

# CloudEngine S6730-H Series 10GE Switches

Huawei CloudEngine S6730-H series 10GE switches are next-generation enterprise-class core and aggregation switches that provide 10GE downlink optical ports and 100GE uplink optical ports.

# **Product Overview**

Huawei CloudEngine S6730-H series switches are next-generation enterprise-class core and aggregation switches that offer high performance, high reliability, cloud management, and intelligent operations and maintenance (O&M). They build on an industry-leading Versatile Routing Platform (VRP) and are purpose-built with security, IoT, and cloud in mind. With these traits, CloudEngine S6730-H can be widely used in enterprise campuses, colleges/universities, data centers, and other scenarios.

CloudEngine S6730-H switches offer 10GE, 25GE, 40GE, and 100GE port types, flexibly adapting to diversified network bandwidth requirements. They also support cloud management and implement cloud-managed network services throughout the full lifecycle from planning, deployment, monitoring, experience visibility, and fault rectification, all the way to network optimization, greatly simplifying network management.

By integrating the native wireless access controller (WAC) capability, a single CloudEngine S6730-H switch can manage a vast number of wireless access points (APs). The results are simplified network architecture, fewer required devices, and lowered networking costs. Free mobility, another key differentiator of CloudEngine S6730-H, enables consistent user experience no matter the user location or IP address, fully meeting enterprises' demands for mobile offices.

CloudEngine S6730-H switches support VXLAN to implement network virtualization, achieving multi-purpose networks and multi-network convergence for greatly improved network capacity and utilization. As such, CloudEngine S6730-H switches are an ideal choice for building next-generation IoT converged networks in terms of cost, flexibility, and scalability.

The full series of CloudEngine S6730-H switches have built-in security probes to enable abnormal traffic detection, analysis of threats even in encrypted traffic, and network-wide threat deception. With such robust security features, CloudEngine S6730-H switches transform traditional passive security defense into proactive security protection, fully ensuring campus network security.

# **Models and Appearance**

# Appearance • 48 x 10 Gig SFP+, 6 x 40/100 Gig QSFP28 • Dual pluggable power modules, 1+1 power backup • Switching capacity: 2.16Tbps/2.4Tbps NOTE 100GE QSFP28 interfaces support 40GE and 100GE optical module auto-sensing. A QSFP28 optical port cannot be split into four 10GE ports, regardless of whether the port uses a QSFP28 or QSFP+ optical module. The default uplink port is 40GE, which needs to be upgraded to 100GE through the license.

| Appearance                 | Description  |
|----------------------------|--|
|                            | The value before the slash (/) refers to the device's switching capability, while the value after the slash (/) means the chip's switching capability. |
|                            | • 24 x 10 Gig SFP+, 6 x 40/100 Gig QSFP28  |
|                            | Dual pluggable power modules, 1+1 power backup   |
| CloudEngine S6730-H24X6C   | Switching capacity: 1.68Tbps/2.4Tbps   |
|                            | NOTE   |
|                            | 100GE QSFP28 interfaces support 40GE and 100GE optical module auto-sensing.  |
|                            | A QSFP28 optical port cannot be split into four 10GE ports, regardless of whether the port uses a QSFP28 or QSFP+ optical module.                      |
|                            | The default uplink port is 40GE, which needs to be upgraded to 100GE through the license.  |
|                            | The value before the slash (/) refers to the device's switching capability, while the value after the slash (/) means the chip's switching capability. |
| de stants                  | • 24 x 10 Gig SFP+, 4 x 25 Gig SFP28, 4 x 100 Gig QSFP28   |
|                            | Dual pluggable power modules, 1+1 power backup   |
| CloudEngine S6730-H24X4Y4C | Switching capacity: 1.48Tbps/2.4Tbps   |
|                            | NOTE   |
|                            | 25GE SFP28 interfaces support 10GE and 25GE optical module auto-sensing.   |
|                            | 100GE QSFP28 interfaces support 40GE and 100GE optical module auto-sensing.  |
|                            | A QSFP28 optical port cannot be split into four 10GE ports, regardless of whether the port uses a QSFP28 or QSFP+ optical module.                      |
|                            | The default uplink port is 100GE.  |
|                            | The value before the slash (/) refers to the device's switching capability, while the value after the slash (/) means the chip's switching capability. |

