Huawei S7700 Series Switches
Product Brochure

HUAWEI TECHNOLOGIES CO., LTD.

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Product Overview

The S7700 series switches (S7700 for short) are high-end smart routing switches designed for next-generation enterprise networks. The S7700 design is based on Huawei's intelligent multi-layer switching technology to provide intelligent service optimization methods, such as MPLS VPN, traffic analysis, comprehensive HQoS policies, controllable multicast, load balancing, and security, in addition to high-performance Layer 2 to Layer 4 switching services. The S7700 also features super scalability and reliability. The S7700 can function either as an aggregation or core node on a campus network or in a data center to provide integrated wireless access. The S7700 also offers voice, video, and data services, helping enterprises build routing and switching integrated end-to-end networks.

Product Appearance

The S7700 series is available in three models: S7703, S7706, and S7712. The switching capacity and port density of all four models is expandable. The S7700 is developed based on a new hardware platform and adopts a left-to-rear ventilation channel to achieve better energy efficiency. Key components work in redundancy mode to minimize risks of system breakdown and service interruption. Using innovative energy-saving chips, the S7700 provides an industry-leading solution for a sustainable energy-saving network.

S7703

S7706

S7712

Product Features

Agile Switch, Enabling Networks to Be More Agile for Services

- The high-speed ENP chip used in the S7700 series is tailored for Ethernet. The chip's flexible packet processing and traffic control capabilities can meet current and future service requirements, helping build a highly scalable network.
- The built-in native AC on S7700 series switches allows enterprises to build a wireless network without additional AC hardware. S7700 switch can manage up to 4K APs. It is a core switch that provides up to Tbit/s AC capabilities, avoiding the performance bottleneck on independent AC devices. The native AC capabilities help organizations better cope with challenges in the high-speed wireless era.
- The S7700 series' unified user management function authenticates both wired and wireless users, ensuring a consistent user experience no matter whether they are connected to the network through wired or wireless access devices. The unified user management function supports various authentication methods, including 802.1x, MAC address, and Portal authentication, and is capable of managing users based on user groups, domains, and time ranges. These functions implement user and service management and enable the transformation from device-centric management to user-centric management.
- Huawei's Super Virtual Fabric 2.0 (SVF 2.0) technology can not only virtualize fixed-configuration switches into S7700 switch line cards but also virtualize APs as switch ports. With this virtualization technology, a physical network with core/aggregation switches, access switches, and APs can be virtualized into a "super switch", offering the simplest network management solution.
- Huawei's Packet Conservation Algorithm for Internet (iPCA) technology changes the traditional method that uses simulated traffic for fault location. iPCA technology monitors network quality for any service flow at any network node, at any time, and without extra costs. It can detect temporary service interruptions within one second and can identify faulty ports accurately. This cutting-edge fault detection technology turns "extensive management" into "fine granular management."
- Huawei's IEEE 1588v2 and Synchronous Ethernet (SyncE) solutions enable high-precision time synchronization between network devices. Compared with the Global Positioning System (GPS) time synchronization solution, Huawei's solutions enhance security while reducing costs.
- The Service Chain feature virtualizes the value-added service processing capabilities, such as firewall, so that campus networks can utilize these capabilities in an undifferentiated manner. That is, these capabilities can be used without location constraint.

Powerful service processing capabilities

- The S7700 provides high-density 10GE ports and 100GE ports. Each S7712 chassis can provide a maximum of 576 x 10GE ports, 96 x 40GE ports or 48 x 100GE ports, meeting the requirements of bandwidth-consuming applications, such as multimedia conferencing and data access.
- The S7700's multi-service routing and switching platform meets requirements for service bearing at the access layer, aggregation layer, and core layer of enterprise networks. The S7700 provides wireless access along with voice, video, and data services, helping enterprises build integrated full-service networks with high availability and low latency.

- The S7700 supports distributed Layer 2/Layer 3 MPLS VPN functions, including MPLS, VPLS, HVPLS, and VLL, implementing VPN access for enterprise users.
- The S7700 supports various Layer 2 and Layer 3 multicast protocols such as PIM SM, PIM DM, PIM SSM, MLD, and IGMP snooping. It can provide enterprises with multi-terminal high definition video surveillance and video conferencing services.

