

# CloudEngine S1730S Series Switches

Huawei CloudEngine S1730 series switches are next-generation energy-saving Ethernet access switches designed for small- and medium-sized enterprises, Internet cafes, hotels, and schools.



## Product Overview

Huawei CloudEngine S1730 series switches are easy to install and maintain and come with a wide range of service features, helping customers build secure, reliable, and high-performance networks.



There are two types of CloudEngine S1730S series switches: web-managed switches and fully-managed switches.










## Models and Appearances



### CloudEngine S1730S-H fully-managed switches

| Appearance   | Description   |
|--|---|
| <br>CloudEngine S1730S-H24T4S-A | <ul style="list-style-type: none"> <li>• 24 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>• AC power supply</li> <li>• Forwarding performance: 41.66 Mpps</li> <li>• Switching capacity: 168 Gbps</li> </ul> |
| <br>CloudEngine S1730S-H48T4S-A | <ul style="list-style-type: none"> <li>• 48 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>• AC power supply</li> <li>• Forwarding performance: 77.38 Mpps</li> <li>• Switching capacity: 216 Gbps</li> </ul> |

### CloudEngine S1730S-S web-managed switches

| Appearance   | Description  |
|--|--|
| <br>CloudEngine S1730S-S8T4S-A1 | <ul style="list-style-type: none"> <li>• 8 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>• AC power supply</li> <li>• Forwarding performance: 17.86 Mpps</li> <li>• Switching capacity: 168 Gbps</li> </ul> |
| <br>CloudEngine S1730S-S8P4S-A1 | <ul style="list-style-type: none"> <li>• 8 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>• AC power supply</li> <li>• PoE+</li> </ul>   |

| Appearance  | Description   |
|---|---|
|   | <ul style="list-style-type: none"> <li>Forwarding performance: 17.86 Mpps</li> <li>Switching capacity: 168 Gbps</li> </ul>  |
|  <p>CloudEngine S1730S-S24T4S-A1</p>   | <ul style="list-style-type: none"> <li>24 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 41.66 Mpps</li> <li>Switching capacity: 168 Gbps</li> </ul>               |
|  <p>CloudEngine S1730S-S24P4S-A1</p>   | <ul style="list-style-type: none"> <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: 41.66 Mpps</li> <li>Switching capacity: 168 Gbps</li> </ul> |
|  <p>CloudEngine S1730S-S24T4X-A1</p>   | <ul style="list-style-type: none"> <li>24 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 95.23 Mpps</li> <li>Switching capacity: 168 Gbps</li> </ul>           |
|  <p>CloudEngine S1730S-S48T4S-A1</p>   | <ul style="list-style-type: none"> <li>48 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 77.38 Mpps</li> <li>Switching capacity: 216 Gbps</li> </ul>               |
|  <p>CloudEngine S1730S-S48P4S-A1</p> | <ul style="list-style-type: none"> <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: 77.38 Mpps</li> <li>Switching capacity: 216 Gbps</li> </ul> |
|  <p>CloudEngine S1730S-S48T4X-A1</p> | <ul style="list-style-type: none"> <li>48 x 10/100/1000Base-T ports, 4 x 10 GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 130.94 Mpps</li> <li>Switching capacity: 216 Gbps</li> </ul>          |
|  <p>CloudEngine S1730S-S24T4S-A</p>  | <ul style="list-style-type: none"> <li>24 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>AC power supply</li> <li>Forwarding performance: 41.66 Mpps</li> <li>Switching capacity: 168 Gbps</li> </ul>               |
|  <p>CloudEngine S1730S-S24P4S-A</p>  | <ul style="list-style-type: none"> <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: 41.66 Mpps</li> <li>Switching capacity: 168 Gbps</li> </ul> |
|  <p>CloudEngine S1730S-S24T4X-A</p>  | <ul style="list-style-type: none"> <li>24 x 10/100/1000Base-T ports, 4 x 10GE SFP+ ports</li> <li>AC power supply</li> <li>Forwarding performance: 95.23 Mpps</li> <li>Switching capacity: 168 Gbps</li> </ul>            |

| Appearance   | Description   |
|--|---|
|  <p>CloudEngine S1730S-S48T4S-A</p> | <ul style="list-style-type: none"> <li>• 48 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>• AC power supply</li> <li>• Forwarding performance: 77.38 Mpps</li> <li>• Switching capacity: 216 Gbps</li> </ul>                           |
|  <p>CloudEngine S1730S-S48P4S-A</p> | <ul style="list-style-type: none"> <li>• 48 x 10/100/1000Base-T ports, 4 x GE SFP ports</li> <li>• Pluggable AC power module</li> <li>• PoE+</li> <li>• Forwarding performance: 77.38 Mpps</li> <li>• Switching capacity: 216 Gbps</li> </ul> |

## Features and Highlights

### Innovative Energy-saving Design

- CloudEngine S1730S series switches can adjust the output power based on the cable length. It can also set any ports that are not transmitting traffic to sleep mode.
- The models that use a fan-free design reduce power consumption and noise.