# **Features and Highlights**

# **Abundant Convergence**

- This CloudEngine S6730-H series provides the integrated WLAN AC function that can manage 1K APs, reducing the costs of purchasing additional WLAN AC hardware. With this switch series, customers can stay ahead in the high-speed wireless era.
- The CloudEngine S6730-H series supports SVF and functions as a parent switch. With this virtualization technology, a physical network with the "Small-sized core and aggregation switches + Access switches + APs" structure can be virtualized into a "super switch", greatly simplifying network management.
- The CloudEngine S6730-H series provides excellent QoS capabilities and supports queue scheduling and congestion control algorithms. Additionally, it adopts innovative priority queuing and multi-level scheduling mechanisms to implement finegrained scheduling of data flows, meeting service quality requirements of different user terminals and services.

### **Providing Granular Network Management**

- The CloudEngine S6730-H series uses the Packet Conservation Algorithm for Internet (iPCA) technology that alters the traditional method of using simulated traffic for fault location. iPCA technology can monitor network quality for any service flow anywhere, anytime, without extra costs. It can detect temporary service interruptions in a very short time and can identify faulty ports accurately. This cutting-edge fault detection technology turns "extensive management" to "granular management."
- The CloudEngine S6730-H supports Two-Way Active Measurement Protocol (TWAMP) to accurately check any IP link and obtain the entire network's IP performance. This protocol eliminates the need of using a dedicated probe or a proprietary protocol.

# **Flexible Ethernet Networking**

- In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), the CloudEngine S6730-H 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 service switching within 50 milliseconds. ERPS is defined in ITU-T G.8032. It implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.
- The CloudEngine S6730-H supports Smart Link and Virtual Router Redundancy Protocol (VRRP), which implement backup of uplinks. One CloudEngine S6730-H switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.

# Intelligent Stack (iStack)

• The CloudEngine S6730-H series supports the iStack function that 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 a stack's ports, bandwidth, and processing capability by simply adding member switches. iStack also simplifies device configuration and management. After a stack is set up, multiple physical switches can be virtualized into one logical device. You can log in to any member switch in the stack to manage all the member switches in it.

# **Cloud-based 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).

### **VXLAN Features**

- VXLAN is used to construct a Unified Virtual Fabric (UVF). As such, multiple service networks or tenant networks can be deployed on the same physical network, and service and tenant networks are isolated from each other. This capability truly achieves 'one network for multiple purposes'. The resulting benefits include enabling data transmission of different services or customers, reducing the network construction costs, and improving network resource utilization.
- This series switches are VXLAN-capable and allow centralized and distributed VXLAN gateway deployment modes. These switches also support the BGP EVPN protocol for dynamically establishing VXLAN tunnels and can be configured using NETCONF/YANG.

# **Clock Synchronization**

• CloudEngine S6730-H48X6C and CloudEngine S6730-H24X6C models supports the IEEE 1588v2 protocol, which implements low-cost, high-precision, and high-reliability time and clock synchronization. This feature can meet strict requirements of power and transportation industry customers on time and clock synchronization.

# **Link Layer Security**

• CloudEngine S6730-H24X4Y4C models support MACsec. MACsec protects transmitted Ethernet data frames through identity authentication, data encryption, integrity check, and anti-replay protection, reducing the risks of information leakage and malicious network attacks. With MACsec, these switch models are able to address strict information security requirements of customers in industries such as government and finance.

