AO
Tribunal de Justiça do Estado do Amazonas - TJAM
Av. André Araújo, s/nº, Aleixo Manaus/AM CEP: 69000-060
A/C: Sr(a). Pregoeiro(a) e Equipe de Apoio

Ref. **Pregão:** 042/2019-TJAM
Data de Abertura: 26/09/2019 às 09h30min
Objeto: Registro de preços para eventual fornecimento de ativos de rede, incluindo switches, conversores ópticos e aplicativos de interconectividade, para atender ao Tribunal de Justiça do Amazonas, por um período de 12 (doze) meses, conforme especificações e condições definidas no Termo de Referência deste Edital.

Formulário de Proposta de Preços

RAZÃO SOCIAL: 3CORP TECHNOLOGY S/A INFRAESTRUTURA DE TELECOM					
CNPJ: 04.238.297/0001-89					
TELEFONES: (11) 3056-7733/7735					
ENDEREÇO: AV. Doutor Tácito Vianna Rodrigues, Galpão "7", Paraíso, Resende/RJ - CEP:27.536-025					
BANCO	BANCO DO BRASIL - 001	**AGÊNCIA**	3348-0	**C/C**	61868-3

ITEM	DESCRIÇÃO	MARCA/ MODELO/ FABRICANTE	UNID	QTDE	VALOR UNITÁRIO R$	VALOR TOTAL R$
1	Switch de Acesso 24 Portas 10/100/1000 Mbps, uplink 1 Gbps, conforme especificações técnicas constantes no item 6.1 deste Termo de Referência	Marca/Fabricante: HUAWEI -Modelo: S5720-28P-LI-AC	UND	100	R$ 3.000,00	R$ 300.000,00
2	Switch de Acesso 48 Portas 10/100/1000 Mbps, uplink 1 Gbps, conforme especificações técnicas constantes no item 6.2 deste Termo de Referência	Marca/Fabricante: HUAWEI - Modelo: S5720-52P-LI-AC	UND	100	R$ 4.498,00	R$ 449.800,00

3	Switch de Acesso 48 Portas 10/100/1000 Mbps, uplink 1 Gbps, PoE+, conforme especificações técnicas constantes no item 6.3 deste Termo de Referência	Marca/Fabricante: HUAWEI - Modelo: S5720-52P-PWR-LI-AC	UND	100	R$	6.000,00	R$	600.000,00
4	Switch de Distribuição 48 Portas 10/100/1000 Mbps, 8 portas uplink 1 Gbps	Marca/Fabricante: HUAWEI - Modelo: S6730-H48X6C	UND	20	R$	23.774,00	R$	475.480,00
5	Conversor Óptico - Transceiver – MiniGbic SFP 1GbE, para conexão aos equipamentos dos itens 1, 2 e 3	Marca/Fabricante: HUAWEI - Modelo: S5700 Spares	UND	200	R$	600,00	R$	120.000,00
6	Conversor Óptico - Transceiver – MiniGbic SFP+ 10GbE, para conexão aos equipamentos dos itens 1, 2 e 3	Marca/Fabricante: HUAWEI - Modelo: S5700 Spares	UND	40	R$	1.300,00	R$	52.000,00
7	Licença de 2x10 Gbps, para gerenciamento dos equipamentos dos itens 1, 2 e 3	-	UND	200	R$	1.200,00	R$	240.000,00
8	Licença de empilhamento de 2x10 Gbps, para gerenciamento dos equipamentos dos itens 1, 2 e 3	-	UND	200	R$	1.400,00	R$	280.000,00
9	Licença de 2x 10 Gbps, para gerenciamento dos equipamentos do item 4	-	UND	20	R$	4.409,00	R$	88.180,00
10	Licença de 6x 10 Gbps, para gerenciamento dos equipamentos do item 4	-	UND	20	R$	3.077,00	R$	61.540,00
					TOTAL GLOBAL		**R$**	**2.667.000,00**

Valor por extenso: R$ 2.667.000,00 (dois milhões seiscentos e sessenta e sete mil reais)

Validade da proposta: 60 (sessenta) dias, conforme edital

Observação: Estão inclusos nos preços supramencionados todos os custos diretos e indiretos, inclusive de embalagens, transportes ou fretes, e ainda os resultantes da incidência de quaisquer tributos, contribuições ou obrigações decorrentes da legislação trabalhista, fiscal e previdenciária a que estiver sujeito.

Prazo para entrega: 45 (quarenta e cinco) dias, a partir do recebimento da Nota de Empenho, conforme edital.

Local para entrega: Divisão de Patrimônio e Material, localizado no térreo do Fórum Ministro Henoch Reis, na Av. Paraíba, s/n., São Francisco, Manaus/AM, CEP 69079-265, conforme solicitado

Link dos Catálogos:
https://support.huawei.com/hedex/hdx.do?docid=EDOC1100101074&lang=en&idPath=24030814%7C21782164%7C21782167%7C22318564%7C22347278

Parceiro de Vendas e Serviços Huawei: https://e.huawei.com/br/partner/find-a-partner

Vigência da Ata de Registro de Preços: 12 (doze) meses, a contar da assinatura, conforme edital

Dados da Empresa

Razão Social: **3CORP TECHNOLOGY S/A INFRAESTRUTURA DE TELECOM**

CNPJ/MF: **04.238.297/0001-89** Tel/Fax: **(11) 3056-7733/7735**

Endereço: **AV. Doutor Tácito Vianna Rodrigues, Galpão "7", Paraíso** CEP: **27.536-025** Cidade: **Resende**

UF: **RJ**

Endereço Eletrônico (e-mail): **Governo@3corp.com.br**

Banco: **Banco do Brasil - 001** Agência: **3348-0** C/C: **61868-3**

Dados do Representante Legal, responsável pela assinatura do Contrato

Nome: **Giuseppe Forestiero**

Função: **Presidente/Diretor**

CPF: **989.128.018-72**

Telefone/Fax: **(11) 3056-7733/7735**

Endereço Eletrônico: **Governo@3corp.com.br**

Nome: **Rodrigo Rosário Cavalcante**

Função: **Diretor**

CPF: **283.646.158-66**

Telefone/Fax: **(11) 3056-7733/773**

Endereço Eletrônico: **Governo@3corp.com.br**

Resende, 26 de Setembro de 2019.

