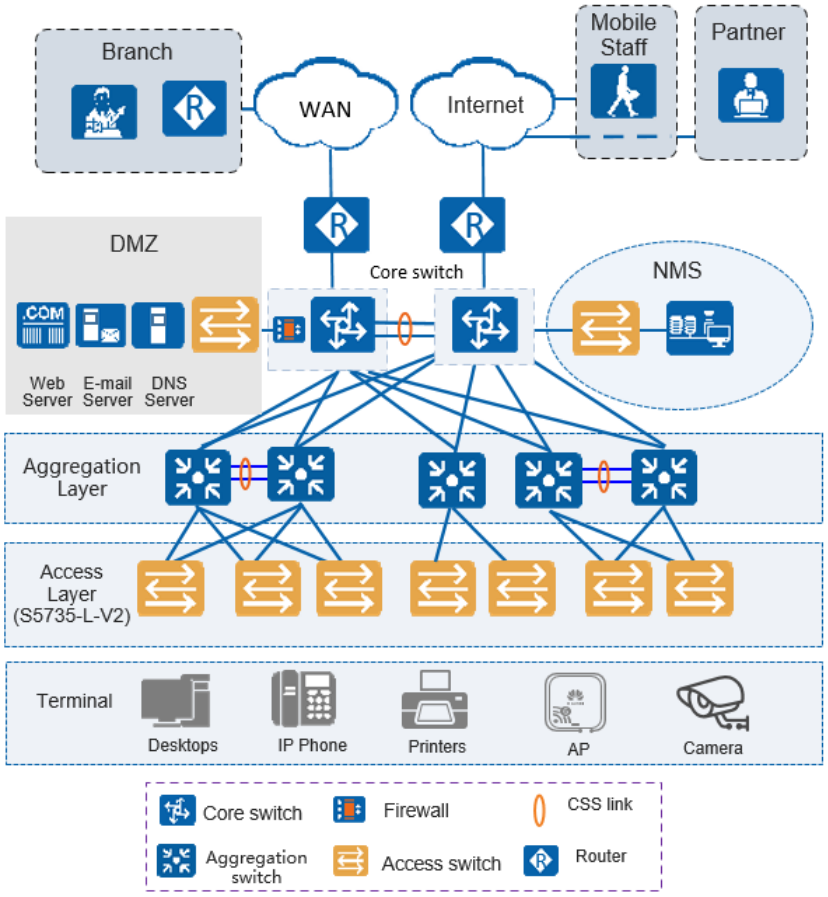
## Performance Specification

| Entries | S5735-L-V2 series switches |
|---|---|
| Number of dynamic MAC address entries | Up to 32K |
| Number of static MAC address entries | 1024 |
| Maximum number of VLANs | 4094 |
| Number of VLANIF interfaces | 1024 |
| IPv4 routing entries | Up to 4096 |
| IPv6 routing entries | Up to 2048 |
| Number of ARP entries | Up to 4000 |
| Number of ND entries | Up to 1024 |
| ACL scale entries | IPv4: 2432 @ 320 bits; IPv6: 1536 @ 480 bits |
| IPv4/IPv6 multicast L2 entries | 1024 |
| IPv4/IPv6 multicast L3 entries | 1024 |
| Jumbo frames | 10240 |

# Networking and Applications

### Medium or 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.




# Safety and Regulatory Compliance

Safety and regulatory compliance of the CloudEngine S5735-L-V2 series

| Certification Category | Description |
|---|---|
| Safety | IEC 62368-1 |
| | EN 62368-1 |
| | UL 62368-1 |
| | CSA C22.2 No 62368-1 |
| Electromagnetic Compatibility (EMC) | CISPR32 |
| | CISPR35 |
| | EN 55032 |
| | EN 55035 |
| | ETSI EN 300 386 |
| | CFR 47 FCC Part 15 |
| | ICES 003 |
| | AS/NZS CISPR32 |
| | VCCI |

| Certification Category | Description |
| --- | --- |
| | IEC61000-4-2 |
| Environment | RoHS |
| | REACH |
| | WEEE |
| Laser safety | IEC60825-1 |
| | IEC60825-2 |
| | EN60825-1 |
| | EN60825-2 |