# **Intelligent O&M**

- This series switches provides telemetry technology to collect device data in real time and send the data to Huawei campus network analyzer(iMaster NCE-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.
- This series switches 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**

- 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.

# **Big Data-Powered Collaborative Security**

- This series of switches supports encrypted communication analytics (ECA), a traffic identification and detection technology. ECA can precisely detect malicious traffic by efficiently identifying encrypted and non-encrypted traffic, extracting the characteristics of encrypted traffic, and sending these characteristics to HiSec Insight (a big data-powered security analysis system). Furthering to this, ECA-capable switches can work with the controller iMaster NCE-Campus to automatically isolate threats, thereby ensuring campus network security.
- This series of switches also supports network deception technology. Specifically, switches functioning as sensors can detect threats (such as IP address scanning and port scanning on the network) and lure threat traffic to the honeypot for simulated interaction with attackers. In this way, it is easy to obtain attack behaviors, extract attack tools, and analyze suspicious traffic in depth to create defense policies. Switches then work with iMaster NCE-Campus to automatically isolate threats and block the spread of attack behaviors, ensuring campus network security.

# **Open Programmability System(OPS)**

• Open Programmability System (OPS) is an open programmable system based on the Python language. IT administrators can program the O&M functions of a switch through Python scripts to quickly innovate functions and implement intelligent O&M.

# Licensing

# Licensing

This series switches 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:   | √                    | √                                 | √                                  |
| Layer 2 functions, IPv4, IPv6, MPLS, SVF, and others                                 |                      |                                   |                                    |
| Note: For details, see the Service Features  |                      |                                   |                                    |
| Basic network automation based on the iMaster NCE-Campus:                            | ×                    | $\checkmark$                      | √                                  |
| Basic automation: Plug-and-play, SSID, and AP group management                       |                      |                                   |                                    |
| Basic monitoring: Application visualization  |                      |                                   |                                    |
| NE management: Image and topology management and discovery                           |                      |                                   |                                    |
| <ul> <li>WLAN enhancement: Roaming and optimization for<br/>up to 128 APs</li> </ul> |                      |                                   |                                    |
| Advanced network automation and intelligent O&M:                                     | ×                    | ×                                 | √                                  |
| VXLAN, user access authentication, free mobility, and                                |                      |                                   |                                    |

| Switch Functions              | N1 Basic<br>Software | N1 Foundation<br>Software Package | N1 Advanced<br>Software<br>Package |
|-------------------------------|----------------------|-----------------------------------|------------------------------------|
| CampusInsight basic functions |                      |                                   |                                    |

Note: Only V200R019C00 and later versions can support N1 mode

# **Product Specifications**

| Item   | CloudEngine S6730-<br>H48X6C  | CloudEngine S6730-<br>H24X6C               | CloudEngine S6730-<br>H24X4Y4C   |
|--|---|--|--|
| Fixed ports  | 48 x 10 Gig SFP+, 6 x 40/100<br>Gig QSFP28  | 24 x 10 Gig SFP+, 6 x 40/100<br>Gig QSFP28 | 24 x 10 Gig SFP+, 4 x 25 Gig<br>SFP28, 4 x 100 Gig QSFP28  |
| Dimensions (H x W x D)   | 43.6 mm x 442.0 mm x 420.0<br>mm (1.72 in. x 17.4 in. x 16.5<br>in.)  43.6 mm x 442.0 mm x 420.0<br>mm (1.72 in. x 17.4 in. x 16.5<br>in.)  |  | 43.6 mm x 220.0 mm x 420.0 mm (1.72 in. x 8.7 in. x 16.5 in.)  |
| Chassis height(U)  | 1U  | 1U   | 1U   |
| Rated voltage range  | <ul> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-Voltage DC input: 240 V DC</li> <li>DC input: -48 V DC to -60 V DC</li> </ul>   |  | <ul> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-Voltage DC input: 240 V DC</li> <li>DC input: -48 V DC to -60 V DC</li> </ul>                    |
| Maximum voltage range  | <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</li> <li>DC input: -38.4 V DC to -72 V DC</li> </ul>  |  | <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</li> <li>DC input: -38.4 V DC to -72 V DC</li> </ul> |
| Maximum input current  | <ul><li>AC 600W: 8A</li><li>DC 1000W: 30A</li></ul>   |  | <ul><li>AC 300W: 4A</li><li>DC 260W: 10A</li></ul>   |
| Typical power<br>consumption (30%<br>of traffic load, tested<br>according to ATIS<br>standard) | 165 W 149 W   |  | 186 W  |
| Maximum power<br>consumption (100%<br>throughput, full<br>speed of fans)                       | 291 W   | 254 W                                      | 253 W  |
| Operating temperature  | -5°C to +45°C (23°F to 113°F) at an altitude of 0-1800 m (0-5906 ft.)  NOTE  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.).  The switch cannot be started when the ambient temperature is lower than 0°C (32°F). |  |  |
| Storage temperature  | -40°C to +70°C (-40°F to +158°F)  |  |  |
| Operating altitude   | 0-5000 m (0-16404 ft.)  |  |  |