04 238 297/0001-89
3Corp Technology S/A
Infraestrutura de Telecom
Av. Dr. Tacito Vianna Rodrigues, 300
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CloudEngine S6730-H Series Switches

Huawei CloudEngine S6730-H series full-featured 10GE switches are Huawei's new generation IDN-ready fixed switches that provide 10GE downlink ports 100GE uplink ports.

Product Overview

Huawei CloudEngine S6730-H series full-featured 10 GE switches are Huawei's new-generation fixed switches ,to provide 10 GE downlink ports as well as 100 GE uplink ports.

Huawei CloudEngine S6730-H series switches provide native AC capabilities and can manage 1K APs. They provide a free mobility function to ensure consistent user experience and are Virtual Extensible LAN(VXLAN)capable to implement network virtualization. CloudEngine S6730-H series switches also provide built-in security probes and support abnormal traffic detection, Encrypted Communications Analytics (ECA), and network-wide threat deception. The CloudEngine S6730-H series is ideal for enterprise campuses, carriers, higher education institutions, and governments.

Models and Appearance

Appearance	Description
 CloudEngine S6730-H48X6C	• 48 x 10 Gig SFP+, 6 x 100 Gig QSFP28 • Dual pluggable power modules, 1+1 power backup, 600W AC (equipped power modules by default not available) • Forwarding performance: 480 Mpps • Switching capacity: 2.4 Tbit/s **NOTE** 100GE QSFP28 interfaces support 40GE and 100GE optical module auto-sensing.
 CloudEngine S6730-H24X6C	• 24 x 10 Gig SFP+, 6 x 100 Gig QSFP28 • Dual pluggable power modules, 1+1 power backup, 600W AC (equipped power modules by default not available) • Forwarding performance: 420 Mpps • Switching capacity: 2.4 Tbit/s **NOTE** 100GE QSFP28 interfaces support 40GE and 100GE optical module auto-sensing.

Features and Highlights

Abundant Convergence

- This CloudEngine S6730-H series provides the integrated WLAN AC function that can manage 1,000 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 fine-grained 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

- 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.
- The CloudEngine S6730-H 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

- The CloudEngine S6730-H series 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.

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.

Big Data Powered Collaborative Security

- Agile switches use NetStream to collect campus network data and then report such data to the Huawei Cybersecurity Intelligence System (CIS). The purposes of doing so are to detect network security threats, display the security posture across the entire network, and enable automated or manual response to security threats. The CIS delivers the security policies to the Agile Controller. The Agile Controller then delivers such policies to agile switches that will handle security events accordingly. All these ensure campus network security.
- The CloudEngine S6730-H series supports Encrypted Communication Analytics (ECA). It uses built-in ECA probes to extract characteristics of encrypted streams based on NetStream sampling and Service Awareness (SA), generates metadata, and reports the metadata to Huawei Cybersecurity Intelligence System (CIS). The CIS uses the AI algorithm to train the traffic model and compare characteristics of extracted encrypted traffic to identify malicious traffic. The CIS displays detection results on the GUI, provides threat handling suggestions, and automatically isolates threats with the Agile Controller to ensure campus network security.
- The CloudEngine S6730-H series supports deception. It functions as a sensor to detect threats such as IP address scanning and port scanning on a network and lures threat traffic to the honeypot for further checks. The honeypot performs in-depth interaction with the initiator of the threat traffic, records various application-layer attack methods of the initiator, and reports security logs to the CIS. The CIS analyzes security logs. If the CIS determines that the suspicious traffic is an attack, it generates an alarm and provides handling suggestions. After the administrator confirms the alarm, the CIS delivers a policy to the Agile Controller. The Agile Controller delivers the policy to the switch for security event processing, ensuring campus network security.

Intelligent O&M

- The CloudEngine S6730-H series 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.
- The CloudEngine S6730-H series 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 CloudEngine S6730-H 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.

Product Specifications

Item	CloudEngine S6730-H48X6C	CloudEngine S6730-H24X6C
Fixed ports	48 x 10 Gig SFP+, 6 x 100 Gig QSFP28	24 x 10 Gig SFP+, 6 x 100 Gig QSFP28

Item	CloudEngine S6730-H48X6C	CloudEngine S6730-H24X6C
Dimensions (W x D x H)	442 mm x 420 mm x 43.6 mm	442 mm x 420 mm x 43.6 mm
Chassis height(U)	1U	1U
Input voltage	• Rated AC voltage: 100V to 240V AC; 50/60 Hz • Max. AC voltage: 90V to 290V AC; 45–65 Hz	
Input current	AC 600W：Max 8A	
Maximum power consumption	274W	231W
Minimum power consumption	97W	97W
Operating temperature	• 0–1800 m altitude: -5°C to 45°C • 1800–5000 m altitude: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	
Storage temperature	-40-70℃	
Operating altitude	5000 m	
Noise (sound pressure at normal temperature)	52dB(A)	
Surge protection specification	AC power interface: differential mode: ±6kV: common mode: ±6kV	
Power supply type	600W AC Power	
Relative humidity	5% to 95% (non-condensing)	
Fans	4, Fan modules are pluggable	
Heat dissipation	Heat dissipation with fan, intelligent fan speed adjustment	