Carrier-class reliability and visual fault diagnosis

- Huawei's high reliability design ensures that the S7700 is 99.999% reliable. The S7700 provides redundant backup for key components, including main processing units (MPUs), power supply units, and fans trays, all of which are hot swappable.
- The S7700 innovatively implements the Cluster Switch System (CSS) function through switch fabrics, and packets are only switched once when they are forwarded between chassis. This addresses the problem of low switching efficiency caused by multiple switching processes during inter-chassis forwarding in clusters established using line cards. In addition, inter-chassis link aggregation can be used to improve link use efficiency and prevent single-point failures.
- The S7700 can use service ports as cluster ports, enabling flexible port utilization.
- The S7700 supports High-speed Self Recovery (HSR) technology. Using Huawei's ENP cards, the S7700 is the industry's only switch that implements end-to-end IP MPLS bearer network protection switchover within 50 ms, improving network reliability.
- The S7700 has a dedicated fault detection subcard that provides hardware-based BFD and hardware-based OAM including IEEE 802.3ah, 802.1ag, and ITU-Y.1731. Hardware-based OAM implements 3.3 ms fault detection and can check session connectivity of all terminals in real time when a network fault occurs. The S7700 can also work with a network management system (NMS). The NMS provides a graphical fault diagnosis interface and traverses all network elements and links automatically to help users detect and locate faults quickly.

Enhanced QoS mechanism, improving the voice and video experience

- The S7700's HQoS control mechanisms classify traffic based on information from the link layer to the application layer. With advanced queue scheduling and congestion control algorithms, the S7700 performs accurate multi-level scheduling for data flows, satisfying enterprises' QoS requirements for a variety of services and user terminals.
- The S7700 supports hardware-based low delay queues for multicast packets so that the video service can be processed with high priority and low delay. This feature guarantees the high quality of key services in an enterprise, such as video conference and surveillance.
- The S7700 uses innovative priority scheduling algorithms to optimize the QoS queue scheduling mechanism for voice and video services. The improved scheduling mechanism shortens the delay of the VoIP service and eliminates the pixelation effect in the video service, improving user experience.

High-performance IPv6 service processing, resulting in a smooth transition from IPv4 to IPv6

- Both the hardware platform and software platform of the S7700 support IPv6. The S7700 has earned the IPv6 Ready Phase 2 (Gold) designation.

- The S7700 supports IPv4/IPv6 dual stack, various tunneling technologies, IPv6 static routing, RIPng, OSPFv3, BGP+, IS-ISv6, and IPv6 multicast. These features meet the demand for IPv6 networking and combined IPv4 and IPv6 networking.

Superb traffic analysis capability, resulting in real-time network performance monitoring

- The S7700 supports NetStream for the real-time collection and analysis of network traffic statistics.
- The S7700 supports the V5, V8, and V9 NetStream formats and provides aggregation traffic templates to reduce the burden on the network collector system. In addition, the S7700 supports real-time traffic collection, dynamic report generation, traffic attribute analysis, and traffic exception trap.
- NetStream monitors network traffic in real time and analyzes the device's throughput, providing data for network structure optimization and capacity expansion.

Comprehensive security mechanisms, protecting enterprises from internal and external security threats

- The S7700 supports MAC security (MACSec) that enables hop-by-hop secure data transmission. The S7700 can be applied to scenarios that pose high requirements on data confidentiality, such as government and finance sectors.
- NGFW is a next-generation firewall card that can be installed on an S7700. In addition to the traditional defense functions such as firewall, identity authentication, and Anti-DDoS, the NGFW supports IPS, anti-spam, web security, and application control functions.
- The S7700 provides comprehensive NAC solutions for enterprise networks. It supports MAC address authentication, Portal authentication, 802.1x authentication, and DHCP snooping-triggered authentication. These authentication methods ensure the security of various access modes, such as dumb terminal access, mobile access, and centralized IP address allocation.