| Item   | CloudEngine S6730-<br>H48X6C   | CloudEngine S6730-<br>H24X6C | CloudEngine S6730-<br>H24X4Y4C  |
|--|--|------------------------------|---|
| Noise (sound pressure at normal temperature) | < 65 dB(A)   |                              | < 64.5 db(A)  |
| Power supply surge protection                | <ul> <li>Using AC power modules: ±6 kV in differential mode, ±6 kV in common mode</li> <li>Using DC power modules: ±2 kV in differential mode, ±4 kV in common mode</li> </ul>   |                              |   |
| Power supply type                            | <ul> <li>Using DC power modules: ±2 kV in differential mode, ±4 kV in comparison of the comparison</li></ul> |                              | 300 W AC Power Module     260 W DC Power Module  NOTE  The S6730-H can use a single power module or double power modules for 1+1 power redundancy. Pluggable AC and DC power modules can be used together in the same switch. |
| Relative humidity                            | 5% to 95%, noncondensing   |                              |   |
| Fans   | 4, Fan modules are pluggable   |                              | 3, Built-in fan   |
| Heat dissipation                             | Heat dissipation with fan, intelligent fan speed adjustment  |                              |   |

# **Service Features**

Except for special instructions, the following features are supported by CloudEngine S6730-H with N1 basic software.

| Feature          | Description  |
|------------------|--|
| MAC              | Up to 384K MAC address entries IEEE 802.1d standards compliance MAC address learning and aging Static, dynamic, and blackhole MAC address entries Packet filtering based on source MAC addresses |
| VLAN             | 4K VLANs Guest VLANs and voice VLANs GVRP MUX VLAN VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and ports VLAN mapping   |
| ARP              | Static ARP Dynamic ARP   |
| IP routing       | Static routes, RIP v1/2, RIPng, OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGP4+, ECMP, routing policy Up to 256K FIBv4 entries Up to 80K FIBv6 entries  |
| Interoperability | VLAN-Based Spanning Tree (VBST), working with PVST, PVST+, and RPVST Link-type Negotiation Protocol (LNP), similar to DTP  |