Service Features

Feature	Description
MAC	Up to 128K 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

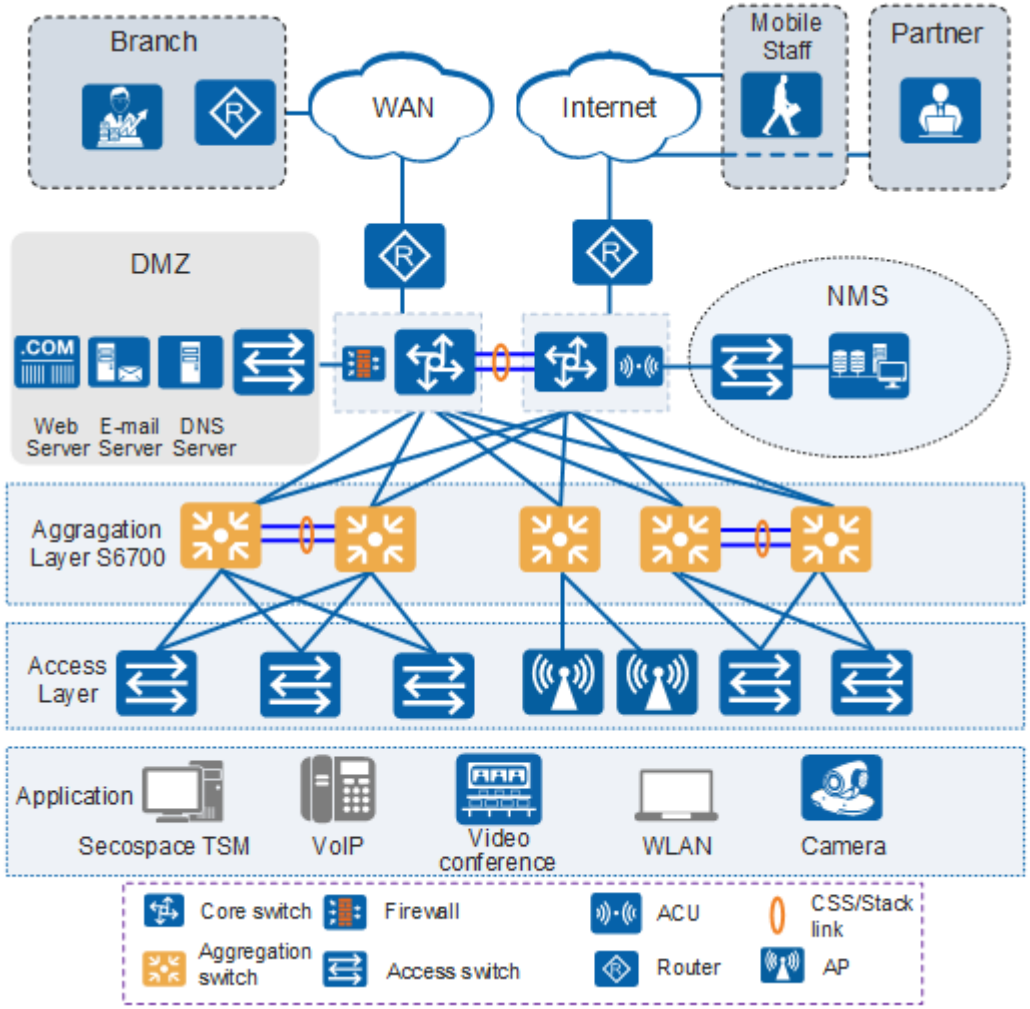
Feature	Description
IP routing	Static routes, RIP v1/2, RIPng, OSPF, OSPFv3, IS-IS, IS-ISv6, BGP, BGP4+, ECMP, routing policy Up to 192K FIBv4 entries Up to 80K FIBv6 entries
Interoperability	VLAN-Based Spanning Tree (VBST), working with PVST, PVST+, and RPVST Link-type Negotiation Protocol (LNP), similar to DTP 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 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 HQoS Eight queues on each port DRR, SP, and DRR+SP queue scheduling algorithms

Feature	Description
	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
Security	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 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
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 functions, VXLAN L2 and L3 gateways, BGP EVPN VXLAN configuration using NETCONF/YANG
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
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 maintenance	Cloud-based management Virtual cable test SNMP v1/v2c/v3

Feature	Description
	RMON Web-based NMS System logs and alarms of different severities GVRP MUX VLAN 802.3az Energy Efficient Ethernet (EEE) NetStream Telemetry

Networking and Applications

Huawei CloudEngine S6730-H is a fixed agile switch with 10GE downlink and 100GE uplink ports. It supports in-depth wired and wireless convergence and unified management on devices, users, and services. The CloudEngine S6730-H can be used as the core device in an enterprise branch network or a small- or middle-sized campus network, or as the aggregation device in a large-sized campus network. The switch helps achieve a manageable and highly reliable enterprise campus network with scalable services.