**NOTE**

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

# MIB and Standards Compliance

## Supported MIBs

Supported MIBs by the CloudEngine S5735-L-V2 series

| Category | MIB |
| --- | --- |
| Public MIB | • BRIDGE-MIB<br>• DISMAN-NSLOOKUP-MIB<br>• DISMAN-PING-MIB<br>• DISMAN-TRACEROUTE-MIB<br>• ENTITY-MIB<br>• EtherLike-MIB<br>• IF-MIB<br>• IP-FORWARD-MIB<br>• IPv6-MIB<br>• LAG-MIB |

| Category | MIB |
| --- | --- |
| | • LLDP-EXT-DOT1-MIB<br>• LLDP-EXT-DOT3-MIB<br>• LLDP-MIB<br>• NOTIFICATION-LOG-MIB<br>• NQA-MIB<br>• P-BRIDGE-MIB<br>• Q-BRIDGE-MIB<br>• RFC1213-MIB<br>• RMON-MIB<br>• SAVI-MIB<br>• SNMP-FRAMEWORK-MIB<br>• SNMP-MPD-MIB<br>• SNMP-NOTIFICATION-MIB<br>• SNMP-TARGET-MIB<br>• SNMP-USER-BASED-SM-MIB<br>• SNMPv2-MIB<br>• SNMP-VIEW-BASED-ACM-MIB<br>• TCP-MIB<br>• UDP-MIB |
| Huawei-proprietary MIB | • HUAWEI-AAA-MIB<br>• HUAWEI-ACL-MIB<br>• HUAWEI-ALARM-MIB<br>• HUAWEI-ALARM-RELIABILITY-MIB<br>• HUAWEI-BASE-TRAP-MIB<br>• HUAWEI-BRAS-RADIUS-MIB<br>• HUAWEI-BRAS-SRVCFG-EAP-MIB<br>• HUAWEI-BRAS-SRVCFG-STATICUSER-MIB<br>• HUAWEI-CBQOS-MIB<br>• HUAWEI-CDP-COMPLIANCE-MIB<br>• HUAWEI-CONFIG-MAN-MIB<br>• HUAWEI-CPU-MIB<br>• HUAWEI-DAD-TRAP-MIB<br>• HUAWEI-DATASYNC-MIB<br>• HUAWEI-DEVICE-MIB<br>• HUAWEI-DHCPR-MIB<br>• HUAWEI-DHCPS-MIB<br>• HUAWEI-DHCP-SNOOPING-MIB<br>• HUAWEI-DIE-MIB<br>• HUAWEI-DNS-MIB<br>• HUAWEI-DLDP-MIB<br>• HUAWEI-ERPS-MIB<br>• HUAWEI-ERRORDOWN-MIB<br>• HUAWEI-ENERGYMNGT-MIB<br>• HUAWEI-EASY-OPERATION-MIB |