| Feature                     | Description   |
|-----------------------------|---|
|                             | VLAN Central Management Protocol (VCMP), similar to VTP   |
| Wireless service            | AP access control, AP domain management, and AP configuration template management Radio management, unified static configuration, and dynamic centralized management WLAN basic services, QoS, security, and user management CAPWAP, tag/terminal location, and spectrum analysis   |
| Ethernet loop<br>protection | RRPP ring topology and RRPP multi-instance  Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protection switchover  SEP  ERPS (G.8032)  BFD for OSPF, BFD for IS-IS, BFD for VRRP, and BFD for PIM  STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s)  BPDU protection, root protection, and loop protection   |
| MPLS                        | MPLS L3VPN MPLS L2VPN (VPWS/VPLS) MPLS-TE MPLS QoS  |
| IPv6 features               | Neighbor Discover (ND)  PMTU  IPv6 Ping, IPv6 Tracert, IPv6 Telnet  ACLs based on source IPv6 addresses, destination IPv6 addresses, Layer 4 ports, or protocol types  Multicast Listener Discovery snooping (MLDv1/v2)  IPv6 addresses configured for sub-interfaces, VRRP6, DHCPv6, and L3VPN   |
| Multicast                   | IGMP v1/v2/v3 snooping and IGMP fast leave  Multicast forwarding in a VLAN and multicast replication between VLANs  Multicast load balancing among member ports of a trunk  Controllable multicast  Port-based multicast traffic statistics  IGMP v1/v2/v3, PIM-SM, PIM-DM, and PIM-SSM  MSDP  Multicast VPN  |
| QoS/ACL                     | Rate limiting in the inbound and outbound directions of a port  Packet redirection  Port-based traffic policing and two-rate three-color CAR  Eight queues on each port  DRR, SP, and DRR+SP queue scheduling algorithms  WRED  Re-marking of the 802.1p and DSCP fields of packets  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/destination port number, protocol type, and VLAN ID  Queue-based rate limiting and shaping on ports |
|                             | Hierarchical user management and password protection  |

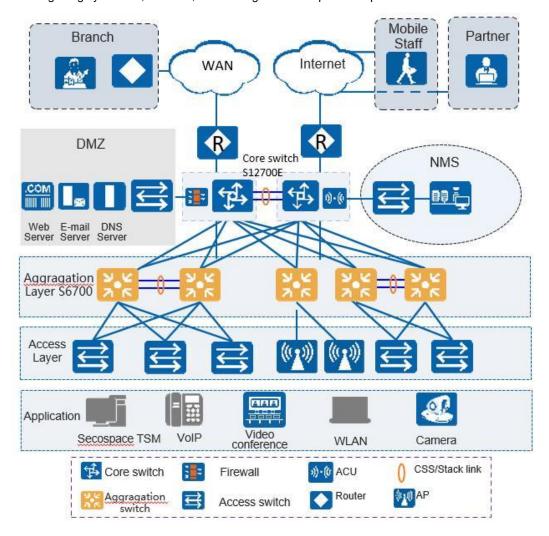
| Feature        | Description  |
|----------------|--|
|                | DoS attack defense, ARP attack defense, and ICMP attack defense  |
|                | Binding of the IP address, MAC address, port number, and VLAN ID   |
|                | Port isolation, port security, and sticky MAC  |
|                | MAC Forced Forwarding (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 a port  |
|                | AAA authentication, RADIUS authentication, and HWTACACS authentication   |
|                | NAC  |
|                | SSH V2.0   |
|                | HTTPS  |
|                | CPU protection   |
|                | Blacklist and whitelist  |
|                | Attack source tracing and punishment for IPv6 packets such as ND, DHCPv6, and MLD packets                      |
|                | IPSec for management packet encryption   |
|                | ECA  |
|                | Deception  |
|                | MACSec(Supported by the CloudEngine S6730-H24X4Y4C models)   |
| Reliability    | LACP   |
|                | E-Trunk  |
|                | Ethernet OAM (IEEE 802.3ah and IEEE 802.1ag)   |
|                | ITU-Y.1731   |
|                | DLDP   |
|                | LLDP   |
|                | BFD for BGP, BFD for IS-IS, BFD for OSPF, BFD for static routes  |
| VXLAN          | VXLAN L2 and L3 gateways   |
|                | Centralized and distributed gateway  |
|                | BGP-EVPN   |
|                | Configured through the NETCONF protocol  |
| SVF            | Acting as the parent node to vertically virtualize downlink switches and APs as one device for                 |
|                | management   |
|                | Two-layer client architecture  |
|                | ASs can be independently configured. Services not supported by templates can be configured on the parent node. |
|                | Third-party devices allowed between SVF parent and clients   |
| :DCA           |  |
| iPCA           | Marking service packets to obtain the packet loss ratio and number of lost packets in real time                |
|                | Measurement of the number of lost packets and packet loss ratio on networks and devices                        |
| Management and | Cloud-based management   |
| maintenance    | Virtual cable test   |
|                | SNMP v1/v2c/v3   |
|                | RMON   |
|                | Web-based NMS  |
|                | System logs and alarms of different severities   |
|                | GVRP   |