### Non-blocking and High-speed Forwarding

- All ports on CloudEngine S1730S series switches provide Layer 2 line-rate forwarding capabilities to ensure non-blocking packet forwarding. CloudEngine S1730S models provide both optical and electrical GE uplink ports, which facilitate user access and are cost-effective.
- The CloudEngine S1730S-S and S1730S-H support up to 8K and 16K MAC address entries, respectively, facilitating network expansion and new service provisioning.
- CloudEngine S1730S series switches support flow control. If congestion occurs on the local device, the local device sends a message to the remote device, instructing the remote device to temperately stop sending packets.

### Perpetual PoE

- When a PoE switch is restarted after its software version is upgraded, the power supply to PDs is not interrupted. This capability ensures that the connected PDs are not powered off during the switch restart.

### Convenient Management and Maintenance

- Web-managed S1730S-S models come with a web network management system (NMS), simplifying device configuration and management.
- Fully-managed S1730S-H models allow for the use of a Simple Network Management Protocol (SNMP) NMS for centralized configuration and management.

### Intelligent O&M

- Web-managed and fully-managed S1730S models support a variety of intelligent O&M features for audio and video services, including the Enhanced Media Delivery Index (eMDI). With eMDI, the switch can act as a monitored node to periodically collect statistics and report audio and video service indicators to CampusInsight. In this way, CampusInsight can quickly demarcate audio and video service quality faults based on the results of multiple monitored nodes.

### Intelligent Upgrade

- Switches support the intelligent upgrade feature. Specifically, switches obtain the version upgrade path and download 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.

## Powerful Security Performance

- CloudEngine S1730S series switches provide a wide range of security features, including 802.1X, RADIUS, Portal, and NAC. These switches also support packet filtering based on MAC addresses or interfaces in order to defend against hackers and virus attacks.

## High Networking and Bandwidth Extensibility

- CloudEngine S1730S series switches provide LACP, STP, RSTP, and MSTP functions to implement link aggregation and backup.

# Product Specifications

### CloudEngine S1730S-H fully-managed switches

| Item  | CloudEngine S1730S-H24T4S-A  | CloudEngine S1730S-H48T4S-A   |
|---|--|---|
| Fixed port                                    | 24 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports  | 48 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports   |
| Dimensions (H x W x D)                        | 43.6 mm x 442 mm x 220 mm (1.72 in. x 17.40 in. x 8.66 in.)  | 43.6 mm x 442 mm x 220 mm (1.72 in. x 17.40 in. x 8.66 in.)   |
| Chassis height                                | 1U   | 1U  |
| Power supply                                  | Built-in AC power  | Built-in AC power   |
| Rated voltage range                           | <ul style="list-style-type: none"> <li>● AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>● High-voltage DC input: 240 V DC</li> </ul>  | <ul style="list-style-type: none"> <li>● AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>● High-voltage DC input: 240 V DC</li> </ul>   |
| Maximum voltage range                         | <ul style="list-style-type: none"> <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</li> </ul>   | <ul style="list-style-type: none"> <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</li> </ul>  |
| Maximum power consumption                     | 34W  | 53W   |
| Operating temperature                         | 5°C to +45°C (23°F to 113°F) at an altitude of 0-1800 m (0-5906 ft.)<br><b>NOTE</b><br>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.). | -5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)<br><b>NOTE</b><br>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.). |
| Storage temperature                           | -40°C to +70°C (-40°F to +158°F)   |   |
| Relative humidity                             | 5% to 95% (non-condensing)   |   |
| Surge protection specification (service port) | ±7 kV in common mode   |   |

| Item  | CloudEngine S1730S-H24T4S-A  | CloudEngine S1730S-H48T4S-A                                  |
|---|--|--|
| Surge protection specification (power port) | <ul style="list-style-type: none"> <li>Differential mode: <math>\pm 6</math> kV</li> <li>Common mode: <math>\pm 6</math> kV</li> </ul> |  |
| Heat dissipation                            | Natural heat dissipation   | Air-cooled heat dissipation and intelligent speed adjustment |