| Category | MIB |
| --- | --- |
| | • HUAWEI-ENTITY-EXTENT-MIB<br>• HUAWEI-ENTITY-TRAP-MIB<br>• HUAWEI-ETHARP-MIB<br>• HUAWEI-ETHOAM-MIB<br>• HUAWEI-FLASH-MAN-MIB<br>• HUAWEI-FWD-RES-TRAP-MIB<br>• HUAWEI-GARP-APP-MIB<br>• HUAWEI-GTL-MIB<br>• HUAWEI-HGMP-MIB<br>• HUAWEI-HWTACACS-MIB<br>• HUAWEI-IF-EXT-MIB<br>• HUAWEI-INFOCENTER-MIB<br>• HUAWEI-IPPOOL-MIB<br>• HUAWEI-IPV6-MIB<br>• HUAWEI-ISOLATE-MIB<br>• HUAWEI-L2IF-MIB<br>• HUAWEI-L2MAM-MIB<br>• HUAWEI-L2VLAN-MIB<br>• HUAWEI_LDT-MIB<br>• HUAWEI-LLDP-MIB<br>• HUAWEI-MAC-AUTHEN-MIB<br>• HUAWEI-MEMORY-MIB<br>• HUAWEI-MFF-MIB<br>• HUAWEI-MFLP-MIB<br>• HUAWEI-MSTP-MIB<br>• HUAWEI-MULTICAST-MIB<br>• HUAWEI-NTPV3-MIB<br>• HUAWEI-PERFORMANCE-MIB<br>• HUAWEI-PERFMGMT-MIB<br>• HUAWEI-PORT-MIB<br>• HUAWEI-PORTAL-MIB<br>• HUAWEI-QINQ-MIB<br>• HUAWEI-RM-EXT-MIB<br>• HUAWEI-RRPP-MIB<br>• HUAWEI-SECURITY-MIB<br>• HUAWEI-SEP-MIB<br>• HUAWEI-SNMP-EXT-MIB<br>• HUAWEI-SSH-MIB<br>• HUAWEI-STACK-MIB<br>• HUAWEI-SWITCH-L2MAM-EXT-MIB<br>• HUAWEI-SWITCH-SRV-TRAP-MIB<br>• HUAWEI-SYS-MAN-MIB<br>• HUAWEI-TCP-MIB<br>• HUAWEI-TFTPC-MIB<br>• HUAWEI-TRNG-MIB |

| Category | MIB |
| --- | --- |
| | • HUAWEI-UNIMNG-MIB<br>• HUAWEI-USA-MIB<br>• HUAWEI-XQOS-MIB |

NOTE

For more detailed information of MIBs supported by the CloudEngine S5735-L-V2 series, visit https://support.huawei.com/enterprise/en/switches/s5700-pid-6691579?category=reference-guides&subcategory=mib-reference.

## Standard Compliance

Standard compliance list of the CloudEngine S5735-L-V2 series

| Standard Organization | Standard or Protocol |
| --- | --- |
| IETF | • RFC 768 User Datagram Protocol (UDP)<br>• RFC 792 Internet Control Message Protocol (ICMP)<br>• RFC 793 Transmission Control Protocol (TCP)<br>• RFC 826 Ethernet Address Resolution Protocol (ARP)<br>• RFC 854 Telnet Protocol Specification<br>• RFC 951 Bootstrap Protocol (BOOTP)<br>• RFC 959 File Transfer Protocol (FTP)<br>• RFC 1058 Routing Information Protocol (RIP)<br>• RFC 1112 Host extensions for IP multicasting<br>• RFC 1157 A Simple Network Management Protocol (SNMP)<br>• RFC 1256 ICMP Router Discovery<br>• RFC 1305 Network Time Protocol Version 3 (NTP)<br>• RFC 1349 Internet Protocol (IP)<br>• RFC 1493 Definitions of Managed Objects for Bridges<br>• RFC 1542 Clarifications and Extensions for the Bootstrap Protocol<br>• RFC 1643 Ethernet Interface MIB<br>• RFC 1757 Remote Network Monitoring (RMON)<br>• RFC 1901 Introduction to Community-based SNMPv2<br>• RFC 1902-1907 SNMP v2<br>• RFC 1981 Path MTU Discovery for IP version 6<br>• RFC 2131 Dynamic Host Configuration Protocol (DHCP)<br>• RFC 2460 Internet Protocol, Version 6 Specification (IPv6)<br>• RFC 2461 Neighbor Discovery for IP Version 6 (IPv6)<br>• RFC 2462 IPv6 Stateless Address Auto configuration<br>• RFC 2463 Internet Control Message Protocol for IPv6 (ICMPv6)<br>• RFC 2474 Differentiated Services Field (DS Field)<br>• RFC 2863 The Interfaces Group MIB<br>• RFC 2597 Assured Forwarding PHB Group<br>• RFC 2598 An Expedited Forwarding PHB<br>• RFC 2571 SNMP Management Frameworks<br>• RFC 2865 Remote Authentication Dial In User Service (RADIUS)<br>• RFC 3046 DHCP Option82<br>• RFC 3513 IP Version 6 Addressing Architecture |