| Feature | Description |
|---------|-------------|
|         | MUX VLAN    |
|         | NetStream   |
|         | Telemetry   |

# **Networking and Applications**

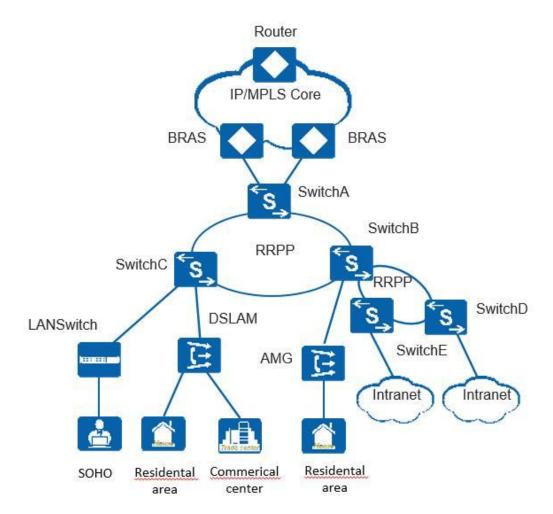
# **Large-scale Enterprise Campus Network**

CloudEngine S6730-H series switches can be deployed at the aggregation layer of a large-scale enterprise campus network, creating a highly reliable, scalable, and manageable enterprise campus network.



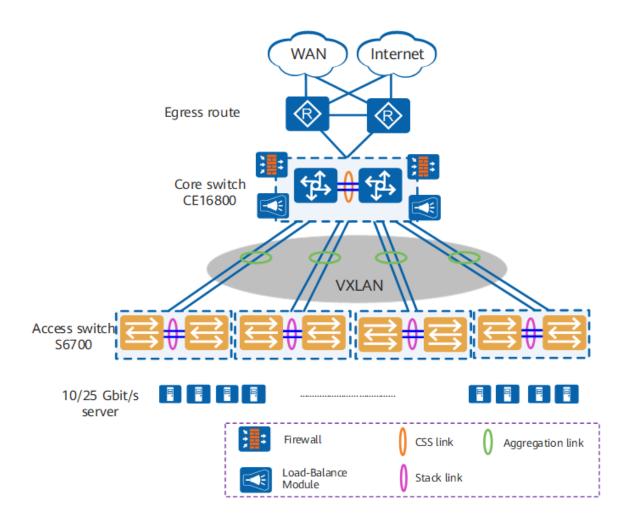
# **Application on a MAN**

CloudEngine S6730-H 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.



# **Data Center**

CloudEngine S6730-H switches can be deployed at the access layer build a virtualized, highly reliable, non-blocking, and energy conservative data center network.