#### CloudEngine S1730S-S web-managed switches

| Item                      | CloudEngine S1730S-S8T4S-A1  | CloudEngine S1730S-S8P4S-A1  | CloudEngine S1730S-S24T4S-A1   | CloudEngine S1730S-S24P4S-A1   |
|---------------------------|--|--|--|--|
| Fixed port                | 8 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports   | 8 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports   | 24 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports  | 24 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports  |
| Dimensions (H x W x D)    | 43.6 mm x 250 mm x 180 mm<br>(1.72 in. x 9.84 in. x 7.1 in.)   | 43.6 mm x 300 mm x 220 mm<br>(1.72 in. x 11.8 in. x 8.7 in.)   | 43.6 mm x 442 mm x 220 mm<br>(1.72 in. x 17.4 in. x 8.7 in.)   | 43.6 mm x 442 mm x 220 mm<br>(1.72 in. x 17.4 in. x 8.7 in.)   |
| Chassis height            | 1U   | 1U   | 1U   | 1U   |
| Power supply              | Built-in AC power  | Built-in AC power  | Built-in AC power  | Built-in AC power  |
| Rated voltage range       | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> </ul>   | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> </ul>   | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> </ul>   | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>  |
| Maximum voltage range     | <ul style="list-style-type: none"> <li>AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz</li> </ul>  | <ul style="list-style-type: none"> <li>AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz</li> </ul>  | <ul style="list-style-type: none"> <li>AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz</li> </ul>  | <ul style="list-style-type: none"> <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</li> </ul>   |
| Maximum power consumption | 29.7W  | <ul style="list-style-type: none"> <li>Without PoE: 38.6 W</li> <li>100% PoE loads: 162.6 W (PoE: 124 W)</li> </ul>  | 47.6W  | <ul style="list-style-type: none"> <li>Without PoE: 53.2 W</li> <li>100% PoE loads: 433.2 W (PoE: 380 W)</li> </ul>  |
| Operating temperature     | <p>-5°C to +50°C (23°F to 122°F) (0 m to 1800 m, with non-industrial optical modules)</p> <p>-5°C to +55°C (23°F to 131°F) (0 m to 1800 m, industrial optical modules with a distance of less than or equal to 10 km)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest</p> | <p>-5°C to +50°C (23°F to 122°F) (0 m to 1800 m, with non-industrial optical modules)</p> <p>-5°C to +55°C (23°F to 131°F) (0 m to 1800 m, industrial optical modules with a distance of less than or equal to 10 km)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest</p> | <p>-5°C to +50°C (23°F to 122°F) (0 m to 1800 m, with non-industrial optical modules)</p> <p>-5°C to +55°C (23°F to 131°F) (0 m to 1800 m, industrial optical modules with a distance of less than or equal to 10 km)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest</p> | <p>-5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> |

| Item  | CloudEngine S1730S-S8T4S-A1  | CloudEngine S1730S-S8P4S-A1  | CloudEngine S1730S-S24T4S-A1   | CloudEngine S1730S-S24P4S-A1   |
|---|--|--|--|--|
|   | operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.)        | operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.)        | operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.)        |  |
| Storage temperature                           | -40°C to +70°C (-40°F to +158°F)   |  |  |  |
| Relative humidity                             | 5% to 95% (non-condensing)   |  |  |  |
| Surge protection specification (service port) | ±7 kV in common mode   | ±7 kV in common mode   | ±7 kV in common mode   | ±7 kV in common mode   |
| Surge protection specification (power port)   | <ul style="list-style-type: none"> <li>Differential mode: ± 6 kV</li> <li>Common mode: ± 6 kV</li> </ul> | <ul style="list-style-type: none"> <li>Differential mode: ± 6 kV</li> <li>Common mode: ± 6 kV</li> </ul> | <ul style="list-style-type: none"> <li>Differential mode: ± 6 kV</li> <li>Common mode: ± 6 kV</li> </ul> | <ul style="list-style-type: none"> <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   | Air-cooled heat dissipation and intelligent speed adjustment   | Air-cooled heat dissipation and intelligent speed adjustment   |