Ordering Information

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

Model	Product Description
CloudEngine S6730-H48X6C	CloudEngine S6730-H48X6C(48 x 10 Gig SFP+, 6 x 100 Gig QSFP28, equipped power modules by default not available)
CloudEngine S6730-H24X6C	CloudEngine S6730-H24X6C(24 x 10 Gig SFP+, 6 x 100 Gig QSFP28, equipped power modules by default not available)
PAC-600S12-CB	600W AC power module

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

Huawei Technologies Co., Ltd.

Address:Huawei Industrial Base Bantian, Longgang Shenzhen 518129 People's Republic of China

Website:e.huawei.com

S5720-LI Series Simplified Gigabit Ethernet Switches

Huawei S5720-LI series switches are energy-saving Gigabit Ethernet switches that provide flexible GE access ports and 10GE uplink ports.

Product Overview

Building on next-generation, high-performance hardware and the Huawei Versatile Routing Platform (VRP), the S5720-LI series switches support 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. The S5720-LI series switches are ideal for multiple scenarios such as enterprise campus network access and gigabit to the desktop.

Models and Appearances

Models and Appearances	Description
 S5720-12TP-LI-AC	• 8 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports, 2 of which are dual-purpose 10/100/1000Base-T or SFP ports • AC power supply • Forwarding performance: 22.5 Mpps • Switching capacity: 336 Gbit/s
 S5720-12TP-PWR-LI-AC	• 8 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports, 2 of which are dual-purpose 10/100/1000Base-T or SFP ports • AC power supply • PoE+ • Forwarding performance: 22.5 Mpps • Switching capacity: 336 Gbit/s
 S5720-16X-PWH-LI-AC	• 12 Ethernet 10/100/1000 PoE++ ports, 2 Ethernet 10/100/1000 Base-T ports, 2 10 Gig SFP+ ports • AC power supply • PoE++ • Forwarding performance: 51 Mpps • Switching capacity: 336 Gbit/s
 S5720-28P-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 51 Mpps/108 Mpps **NOTE**

Models and Appearances	Description
	The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license. • Switching capacity: 336 Gbit/s
 S5720-28P-PWR-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forforwarding performance: 51 Mpps/108 Mpps **NOTE** The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license. • Switching capacity: 336 Gbit/s
 S5720-28TP-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports, 2 of which are dual-purpose 10/100/1000Base-T or SFP ports • AC power supply • Forwarding performance: 46.5 Mpps • Switching capacity: 336 Gbit/s
 S5720-28TP-PWR-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports, 2 of which are dual-purpose 10/100/1000Base-T or SFP ports • AC power supply • PoE+ • Forwarding performance: 46.5 Mpps • Switching capacity: 336 Gbit/s
 S5720-28TP-PWR-LI-ACL	• 8 Ethernet 10/100/1000 PoE+ ports, 16 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports, 2 of which are dual-purpose 10/100/1000Base-T or SFP ports • AC power supply • PoE+ • Forwarding performance: 46.5 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-LI-24S-AC	• 24 Gig SFP ports, 8 of which are dual-purpose 10/100/1000Base-T or SFP ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-LI-24S-DC	• 24 Gig SFP ports, 8 of which are dual-purpose 10/100/1000Base-T or SFP ports, 4 10 Gig SFP+ ports • DC power supply, supporting RPS (redundant power supply) • Forwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s

Models and Appearances	Description
 S5720-28X-LI-DC	• 24 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • DC power supply, supporting RPS (redundant power supply) • Forforwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-PWR-LI-AC	• 24 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forforwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-PWR-LI-ACF	• 24 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forforwarding performance: 108 Mpps • Switching capacity: 336 Gbit/s
 S5720-28X-PWH-LI-AC	• 16 Ethernet 10/100/1000 Base-T ports, 8 PoE Ethernet 100/1000/2500 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE++ • Forforwarding performance: 126 Mpps • Switching capacity: 336 Gbit/s
 S5720-52P-LI-AC	• 48 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports • AC power supply, supporting RPS (redundant power supply) • Forforwarding performance: 87 Mpps/144 Mpps **NOTE** The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license. • Switching capacity: 336 Gbit/s
 S5720-52P-PWR-LI-AC	• 48 Ethernet 10/100/1000 Base-T ports, 4 Gig SFP ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forforwarding performance: 87 Mpps/144 Mpps **NOTE** The specifications, which are to the right of the slash (/), can be achieved by loading the GE to 10G electronic RTU license. • Switching capacity: 336 Gbit/s
 S5720-52X-LI-AC	• 48 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • Forforwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s
 S5720-52X-LI-DC	• 48 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • DC power supply, supporting RPS (redundant power supply) • Forforwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s

Models and Appearances	Description
 S5720-52X-PWR-LI-AC	• 48 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s
 S5720-52X-PWR-LI-ACF	• 48 Ethernet 10/100/1000 Base-T ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • PoE+ • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s
 S5720-52X-LI-48S-AC	• 48 Gig SFP ports, 2 of which are dual-purpose 10/100/1000Base-T or SFP ports, 4 10 Gig SFP+ ports • AC power supply, supporting RPS (redundant power supply) • Forwarding performance: 144 Mpps • Switching capacity: 336 Gbit/s

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 S5720-LI 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 50ms. ERPS is defined in ITU-T G.8032. It implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.
- The S5720-LI supports Smart Link, which implements backup of uplinks. One S5720-LI switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.
- The S5720-LI supports Ethernet OAM (IEEE 802.3ah/802.1ag) to fast-detect link faults.