Innovative energy-saving chips, allowing for intelligent power consumption control

- The S7700 uses innovative energy-saving chips, which can dynamically adjust power on all ports based on traffic volume. An idle port enters a sleep mode to reduce power consumption.
- The S7700 supports Power over Ethernet (PoE) and uses different energy management modes according to the powered device (PD) type, ensuring flexible energy management.
- The S7700 supports IEEE 802.3az Energy Efficient Ethernet and provides the low power idle mode for the PHY line card. If the link utilization is low, the S7700 switches to a lower speed or power PHY to reduce power consumption.

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 S7700 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.

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 Security Collaboration

- 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.

Intelligent Diagnosis

- Open Intelligent Diagnosis System (OIDS) integrates the device health monitoring and fault diagnosis functions – that are typically deployed on a Network Management System (NMS) – into the switch software to implement intelligent diagnosis on a single switch. After OIDS is deployed on a switch, the switch periodically collects and records the running information and automatically determines whether a fault occurs. If a fault occurs, the switch automatically locates the fault or helps locate the fault. All these merits increase fault locating efficiency of O&M staff while improving device maintainability.

Product Specifications

Item	S7703	S7706	S7712
Switching capacity	1.92 Tbps	3.84 Tbps	3.84Tbps
Forwarding performance	1440 Mpps	2880 Mpps	2880 Mpps
MPU slot	2	2	2
Service slot	3	6	12
Redundancy design	MPUs, power modules, CMUs, fans trays		
Wireless network management	Native AC		
	AP access control, AP region management, and AP profile management		
	Radio profile management, uniform static configuration, and centralized dynamic management		
	Basic WLAN services, QoS, security, and user management		
User management	Unified user management		
	802.1x, MAC address, and Portal authentication		
	Traffic- and time-based accounting		
	User authorization based on user groups, domains, and time ranges		

Item	S7703	S7706	S7712
VLAN	4K VLANs		
	Access, trunk, and hybrid interface types, auto-negotiation of LNP links		
	Default VLAN		
	VLAN switching		
	QinQ and selective QinQ		
	MAC address-based VLAN assignment		
VXLAN	VXLAN centralized gateway and distributed gateway		
	BGP EVPN		
	Configured through NETCONF protocol		
ARP	256K ARP entries		
MAC address	1M MAC address entries		
	MAC address learning and aging		
	Static, dynamic, and blackhole MAC address entries		
	Packet filtering based on source MAC addresses		
	Limit on the number of MAC addresses learned on ports and VLANs		
Ring protection	STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s)		
	SEP		
	BPDU protection, root protection, and loop protection		
	BPDU tunnel		
	ERPS(G.8032)		
IP routing	1M IPv4 routing entries		
	IPv4 routing protocols, such as RIPv1/v2, OSPF, BGP, and IS-IS		
	IPv6 dynamic routing protocols, such as RIPng, OSPFv3, ISISv6, and BGP4+		
Multicast	128,000 multicast routing entries		
	IGMPv1/v2/v3 and IGMP v1/v2/v3 snooping		
	PIM-DM, PIM-SM, and PIM-SSM		
	MSDP and MBGP		
	Fast leave		
	Multicast traffic control		
	Multicast querier		
	Multicast packet suppression		
	Multicast CAC		
	Multicast ACL		

Item	S7703	S7706	S7712
MPLS	Basic MPLS functions		
	MPLS OAM		
	MPLS-TE		
	MPLS VPN/VLL/VPLS		
CSS Switch Fabric Clustering	CSS Switch Fabric Clustering (S7706 and S7712)		
Service Port Clustering	Service Port Clustering (S7706 and S7712)		
Reliability	LACP and E-Trunk between devices		
	VRRP and BFD for VRRP		
	BFD for BGP/IS-IS/OSPF/static route		
	NSF and GR for BGP/IS-IS/OSPF/LDP		
	TE FRR and IP FRR		
	Ethernet OAM (IEEE 802.3ah and 802.1ag)		
	HSR		
	ITU-Y.1731		
	DLDP		
QoS	256K ACLs		
	Traffic classification based on Layer 2 protocol packet header, Layer 3 protocol information, Layer 4 protocol information, and 802.1p priority		
	ACL, CAR, re-marking, and scheduling		
	Queue scheduling algorithms including PQ, WRR, DRR, PQ+WRR, and PQ+DRR		
	Congestion avoidance mechanisms, such as WRED and tail drop		
	HQoS		
	Traffic shaping		
Configuration and maintenance	Zero Touch Provisioning		
	Console, Telnet, and SSH terminals		
	Network management protocols, such as SNMPv1/v2c/v3		
	File uploading and downloading using FTP and TFTP		
	BootROM upgrade and remote upgrade		
	Hot patches		
	User operation logs		
	Open Programmability System (OPS)		