| Item                   | CloudEngine S1730S-S24T4X-A1  | CloudEngine S1730S-S48T4S-A1  | CloudEngine S1730S-S48P4S-A1   | CloudEngine S1730S-S48T4X-A1  |
|------------------------|---|---|--|---|
| Fixed port             | 24 x 10/100/1000Base-T Ethernet ports, 4 x 10 GE SFP+ ports                                     | 48 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports   | 48 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports  | 48 x 10/100/1000Base-T Ethernet ports, 4 x 10 GE SFP+ ports                                     |
| Dimensions (H x W x D) | 43.6 mm x 442 mm x 220 mm<br>(1.72 in. x 17.4 in. x 8.7 in.)                                    | 43.6 mm x 442 mm x 220 mm<br>(1.72 in. x 17.4 in. x 8.7 in.)                                    | 43.6 mm x 442 mm x 220 mm<br>(1.72 in. x 17.4 in. x 8.7 in.)   | 43.6 mm x 442 mm x 220 mm<br>(1.72 in. x 17.4 in. x 8.7 in.)                                    |
| Chassis height         | 1U  | 1U  | 1U   | 1U  |
| Power supply           | Built-in AC power   | Built-in AC power   | Built-in AC power  | Built-in AC power   |
| Rated voltage range    | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> </ul>      | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> </ul>      | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>                  | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> </ul>      |
| Maximum voltage range  | <ul style="list-style-type: none"> <li>AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz</li> </ul> | <ul style="list-style-type: none"> <li>AC input: 90 V AC to 264 V AC, 47 Hz to 63 Hz</li> </ul> | <ul style="list-style-type: none"> <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</li> </ul> | <ul style="list-style-type: none"> <li>AC input: 90 V AC to 264 V AC, 47 Hz to 63 Hz</li> </ul> |
| Maximum                | 47.6W   | 50.4W   | <ul style="list-style-type: none"> <li>Without PoE: 76.1 W</li> </ul>  | 50.4W   |

| Item  | CloudEngine S1730S-S24T4X-A1  | CloudEngine S1730S-S48T4S-A1   | CloudEngine S1730S-S48P4S-A1   | CloudEngine S1730S-S48T4X-A1   |
|---|---|--|--|--|
| power consumption                             |   |  | <ul style="list-style-type: none"> <li>100% PoE loads: 456.1 W (PoE: 380 W)</li> </ul>   |  |
| Operating temperature                         | <p>-5°C to +50°C (23°F to 122°F) (0 m to 1800 m, with non-industrial optical modules)</p> <p>-5°C to +55°C (23°F to 131°F) (0 m to 1800 m, industrial optical modules with a distance of less than or equal to 10 km)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> | <p>-5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> | <p>-5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> | <p>-5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> |
| Storage temperature                           | -40°C to +70°C (-40°F to +158°F)  |  |  |  |
| Relative humidity                             | 5% to 95% (non-condensing)  |  |  |  |
| Surge protection specification (service port) | ±7 kV in common mode  | ±7 kV in common mode   | ±7 kV in common mode   | ±7 kV in common mode   |
| Surge protection specification (power port)   | <ul style="list-style-type: none"> <li>Differential mode: ± 6 kV</li> <li>Common mode: ± 6 kV</li> </ul>  | <ul style="list-style-type: none"> <li>Differential mode: ± 6 kV</li> <li>Common mode: ± 6 kV</li> </ul>   | <ul style="list-style-type: none"> <li>Differential mode: ± 6 kV</li> <li>Common mode: ± 6 kV</li> </ul>   | <ul style="list-style-type: none"> <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   | Air-cooled heat dissipation and intelligent speed adjustment   | Air-cooled heat dissipation and intelligent speed adjustment   |

| Item                   | CloudEngine S1730S-S24T4S-A                             | CloudEngine S1730S-S24P4S-A                             | CloudEngine S1730S-S48T4S-A                             | CloudEngine S1730S-S48P4S-A                             | CloudEngine S1730S-S24T4X-A                                |
|------------------------|---|---|---|---|--|
| Fixed port             | 24 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports | 24 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports | 48 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports | 48 x 10/100/1000Base-T Ethernet ports, 4 x GE SFP ports | 24 x 10/100/1000Base-T Ethernet ports, 4 x 10GE SFP+ ports |
| Dimensions (H x W x D) | 43.6 mm x 442 mm x 220 mm                               | 43.6 mm x 442 mm x 220 mm                               | 43.6 mm x 442 mm x 220 mm                               | 43.6 mm x 442 mm x 420 mm                               | 43.6 mm x 442 mm x 420 mm                                  |