Diversified Security Control

- The S5720-LI supports 802.1x authentication, MAC address authentication, and combined authentication on a per port basis, as well as Portal authentication on a per VLANIF interface basis, and implements dynamic policy delivery (VLAN, QoS, and ACL) to users.
- The S5720-LI 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.
- The S5720-LI collects and maintains information about access users, such as IP addresses, MAC addresses, IP address leases, VLAN IDs, and interface numbers in a DHCP snooping binding table. In this way, IP addresses and access interfaces of DHCP users can be tracked. You can specify DHCP snooping trusted and untrusted ports to ensure that users connect only to the authorized DHCP server.
- The S5720-LI 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

- The S5720-LI supports Huawei Easy Operation, a solution that provides zero-touch deployment, replacement of faulty devices without additional configuration, USB-based deployment, batch 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 costs of operation and maintenance. The S5720-LI 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 that helps with network consolidation and reconstruction.

- EasyDeploy: The Commander collects information about the topology of the client connecting to the Commander and saves client startup information based on the topology. The client can be replaced without configuration. Configuration and scripts can be delivered to the client in batches. In addition, the configuration delivery result can be queried.
- The Commander can collect and display power consumption on the entire network.
- The S5720-LI can use the GARP VLAN Registration Protocol (GVRP) to implement dynamic distribution, registration, and propagation of VLAN attributes. GVRP reduces manual configuration workload and ensures correct configuration. Additionally, the S5720-LI 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 can communicate only with ports in the principal VLAN. The S5720-LI also supports VLAN Central Management Protocol (VCMP) and VLAN-Based Spanning Tree (VBST) protocol.

Intelligent O&M

- The S5720-LI 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.
- The S5720-LI 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.

iStack

- The S5720-LI 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. The S5720-LI support stacking through electrical ports.

Excellent Network Traffic Analysis

- The S5720-LI supports the sFlow function. It uses a method defined in the sFlow standard to sample traffic passing through it and sends sampled traffic to the collector in real time. The collected traffic statistics are used to generate statistical reports, helping enterprises maintain their networks.

Easy O&M with Front Panel

- The models with front power sockets can be installed in a 300 mm deep cabinet, and can be maintained through the front panel. This simplifies operation and maintenance. The cabinets can be placed against the wall or back to back, and is well-suited for shallow cabinets and limited equipment room space.

PoE Power Supply

- The S5720-16X/28X-PWH-LI can provide Ethernet power supply(PoE++) for APs and surveillance cameras.
- When a PoE switch is rebooted after 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.
- S5720-28X-PWH-LI-AC and S5720-16X-PWH-LI-AC switches can supply power to PDs within 10s 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.
- When some PoE++ ports on Huawei S5720-28X-PWH-LI-AC work at 2.5 Gbit/s and Category 5E shielded network cables are used, these switches can provide 200-meter PoE power supply to Huawei specific APs, such as AP7052DN, AP7152DN, AP6052DN, AP8082DN, AP8182DN, AP7052DE, and AP7060DN.

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

- 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.

Product Specifications

Item	S5720-12TP-LI-AC	S5720-12TP-PWR-LI-AC	S5720-16X-PWH-LI-AC	S5720-28P-LI-AC	S5720-28P-PWR-LI-AC
Fixed ports	8 10/100/1000 Base-T, 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	8 10/100/1000 Base-T (PoE+), 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	12 10/100/1000 Base-T (PoE++), 2 10/100/1000Base-T, 2 10 Gig SFP+	24 10/100/1000 Base-T, 4 Gig SFP	24 10/100/1000 Base-T (PoE+), 4 Gig SFP
Dimensions (W x D x H)	250 mm ×180 mm × 43.6 mm	320 mm × 220 mm × 43.6 mm	320 mm × 263 mm × 43.6 mm	442 mm × 220 mm × 43.6 mm	442 mm × 310 mm × 43.6 mm
Input voltage	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz
Maximum power consumption	12.85 W	• Without PoE power output: 15.61 W • With PoE power output: 160.5 W (PoE: 123.2 W)	• Without PoE power output: 31.5 W • With PoE power output: 437.5 W (PoE: 360 W)	27.9 W	• Without PoE power output: 42.7 W • With PoE power output: 448.5 W (PoE: 369.6 W)
Typical power consumption	10.39 W	14.57 W	30.9 W	19.6 W	29.5 W

Item	S5720-12TP-LI-AC	S5720-12TP-PWR-LI-AC	S5720-16X-PWH-LI-AC	S5720-28P-LI-AC	S5720-28P-PWR-LI-AC
(Without PoE)					
Long-term operating temperature	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Short-term operating temperature[1]	NA	NA	NA	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Heat dissipation	Natural heat dissipation without fans	Natural heat dissipation without fans	Natural heat dissipation without fans	Natural heat dissipation without fans	Heat dissipation with fan, intelligent fan speed adjustment

Item	S5720-28TP-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28TP-PWR-LI-AC	S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-28X-PWR-LI-AC S5720-28X-PWR-LI-ACF
Fixed ports	24 10/100/1000 Base-T, 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	8 10/100/1000 Base-T (PoE+), 16 10/100/1000 Base-T, 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	24 10/100/1000 Base-T (PoE+), 4 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X)	24 Gig SFP, 8 Combo (10/100/1000Base-T or 100/1000Base-X), 4 10 Gig SFP+	24 10/100/1000 Base-T, 4 10 Gig SFP+	24 10/100/1000 Base-T (PoE+), 4 10 Gig SFP+
Dimensions (W x D x H)	442 mm x 220 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm
Input voltage	AC: • Rated voltage range: 100-240V AC; 50/60 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz	• AC: – Rated voltage range: 100-240V AC; 50/60	AC: • Rated voltage range: 100-240V AC; 50/60 Hz