# **Ordering Information**

The following table lists ordering information of the CloudEngine S6730-H series switches.

| Model                          | Product Description  |
|--------------------------------|--|
| CloudEngine S6730-<br>H48X6C   | S6730-H48X6C (48*10GE SFP+ ports, 6*40GE QSFP28 ports, optional license for upgrade to 6*100GE QSFP28, without power module) |
| CloudEngine S6730-<br>H24X6C   | S6730-H24X6C (24*10GE SFP+ ports, 6*40GE QSFP28 ports, optional license for upgrade to 6*100GE QSFP28, without power module) |
| CloudEngine S6730-<br>H48X6C   | S6730-H48X6C Bundle (48*10GE SFP+ ports, 6*40GE/100GE QSFP28 ports, with 100G license, without power module)                 |
| CloudEngine S6730-<br>H24X6C   | S6730-H24X6C Bundle (24*10GE SFP+ ports, 6*40GE/100GE QSFP28 ports, with 100G license, without power module)                 |
| CloudEngine S6730-<br>H24X4Y4C | S6730-H24X4Y4C (24*10GE SFP+ ports, 4*25GE SFP28 ports, 4*40GE/100GE QSFP28 ports, without power module)                     |
| PAC600S12-CB                   | 600W AC power module (for S6730-H48X6C/S6730-H24X6C series models)   |
| PDC1000S12-DB                  | 1000W DC power module (for S6730-H48X6C/S6730-H24X6C series models)  |
| PAC300S12-CL                   | 300W AC power module (for S6730-H24X4Y4C series models)  |
| PDC260S12-DL                   | 260W DC power module (for S6730-H24X4Y4C series models)  |

| License                    | Product Description   |
|----------------------------|---|
| N1-S67H-M-Lic              | S67XX-H Series Basic SW,Per Device  |
| N1-S67H-M-SnS1Y            | S67XX-H Series Basic SW,SnS,Per Device,1Year  |
| L-100GEUPG-S67H            | S67XX-H Series,40GE to 100GE Electronic RTU License,Per Device  |
| L-VxLAN-S67                | S67 Series, VxLAN License, Per Device   |
| L-1AP-S67                  | S67 Series, Wireless Access Controller AP Resource License-1AP  |
| N1-S67H-F-Lic              | N1-CloudCampus,Foundation,S67XX-H Series,Per Device   |
| N1-S67H-F-SnS              | N1-CloudCampus,Foundation,S67XX-H Series,SnS,Per Device   |
| N1-S67H-A-Lic              | N1-CloudCampus,Advanced,S67XX-H Series,Per Device   |
| N1-S67H-A-SnS              | N1-CloudCampus,Advanced,S67XX-H Series,SnS,Per Device   |
| N1-S67H-FToA-Lic           | N1-Upgrade-Foundation to Advanced,S67XX-H,Per Device  |
| N1-S67H-FToA-SnS           | N1-Upgrade-Foundation to Advanced,S67XX-H,SnS,Per Device  |
| N1-AM-30-Lic               | N1-CloudCampus, Add-On Package, Access Management, Per 30 Endpoints   |
| N1-AM-30-SnS1Y             | N1-CloudCampus, Add-On Package, Access Management, Software Subscription and Support, Per 30 Endpoints, 1 Year                                  |
| N1-EPNP-30-Lic             | N1-CloudCampus, Add-On Package, Endpoints Plug and Play, Per 30 Endpoints   |
| N1-EPNP-30-SnS1Y           | N1-CloudCampus, Add-On Package, Endpoints Plug and Play, Software Subscription and Support, Per 30 Endpoints, 1 Year                            |
| N1-APP-X7FSwitch           | N1-CloudCampus, Add-On Package, Intelligent Application Analysis, X7 Series Fixed Switch, Per Device  |
| N1-APP-X7FSwitch-<br>SnS1Y | N1-CloudCampus, Add-On Package, Intelligent Application Analysis, X7 Series Fixed Switch, Software Subscription and Support, Per Device, 1 Year |

# **More Information**

For more information about Huawei Campus Switches, visit http://e.huawei.com or contact us in the following ways:

- Global service hotline: http://e.huawei.com/en/service-hotline
- Logging in to the Huawei Enterprise technical support website: http://support.huawei.com/enterprise/
- Sending an email to the customer service mailbox: support\_e@huawei. com

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