| Item                      | CloudEngine S1730S-S24T4S-A   | CloudEngine S1730S-S24P4S-A  | CloudEngine S1730S-S48T4S-A  | CloudEngine S1730S-S48P4S-A  | CloudEngine S1730S-S24T4X-A  |
|---------------------------|---|--|--|--|--|
|                           | (1.72 in. x 17.40 in. x 8.66 in.)   | (1.72 in. x 17.40 in. x 8.66 in.)  | (1.72 in. x 17.40 in. x 8.66 in.)  | (1.72 in. x 17.40 in. x 16.54 in.)   | (1.72 in. x 17.40 in. x 16.54 in.)   |
| Chassis height            | 1U  | 1U   | 1U   | 1U   | 1U   |
| Power supply              | Built-in AC power   | Built-in AC power  | Built-in AC power  | 1000 W AC PoE  | Built-in AC power  |
| Rated voltage range       | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>   | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>  | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>  | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 130 V AC, 200 V AC to 240 V AC; 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>  | <ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>  |
| Maximum voltage range     | <ul style="list-style-type: none"> <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</li> </ul>  | <ul style="list-style-type: none"> <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</li> </ul>   | <ul style="list-style-type: none"> <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</li> </ul>   | <ul style="list-style-type: none"> <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</li> </ul>   | <ul style="list-style-type: none"> <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</li> </ul>   |
| Maximum power consumption | 34W   | <ul style="list-style-type: none"> <li>Without PoE: 53 W</li> <li>100% PoE loads: 451 W (PoE: 380 W)</li> </ul>  | 53W  | <ul style="list-style-type: none"> <li>Without PoE: 75 W</li> <li>100% PoE loads: 911 W (PoE: 874 W)</li> </ul>  | 43W  |
| Operating temperature     | <p>5°C to +45°C (23°F to 113°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> | <p>-5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> | <p>-5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> | <p>-5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> | <p>-5°C to +50°C (23°F to 122°F) at an altitude of 0-1800 m (0-5906 ft.)</p> <p><b>NOTE</b></p> <p>When the altitude is 1800-5000 m (5906-16404 ft.), the highest operating temperature reduces by 1°C (1.8°F) every time the altitude increases by 220 m (722 ft.).</p> |
| Storage temperature       | -40°C to +70°C (-40°F to +158°F)  |  |  |  |  |
| Relative humidity         | 5% to 95% (non-condensing)  |  |  |  |  |
| Surge protection          | ±7 kV in common mode  | ±7 kV in common mode   | ±7 kV in common mode   | ±7 kV in common mode   | ±7 kV in common mode   |



| Item  | CloudEngine S1730S-S24T4S-A  | CloudEngine S1730S-S24P4S-A  | CloudEngine S1730S-S48T4S-A  | CloudEngine S1730S-S48P4S-A  | CloudEngine S1730S-S24T4X-A  |
|---|--|--|--|--|--|
| specification (service port)                |  |  |  |  |  |
| Surge protection specification (power port) | <ul style="list-style-type: none"> <li>Differential mode: <math>\pm 6</math> kV</li> <li>Common mode: <math>\pm 6</math> kV</li> </ul> | <ul style="list-style-type: none"> <li>Differential mode: <math>\pm 6</math> kV</li> <li>Common mode: <math>\pm 6</math> kV</li> </ul> | <ul style="list-style-type: none"> <li>Differential mode: <math>\pm 6</math> kV</li> <li>Common mode: <math>\pm 6</math> kV</li> </ul> | <ul style="list-style-type: none"> <li>Differential mode: <math>\pm 6</math> kV</li> <li>Common mode: <math>\pm 6</math> kV</li> </ul> | <ul style="list-style-type: none"> <li>Differential mode: <math>\pm 6</math> kV</li> <li>Common mode: <math>\pm 6</math> kV</li> </ul> |
| Heat dissipation                            | Natural heat dissipation   | Air-cooled heat dissipation and intelligent speed adjustment   | Air-cooled heat dissipation and intelligent speed adjustment   | Air-cooled heat dissipation and intelligent speed adjustment   | Air-cooled heat dissipation and intelligent speed adjustment   |