Item	S5720-28TP-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28TP-PWR-LI-AC	S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-28X-PWR-LI-AC S5720-28X-PWR-LI-ACF
	• Maximum voltage range: 90-264V AC; 47–63 Hz	• Maximum voltage range: 90-264V AC; 47–63 Hz	• Maximum voltage range: 90-264V AC; 47–63 Hz	• Maximum voltage range: 90-264V AC; 47–63 Hz DC: • Rated voltage range: -48-60V DC • Maximum voltage range: -36-72V DC	Hz – Maximum voltage range: 90-264V AC; 47–63 Hz • DC: – Rated voltage range: -48-60V DC – Maximum voltage range: -36-72V DC	• Maximum voltage range: 90-264V AC; 47–63 Hz
Maximum power consumption	22.1 W	• Without PoE power output: 24.4 W • With PoE power output: 165.6 W (PoE: 123.2 W)	• Without PoE power output: 38.8 W • With PoE power output: 444.8 W (PoE: 370 W)	• S5720-28X-LI-24S-AC: 41.7 W • S5720-28X-LI-24S-DC: 42.7 W	• S5720-28X-LI-AC: 29.5 W • S5720-28X-LI-DC: 31 W	• S5720-28X-PWR-LI-AC: – Without PoE power output: 42.7 W – With PoE power output: 448.5 W (PoE: 369.6 W) • S5720-28X-PWR-LI-ACF: – Without PoE power output: 45 W – With PoE power output: 984 W (PoE: 739.2 W)
Typical power consumpti	16.2 W	19.4 W	27.4 W	• S5720-28X-LI-24S-AC:	• S5720-28X-LI-AC: 21.4 W	• S5720-28X-PWR-LI-

Item	S5720-28TP-LI-AC	S5720-28TP-PWR-LI-ACL	S5720-28TP-PWR-LI-AC	S5720-28X-LI-24S-AC S5720-28X-LI-24S-DC	S5720-28X-LI-AC S5720-28X-LI-DC	S5720-28X-PWR-LI-AC S5720-28X-PWR-LI-ACF
on (Without PoE)				28.9 W • S5720-28X-LI-24S-DC: 30.3 W	• S5720-28X-LI-DC: 19.8 W	AC: 29.5 W • S5720-28X-PWR-LI-ACF: 33 W
Long-term operating temperature	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Short-term operating temperature[1]	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	NA	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Heat dissipation	Natural heat dissipation without fans	Natural heat dissipation without fans	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment

Item	S5720-28X-PWH-LI-AC	S5720-52P-LI-AC	S5720-52P-PWR-LI-AC	S5720-52X-LI-AC S5720-52X-LI-DC S5720-52X-LI-48S-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
Fixed ports	16 10/100/1000 Base-T (PoE+), 8 100/1000/2500 Base-T	48 10/100/1000 Base-T, 4 Gig SFP	48 10/100/1000 Base-T (PoE+), 4 Gig SFP	• S5720-52X-LI-AC/DC: 48 10/100/1000 Base-T, 4 10 Gig SFP+	48 10/100/1000 Base-T (PoE+), 4 10 Gig SFP+	48 10/100/1000 Base-T (PoE+), 4 10 Gig SFP+

Item	S5720-28X-PWH-LI-AC	S5720-52P-LI-AC	S5720-52P-PWR-LI-AC	S5720-52X-LI-AC S5720-52X-LI-DC S5720-52X-LI-48S-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
	(PoE++), 4 10 Gig SFP+			• S5720-52X-LI-48S-AC: 48 Gig SFP, 2 Combo (10/100/1000Base-T or 100/1000Base-X), 4 10 Gig SFP+		
Dimensions (W x D x H)	442 mm x 310 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm	442 mm x 220 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm	442 mm x 310 mm x 43.6 mm
Input voltage	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz DC: • Rated voltage range: -48-60V DC • Maximum voltage range: -36-72V DC	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz	AC: • Rated voltage range: 100-240V AC; 50/60 Hz • Maximum voltage range: 90-264V AC; 47–63 Hz
Maximum power consumption	• Without PoE power output: 67.3 W • With PoE power output: 473 W (PoE: 360 W)	50.3 W	• Without PoE power output: 63.5 W • With PoE power output: 464.3 W (PoE: 369. 6 W)	• S5720-52X-LI-AC: 50.3 W • S5720-52X-LI-DC: 51.6 W • S5720-52X-LI-48S-AC: 83 W	• Without PoE power output: 63.5 W • With PoE power output: 464.3 W (PoE: 369.6 W)	• Without PoE power output: 52.1 W • With PoE power output: 977 W (PoE: 739.2 W)
Typical power consumption (Without PoE)	51.6 W	31.6 W	42.2 W	• S5720-52X-LI-AC: 31.6 W • S5720-52X-LI-DC: 33.1 W • S5720-52X-LI-48S-AC: 68 W	42.2 W	42.9 W
Long-term operating temperature	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces	• 0-1800 m: 0°C to 45°C • 1800-5000 m: The operating temperature reduces

Item	S5720-28X-PWH-LI-AC	S5720-52P-LI-AC	S5720-52P-PWR-LI-AC	S5720-52X-LI-AC S5720-52X-LI-DC S5720-52X-LI-48S-AC	S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-ACF
	time the altitude increases by 220 m.	by 1°C every time the altitude increases by 220 m.	by 1°C every time the altitude increases by 220 m.	increases by 220 m.	by 1°C every time the altitude increases by 220 m.	by 1°C every time the altitude increases by 220 m.
Short-term operating temperature[1]	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +50°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.	• 0-1800 m: -5°C to +55°C • 1800-5000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m.
Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Heat dissipation	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment	Heat dissipation with fan, intelligent fan speed adjustment

NOTE

1: Short term indicates that the successive operating time is no more than 96 hours, the total operating time is no more than 360 hours, or the number of times the operating temperature is over 45° C is no more than 15 in a year.