Item	S7703	S7706	S7712
Security and management	802.1x authentication and portal authentication		
	MACSec		
	NAC		
	RADIUS and HWTACACS authentication		
	Different user levels for commands, preventing unauthorized users from using certain commands		
	Defense against DoS attacks, TCP SYN Flood attacks, UDP Flood attacks, broadcast storms, and heavy traffic attacks		
	Ping and traceroute		
	RMON		
	Service Chain		
	Secure Boot(need to use MPU that supports Secure Boot)		
Time synchronization	IEEE 1588v2		
	SyncE		
Value-added service	Firewall		
	NAT		
	NetStream		
	IPSec		
	Load balancing		
	Wireless AC		
	IPS		
Interoperability	Supports VBST (compatible with PVST/PVST+/RPVST)		
	Supports LNP (similar to DTP)		
	Supports VCMP (similar to VTP)		
Energy conservation	IEEE 802.3az: Energy Efficient Ethernet (EEE)		
Dimensions (W x D x H)	442 mm x 489mm x 175 mm, 4U	442 mm x 489 mm x 442 mm, 10U	442 mm x 489 mm x 664 mm, 15U
Chassis weight (empty)	10kg	15kg	37 kg
Operating environment	Operating temperature: 0 m to 1800 m: The long-term operating temperature is 0°C to 45°C and the short-term operating temperature is 0°C to 55°C. 1800 m to 4000 m: The operating temperature reduces by 1°C every time the altitude increases by 220 m. Storage temperature: -40°C to +70°C Relative humidity: 5% to 95% (noncondensing)		
Operating voltage	DC: –38.4 V to –72 V AC: 90 V to 290 V		
Maximum power consumption of the entire equipment	1000 W	2200 W	4200 W
Maximum PoE power	2200 W	8800 W	8800 W

Product List

Basic Configuration	
LE0BN66EDC	N66E DC Assembly Rack (Four 40A outputs, maximum 1600W per output, 600X600X2200mm)
LE0BN66EAC	N66E AC Assembly Rack (Eight 10A Outputs, maximum 1600W per output, 600X600X2200mm)
LE2BN66EA000	N66E AC Assembly Rack (Four 16A Outputs, maximum 2500W per output, 600X600X2200mm)
ES0B00770300	S7703 Assembly Chassis
ES0B00770600	S7706 Assembly Chassis
ES0B00771200	S7712 Assembly Chassis
ES1BS7703S01	S7703 Assembly Chassis-sustain FCC
ES0B017706P0	S7706 POE Assembly Chassis
ES0B017712P0	S7712 POE Assembly Chassis
ES0E2FBX	Wide Voltage Fan Box
ES1M00FBX001	Enhancement Wide Voltage 68 Fan Box
Monitoring Board	
EH1D200CMU00	Centralized Monitoring Board
Main Control Unit	
ES0D00MCUA00	S7703 Main Control Unit A
ES1D2MCUAC00	S7703,Main Control Unit A(Optional Clock)
ES0D00SRUA00	S7706/S7712 Main Control Unit A
ES1D2SRUAC00	S7706/S7712,Main Control Unit A(Optional clock)
ES0D00SRUB00	S7706/S7712 Main Control Unit B(Clock)
ES1D2SRUE000	S7706/S7712,Main Control Unit E
ES1D2SRUH000	S7706/S7712 Main Control Unit H
ES1D2SRUH002	S7706/S7712,Main Control Unit H(Support Secure Boot)
SRU Service Card	
ES0D00FSUA00	Enhanced Flexible Service Unit
ES02VSTSA	Cluster Switching System Service Unit
ES1D2VS04000	4-Port 10G Cluster Switching System Service Unit (SFP+)
LE0D00CKMA00	Clock Pinch Board-1588
Agile Card	
ES1D2C04HX2S	4-Port 100GE QSFP28 Interface Card(X2S,QSFP28)
ES1D2C04HX2E	4-Port 100GE QSFP28 Interface Card(X2E,QSFP28)