## Service Features

### CloudEngine S1730S-S web-managed switches

| Item     | CloudEngine S1730S-S   |
|----------|--|
| Port     | VLAN/Voice VLAN<br>Port bridge<br>Jumbo frames<br>Detect link<br>Flow control auto-negotiation<br>Traffic statistics collection on interfaces<br>Interface rate auto-negotiation<br>VLANIF interfaces<br>MTU<br>Link aggregation<br>Static interface aggregation |
| Security | Port security<br>Sticky MAC<br>Suppressing broadcast, multicast, and unknown unicast traffic on interfaces<br>Controlling broadcast, multicast, and unknown unicast storms<br>Port isolation<br>IPSG<br>ARP security<br>CPU security protection                  |
| Ethernet | 4K VLANs<br>Access modes of access, trunk, hybrid, and QinQ<br>Interface-based VLAN assignment<br>Interface-based MAC address learning<br>Static MAC address entry<br>Automatic aging of MAC addresses   |
| STP      | STP (IEEE 802.1d)<br>RSTP (IEEE 802.1w)  |

| Item               | CloudEngine S1730S-S   |
|--------------------|--|
|                    | MSTP (IEEE 802.1s)   |
| Multicast          | Multicast VLAN<br>Layer 2 multicast policy<br>IGMP V1/V2/V3 snooping<br>MLD V1/V2 snooping<br>Static multicast MAC address   |
| Routing            | Dynamic routes<br>Static routes<br>ARP<br>ND<br>DNS client   |
| QoS                | CAR<br>Traffic policing<br>Traffic shaping<br>Priority mapping<br>Queue scheduling<br>Congestion avoidance<br>IPv4 and IPv6 ACL  |
| NAC                | DHCP client<br>DHCP relay<br>DHCP server<br>DHCP snooping<br>DHCPv6 relay<br>802.1X authentication<br>MAC address authentication<br>Portal authentication<br>Terminal type identification<br>AAA |
| Device management  | Web system network management<br>Dormancy of electrical interfaces<br>Automatic power adjustment on Ethernet interfaces (802.3az)<br>Intelligent upgrade   |
| Device maintenance | System log<br>Ping<br>Mirroring<br>Loopback detection<br>Virtual Cable Test (VCT)<br>Link Layer Discovery Protocol (LLDP)<br>NTP   |

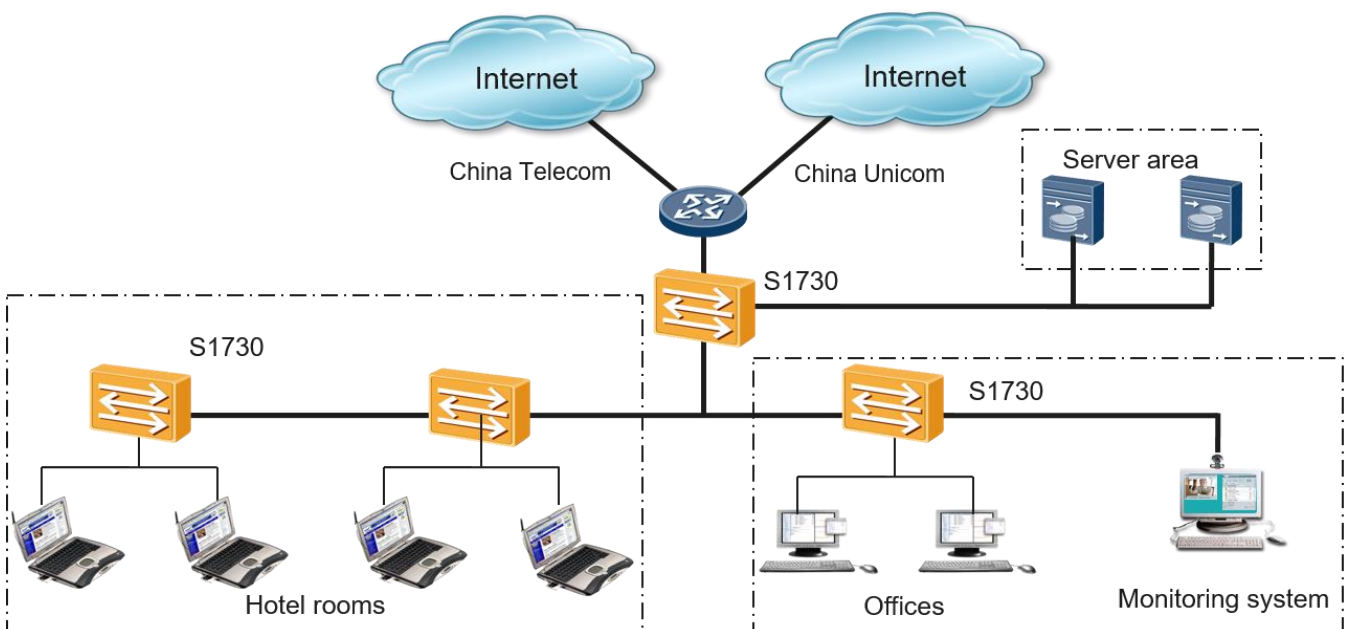
| Item     | CloudEngine S1730S-H  |
|----------|---|
| Port     | VLAN/Voice VLAN<br>Port bridge<br>Jumbo frames<br>Detect link<br>Flow control auto-negotiation<br>Traffic statistics collection on interfaces<br>Interface rate auto-negotiation<br>VLANIF interfaces<br>MTU<br>Link aggregation<br>Static interface aggregation  |
| Security | Hardware ACL<br>Packet filtering based on MAC addresses<br>MAC address authentication<br>Port-based 802.1X authentication.<br>RADIUS authentication<br>Portal authentication<br>Port isolation<br>Storm suppression<br>Attack defense, which prevents broadcast traffic, ARP attacks, ICMP attacks, TCP attacks, worm viruses, and DoS attacks<br>DHCP snooping<br>Port security<br>Suppressing broadcast, multicast, and unknown unicast traffic on interfaces<br>Controlling broadcast, multicast, and unknown unicast storms<br>IPSG<br>ARP defense<br>CPU security protection<br>Attack defense |
| VLAN     | 4K VLANs<br>Access modes of access, trunk, hybrid, and QinQ<br>Interface-based VLAN assignment<br>Interface-based MAC address learning<br>Static MAC address entry<br>Automatic aging of MAC addresses  |
| QoS      | CAR<br>Traffic policing<br>Traffic shaping<br>Priority mapping<br>Congestion avoidance<br>IPv4/IPv6 ACL<br>PQ scheduling, WRR scheduling, and hybrid scheduling   |