Service Features

Item	Description
MAC address table	16K MAC address entries
	MAC address learning and aging
	Static, dynamic, and blackhole MAC address entries
	Packet filtering based on source MAC addresses
	Interface-based MAC learning limiting
VLAN features	4K VLANs
	Guest VLAN and voice VLAN
	GVRP
	MUX VLAN

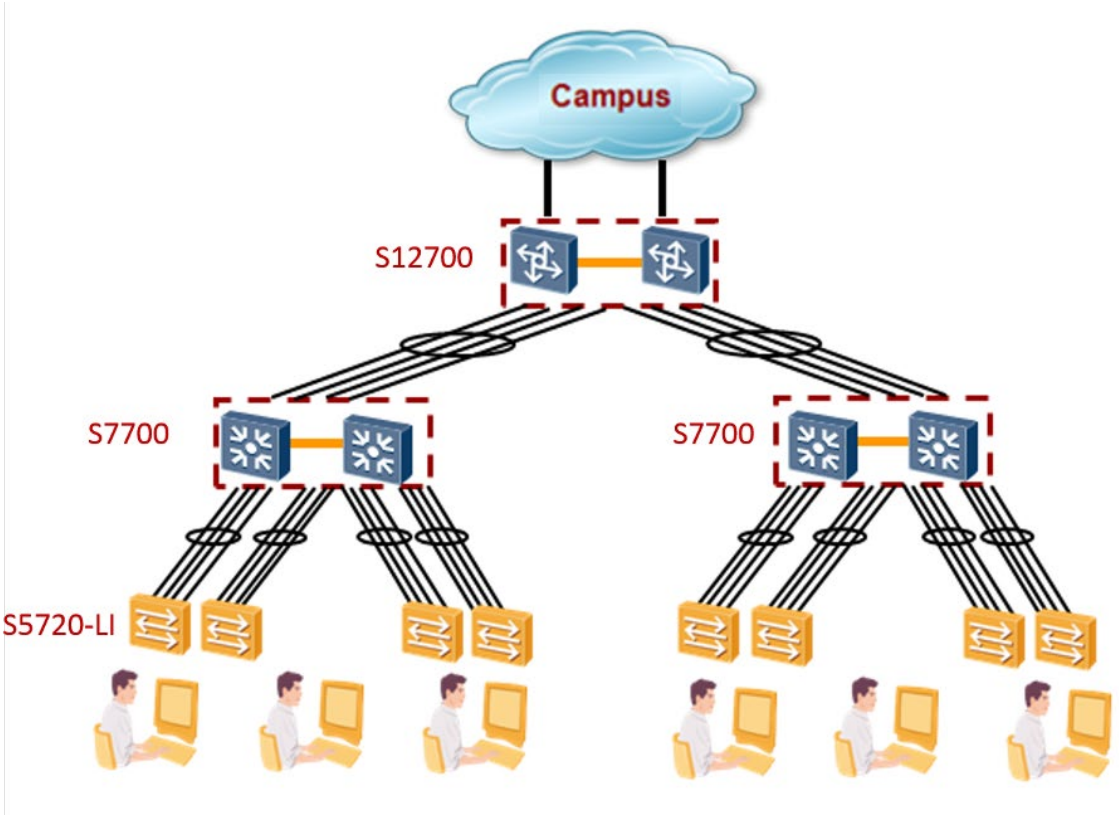
Item	Description
	VLAN assignment based on MAC addresses, protocols, IP subnets, policies, and interfaces
	1: 1 and N: 1 VLAN mapping
Jumbo frame	10K
Ethernet loop protection	RRPP ring topology and RRPP multi-instance
	Smart Link tree topology and Smart Link multi-instance, providing millisecond-level protection switchover
	SEP
	ERPS (G.8032)
	STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s)
	BPDU protection, root protection, and loop protection
	BPDU tunnel
Multicast	PIM DM, PIM SM, PIM SSM
	IGMPv1/v2/v3 and IGMPv1/v2/v3 snooping
	MLD v1/v2 and MLDv1/v2 snooping
	Multicast forwarding in a VLAN and multicast replication between VLANs
	Multicast load balancing among member ports of a trunk
	Controllable multicast
	Interface-based multicast traffic statistics
IP routing	Static route, RIP, RIPng, OSPF, OSPFv3
IPv6 features	Neighbor Discovery (ND)
	Path MTU (PMTU)
	IPv6 ping, IPv6 tracert, and IPv6 Telnet
Reliability	EFM OAM (802.3ah)
	CFM OAM (802.1ag)
	ITU-Y.1731
	DLDP
	LACP
QoS/ACL	Rate limiting on packets sent and received by an interface
	Packet redirection
	Interface-based traffic policing and two-rate and three-color CAR
	Eight queues on each interface
	WRR, DRR, SP, WRR+SP, and DRR+SP queue scheduling algorithms
	Re-marking of the 802.1p priority and DSCP priority
	Packet filtering at Layer 2 to Layer 4, filtering out invalid frames based on the source MAC address, destination MAC address, source IP address, destination IP address, TCP/UDP port number, protocol type, and VLAN ID