ES1D2H02QX2S	2-Port 100GE QSFP28 Interface and 2-Port 40GE QSFP+ Interface Card(X2S,QSFP28)
ES1D2H02QX2E	2-Port 100GE QSFP28 Interface and 2-Port 40GE QSFP+ Interface Card(X2E,QSFP28)
ES1D2X48SX2S	48-Port 10GE SFP+ Interface Card(X2S,SFP+)
ES1D2L08QX2E	8-Port 40GE QSFP+ Interface Card(X2E,QSFP+)
ES1D2X32SX2S	32-Port 10GE SFP+ Interface Card(X2S,SFP+)
ES1D2X32SX2E	32-Port 10GE SFP+ Interface Card(X2E,SFP+)
ES1D2S24SX2S	24-Port 10GE SFP+ Interface and 8-Port GE SFP Interface Card(X2S,SFP+)
ES1D2S24SX2E	24-Port 10GE SFP+ Interface and 8-Port GE SFP Interface Card(X2E,SFP+)
ES1D2S16SX2S	16-Port 10GE SFP+ Interface and 16-Port GE SFP Interface Card(X2S,SFP+)
ES1D2S16SX2E	16-Port 10GE SFP+ Interface and 16-Port GE SFP Interface Card(X2E,SFP+)
ES1D2G48TX1E	48-Port 10/100/1000BASE-T Interface Card(X1E,RJ45)
ES1D2G48SX1E	48-Port 100/1000BASE-X Interface Card(X1E,SFP)
ES1D2S04SX1E	4-Port 10GBASE-X and 24-Port 100/1000BASE-X and 8-Port 10/100/1000BASE-T Combo Interface Card(X1E,RJ45/SFP/SFP+)
ES1D2S08SX1E	8-Port 10GBASE-X and 8-Port 100/1000BASE-X and 8-Port 10/100/1000BASE-T Combo Interface Card(X1E,RJ45/SFP/SFP+)
10/100/1000BASE-T Interface Card	
ES0DG24TFA00	24-Port 10/100/1000BASE-T Interface Card (FA, RJ45)
ES0D0G48TA00	48-Port 10/100/1000BASE-T Interface Card (EA, RJ45)
ES0DG48TFA00	48-Port 10/100/1000BASE-T Interface Card (FA, RJ45)
ES0D0G48TC00	48-Port 10/100/1000BASE-T Interface Card (EC, RJ45)
ES0D0T24XA00	24-Port 10/100/1000BASE-T and 2-Port 10GBASE-X Interface Card (EA,RJ45/XFP)
100/1000BASE-X Interface Card	
ES0D0G24SA00	24-Port 100/1000BASE-X Interface Card (SA, SFP)
ES0D0G24SC00	24-Port 100/1000BASE-X Interface Card (EC, SFP)
ES0D0G24CA00	24-Port 100/1000BASE-X and 8-Port 10/100/1000BASE-T Combo Interface Card (SA, SFP/RJ45)
ES0D0S24XA00	24-Port 100/1000BASE-X and 2-Port 10GBASE-X Interface Card (EA, SFP/XFP)
ES0D0G48SA00	48-Port 100/1000BASE-X Interface Card (EA, SFP)
ES0D0G48SC00	48-Port 100/1000BASE-X Interface Card (EC, SFP)
ES1D2G48SFA0	48-Port 100/1000BASE-X Interface Card (FA, SFP)
100/1000BASE-X Interface Card	