| Item                   | CloudEngine S1730S-H   |
|------------------------|--|
|                        | Eight queues on each interface<br>DiffServ domain  |
| STP                    | STP (IEEE 802.1d)<br>RSTP (IEEE 802.1w)<br>MSTP (IEEE 802.1s)  |
| Multicast              | Multicast VLAN<br>Layer 2 multicast policy<br>IGMP V1/V2/V3 snooping<br>MLD V1/V2 snooping<br>Static multicast MAC address   |
| VPN                    | IPv4/IPv6 VPN<br>IPsec<br>Efficient VPN  |
| Routing                | Dynamic routes<br>Static routes<br>ARP<br>ND<br>DNS client   |
| NAC                    | DHCP client<br>DHCP relay<br>DHCP server<br>DHCP snooping<br>DHCPv6 relay<br>802.1X authentication<br>MAC address authentication<br>Portal authentication<br>Terminal type identification<br>RADIUS<br>PPPoE+<br>ND snooping |
| Ethernet OAM           | Y.1731<br>802.1ag<br>802.3ah   |
| Ring network protocols | Smart Link<br>SEP<br>RRPP<br>MSTP<br>ERPS<br>DLDP<br>VBST  |
| IP OAM & SLA           | NQA<br>eMDI  |

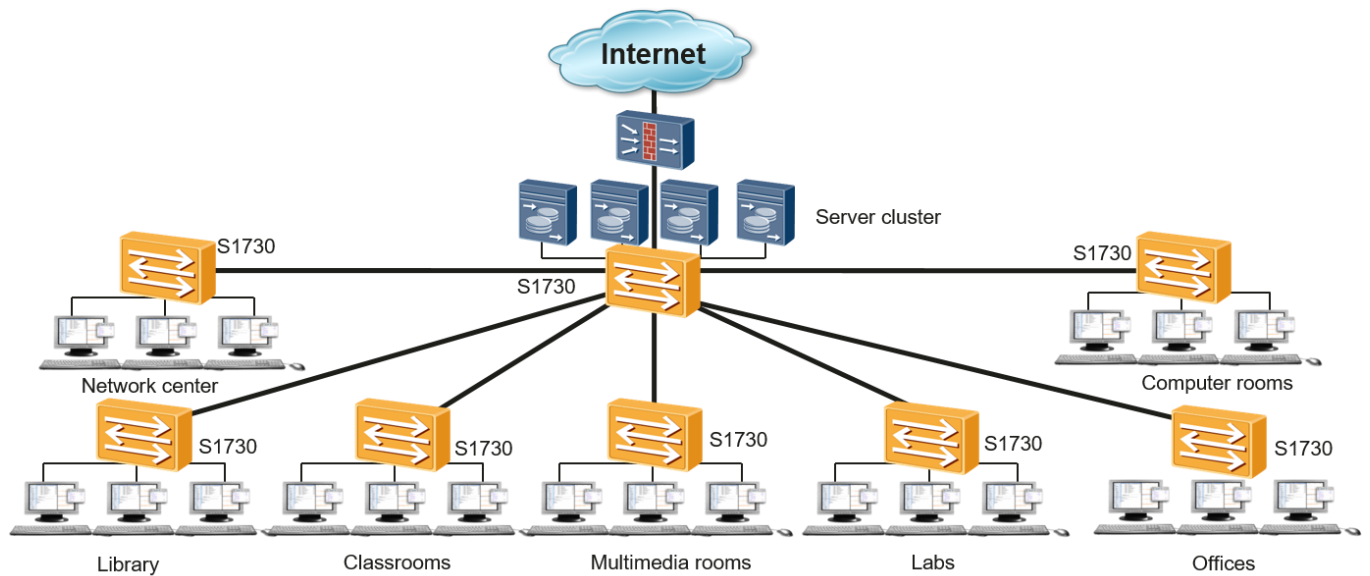
| Item               | CloudEngine S1730S-H  |
|--------------------|---|
| Device management  | SNMP<br>Web system network management<br>DHCP client<br>User password protection<br>One-click restoration<br>CLI configuration<br>USB-based deployment<br>Dormancy of electrical interfaces<br>Automatic power adjustment on Ethernet interfaces (802.3az)<br>Intelligent upgrade |
| Device maintenance | Remote network monitoring (RMON)<br>System log<br>Ping<br>Mirroring<br>Loopback detection<br>Virtual Cable Test (VCT)<br>Link Layer Discovery Protocol (LLDP)<br>NTP  |

## Networking and Applications

### Hotel Scenarios



## School Scenarios



## Ordering Information

The following table lists ordering information of the CloudEngine S1730S series switches.

| Model                        | Product Description   |
|------------------------------|---|
| CloudEngine S1730S-H24T4S-A  | CloudEngine S1730S-H24T4S-A (24*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)        |