Item	Description
	Rate limiting in each queue and traffic shaping on interfaces
Security	Hierarchical user management and password protection
	DoS attack defense, ARP attack defense, and ICMP attack defense
	Binding of the IP address, MAC address, interface number, and VLAN ID
	Port isolation, port security, and sticky MAC
	MFF
	Blackhole MAC address entries
	Limit on the number of learned MAC addresses
	IEEE 802.1x authentication and limit on the number of users on an interface
	AAA authentication, RADIUS authentication, HWTACACS authentication, and NAC
	SSH V2.0
	Hypertext Transfer Protocol Secure (HTTPS)
	CPU defense
	Blacklist and whitelist
	DHCP relay, DHCP server, DHCP snooping
	DHCPv6 relay, DHCPv6 server, DHCPv6 snooping Supports separation between user authentication and policy enforcement points
Lightning protection	Service interface: 7 kV
Super Virtual Fabric (SVF)	Working as an SVF client that is plug-and-play with zero configuration
	Automatically loading the system software package and patches of clients One-click
	and automatic delivery of service configurations
	Supports independent running client
Management and maintenance	iStack
	Virtual Cable Test (VCT)
	Remote configuration and maintenance using Telnet
	SNMPv1/v2c/v3
	RMON
	eSight and web-based NMS
	HTTPS
	LLDP/LLDP-MED
	System logs and multi-level alarms
	802.3az EEE
	Dying Gasp (S5720-X-LI series)
Interoperability	Supports VBST (Compatible with PVST/PVST+/RPVST)

Item	Description
	Supports LNP (Similar to DTP)
	Supports VCMP (Similar to VTP)

Networking and Applications

The S5720-LI provides 1000M desktop access functions for a high performance network, such as voice VLAN, NAC and so on.



Ordering Information

Model	Product Description
S5720-12TP-LI-AC	S5720-12TP-LI-AC (8 Ethernet 10/100/1000 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, AC 110/220 V)
S5720-12TP-PWR-LI-AC	S5720-12TP-PWR-LI-AC (8 Ethernet 10/100/1000 PoE+ ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, 124 W PoE AC 110/220 V)
S5720-16X-PWH-LI-AC	S5720-16X-PWH-LI-AC (12 Ethernet 10/100/1000 PoE++ ports, 2 Ethernet 10/100/1000 ports, 2 10 Gig SFP+, 360 W PoE AC 110/220 V)
S5720-28P-LI-AC	S5720-28P-LI-AC (24 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
S5720-28P-PWR-LI-AC	S5720-28P-PWR-LI-AC (24 Ethernet 10/100/1000 PoE+ ports, 4 Gig SFP, 370 W PoE AC 110/220 V)
S5720-28TP-PWR-LI-ACL	S5720-28TP-PWR-LI-ACL (8 Ethernet 10/100/1000 PoE+ ports, 16 Ethernet 10/100/1000, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, 124 W PoE AC)
S5720-28TP-PWR-LI-AC	S5720-28TP-PWR-LI-AC (24 Ethernet 10/100/1000 PoE+ ports, 2 Gig SFP and 2 dual-purpose

Model	Product Description
	10/100/1000 or SFP, 370 W PoE AC 110/220 V)
S5720-28TP-LI-AC	S5720-28TP-LI-AC (24 Ethernet 10/100/1000 ports, 2 Gig SFP and 2 dual-purpose 10/100/1000 or SFP, AC 110/220 V)
S5720-28X-LI-AC	S5720-28X-LI-AC (24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
S5720-28X-LI-DC	S5720-28X-LI-DC (24 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, DC -48 V)
S5720-28X-LI-24S-AC	S5720-28X-LI-24S-AC (24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, AC 110/220 V)
S5720-28X-LI-24S-DC	S5720-28X-LI-24S-DC (24 Gig SFP, 8 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, DC -48 V)
S5720-28X-PWR-LI-AC	S5720-28X-PWR-LI-AC (24 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 370 W PoE AC 110/220 V)
S5720-28X-PWR-LI-ACF	S5720-28X-PWR-LI-ACF (24 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 740 W PoE AC 110/220 V)
S5720-28X-PWH-LI-AC	S5720-28X-PWH-LI-AC (16 Ethernet 10/100/1000 PoE+ ports, 8 Ethernet 100/1000/2500 PoE++ ports, 4 10 Gig SFP+, 360 W PoE AC 110/220 V)
S5720-52P-LI-AC	S5720-52P-LI-AC (48 Ethernet 10/100/1000 ports, 4 Gig SFP, AC 110/220 V)
S5720-52X-LI-AC	S5720-52X-LI-AC (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, AC 110/220 V)
S5720-52X-LI-DC	S5720-52X-LI-DC (48 Ethernet 10/100/1000 ports, 4 10 Gig SFP+, DC -48 V)
S5720-52P-PWR-LI-AC	S5720-52P-PWR-LI-AC (48 Ethernet 10/100/1000 PoE+ ports, 4 Gig SFP, 370 W PoE AC 110/220 V)
S5720-52X-PWR-LI-AC	S5720-52X-PWR-LI-AC (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 370 W PoE AC 110/220 V)
S5720-52X-PWR-LI-ACF	S5720-52X-PWR-LI-ACF (48 Ethernet 10/100/1000 PoE+ ports, 4 10 Gig SFP+, 740 W PoE AC 110/220 V)
S5720-52X-LI-48S-AC	S5720-52X-LI-48S-AC (48 Gig SFP, 2 of which are dual-purpose 10/100/1000 or SFP, 4 10 Gig SFP+, AC 110/220 V)
RPS1800	RPS1800 Redundant Power System

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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