| Standard Organization | Standard or Protocol |
| --- | --- |
| | • RFC 3579 RADIUS Support For EAP<br>• draft-grant-tacacs-02 TACACS+<br>• RFC 6241 Network Configuration Protocol (NETCONF)<br>• RFC 6020 YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)<br>• RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification |
| IEEE | • IEEE 802.1D Media Access Control (MAC) Bridges<br>• IEEE 802.1p Traffic Class Expediting and Dynamic Multicast Filtering<br>• IEEE 802.1Q Virtual Bridged Local Area Networks<br>• IEEE 802.1ad Provider Bridges<br>• IEEE 802.2 Logical Link Control<br>• IEEE Std 802.3 CSMA/CD<br>• IEEE Std 802.3i 10BASE-T specification<br>• IEEE Std 802.3u 100BASE-T specification<br>• IEEE Std 802.3ab 1000BASE-T specification<br>• IEEE Std 802.3ab RJ45 con Auto-MDIX<br>• IEEE Std 802.3ad Aggregation of Multiple Link Segments<br>• IEEE Std 802.3ae 10GE WEN/LAN Standard<br>• IEEE Std 802.3x Full Duplex and flow control<br>• IEEE Std 802.3z Gigabit Ethernet Standard<br>• IEEE802.1ax/IEEE802.3ad Link Aggregation<br>• IEEE 802.1ab Link Layer Discovery Protocol<br>• IEEE 802.1D Spanning Tree Protocol<br>• IEEE 802.1w Rapid Spanning Tree Protocol<br>• IEEE 802.1s Multiple Spanning Tree Protocol<br>• IEEE 802.1x Port based network access control protocol<br>• IEEE 802.3af DTE Power via MIDI<br>• IEEE 802.3at DTE Power via the MDI Enhancements<br>• IEEE 802.3az Energy Efficient Ethernet |
| ITU | • ITU SG13 Y.17ethoam<br>• ITU SG13 QoS control Ethernet-Based IP Access<br>• ITU-T Y.1731 ETH OAM performance monitor |
| MEF | • MEF 2 Requirements and Framework for Ethernet Service Protection<br>• MEF 9 Abstract Test Suite for Ethernet Services at the UNI<br>• MEF 11 UNI Requirements and Framework<br>• MEF 15 Requirements for Management of Metro Ethernet Phase 1 Network Elements<br>• MEF 17 Service OAM Framework and Requirements<br>• MEF 20 UNI Type 2 Implementation Agreement<br>• MEF 23 Class of Service Phase 1 Implementation Agreement<br>• XMODEM/YMODEM Protocol Reference |

**NOTE**

The listed standards and protocols are fully or partially supported by Huawei switches. For details, visit http://e.huawei.com/en or contact your local Huawei sales office.

# Ordering Information

| Model | Product Description |
|---|---|
| CloudEngine S5735-L24PN4XE-A-V2 | CloudEngine S5735-L24PN4XE-A-V2 (24*10/100/1000/2.5GBASE-T ports(PoE+), 4*10GE SFP+ ports, 2*12GE stack ports, 400W PoE, built-in AC power) |
| CloudEngine S5735-L48LPN4XE-A-V2 | CloudEngine S5735-L48LPN4XE-A-V2 (48*10/100/1000/2.5GBASE-T ports(PoE+), 4*10GE SFP+ ports, 2*12GE stack ports, 360W PoE, built-in AC power) |
| CloudEngine S5735-L48PN4XE-A-V2 | CloudEngine S5735-L48PN4XE-A-V2 (48*10M/100M/1/2.5GE BASE-T ports, 4*10GE SFP+ ports, 2*12GE stack ports, PoE+, 828W PoE, 1*1000W AC power) |
| 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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