| CloudEngine S1730S-H48T4S-A  | CloudEngine S1730S-H48T4S-A (48*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)        |
| CloudEngine S1730S-S8T4S-A1  | CloudEngine S1730S-S8T4S-A1 (8*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)         |
| CloudEngine S1730S-S8P4S-A1  | CloudEngine S1730S-S8P4S-A1 (8*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power)   |
| CloudEngine S1730S-S24T4S-A1 | CloudEngine S1730S-S24T4S-A1 (24*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)       |
| CloudEngine S1730S-S24P4S-A1 | CloudEngine S1730S-S24P4S-A1 (24*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power) |
| CloudEngine S1730S-S24T4X-A1 | CloudEngine S1730S-S24T4X-A1 (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power)    |
| CloudEngine S1730S-S48T4S-A1 | CloudEngine S1730S-S48T4S-A1 (48*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)       |
| CloudEngine S1730S-S48P4S-A1 | CloudEngine S1730S-S48P4S-A1 (48*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power) |
| CloudEngine S1730S-S48T4X-A1 | CloudEngine S1730S-S48T4X-A1 (48*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power)    |
| CloudEngine S1730S-S24T4S-A  | CloudEngine S1730S-S24T4S-A (24*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)        |
| CloudEngine S1730S-S24P4S-A  | CloudEngine S1730S-S24P4S-A (24*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, AC power)  |

| Model                       | Product Description  |
|-----------------------------|--|
| CloudEngine S1730S-S24T4X-A | CloudEngine S1730S-S24T4X-A (24*10/100/1000BASE-T ports, 4*10GE SFP+ ports, AC power)                |
| CloudEngine S1730S-S48T4S-A | CloudEngine S1730S-S48T4S-A (48*10/100/1000BASE-T ports, 4*GE SFP ports, AC power)                   |
| CloudEngine S1730S-S48P4S-A | CloudEngine S1730S-S48P4S-A (48*10/100/1000BASE-T ports, 4*GE SFP ports, PoE+, 1*1000W PoE AC power) |

## 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](mailto:support_e@huawei.com)

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