ES0DG48CEAT0	36-Port 10/100/1000BASE-T and 12-Port 100/1000BASE-X Interface Card (EA, RJ45/SFP)
10GBASE-X Interface Card	
ES0D0X2UXA00	2-Port 10GBASE-X Interface Card (EA, XFP)
ES0D0X4UXA00	4-Port 10GBASE-X Interface Card (EA, XFP)
ES0D0X4UXC00	4-Port 10GBASE-X Interface Card (EC, XFP)
ES1D2X08SED4	8-Port 10GBASE-X Interface Card (ED,SFP+)
ES0D0X12SA00	12-Port 10GBASE-X Interface Card (SA, SFP+)
ES1D2X16SSC2	16-Port 10GBASE-X Interface Card (SC,SFP+)
ES1D2X32SSC0	32-Port 10GBASE-X Interface Card (SC,SFP+)
40GE BASE-X Interface Card	
ES1D2L02QFC0	2-Port 40GBASE-X Interface Card (FC,QSFP+)
100GE BASE-X Interface Card	
ES1D2C02FEE0	2-Port 100GBASE-X Interface Card(EE,CFP)
POE Interface Card	
ES0D0G48VA00	48-Port 10/100/1000BASE-T POE Interface Card (EA, RJ45, POE)
Service Processing Unit	
ET1D2FW00S00	NGFW Module A,with HW General Security Platform Software
ET1D2FW00S01	NGFW Module B,with HW General Security Platform Software
ET1D2IPS0S00	IPS Module A,with HW General Security Platform Software
ACU2	WLAN ACU2 Access Controller Unit(128 AP Control Resource Included)
Optical Transceiver	
FE-SFP Optical Transceiver	
S-SFP-FE-LH40-SM1310	Optical Transceiver,eSFP,FE,Single-mode Module(1310nm,40km,LC)
S-SFP-FE-LH80-SM1550	Optical Transceiver,eSFP,FE,Single-mode Module(1550nm,80km,LC)
SFP-FE-SX-MM1310	Optical Transceiver,SFP,100M/155M,Multi-mode Module(1310nm,2km,LC)
eSFP-FE-LX-SM1310	Optical Transceiver,eSFP,100M/155M,Single-mode Module(1310nm,15km,LC)
GE-SFP Module	
SFP-1000BaseT	Electrical transceiver-SFP-GE-Electrical Interface Module (100m,RJ45)
eSFP-GE-SX-MM850	Optical Transceiver-eSFP-GE-Multi-mode Module (850nm,0.5km,LC)
SFP-GE-LX-SM1310	Optical Transceiver-SFP-GE-Single-mode Module (1310nm,10km,LC)
S-SFP-GE-LH40-SM1310	Optical Transceiver,eSFP,GE,Single-mode Module(1310nm,40km,LC)
S-SFP-GE-LH40-SM1550	Optical Transceiver-eSFP-GE-Single-mode Module (1550nm,40km,LC)

S-SFP-GE-LH80-SM1550	Optical Transceiver-eSFP-GE-Single-mode Module (1550nm,80km,LC)
eSFP-GE-ZX100-SM1550	Optical Transceiver-eSFP-GE-Single-mode Module (1550nm,100km,LC)
10GE-XFP Optical Transceiver	
XFP-SX-MM850	Optical Transceiver-XFP-10G-Multi-mode Module (850nm,0.3km,LC)
XFP-STM64-LX-SM1310	Optical Transceiver-XFP-10G-Single-mode Module (1310nm,10km,LC)
XFP-STM64-LH40-SM1550	Optical Transceiver-XFP-10G-Single-mode Module (1550nm,40km,LC)
XFP-STM64-SM1550-80km	Optical Transceiver-XFP-10G-Single-mode Module (1550nm,80km,LC)
10GE-SFP+ Optical Transceiver	
OMXD30000	Optical Transceiver-SFP+-10G-Multi-mode Module (850nm,0.3km,LC)
SFP-10G-iLR	Optical Transceiver,SFP+,9.8G,Single-mode Module(1310nm,1.4km,LC)
OSX010000	Optical Transceiver-SFP+-10G-Single-mode Module (1310nm,10km,LC)
OSX040N01	Optical Transceiver-SFP+-10G-Single-mode Module (1550nm,40km,LC)
OSXD22N00	Optical module, SFP+, 10G, Multi-mode module (1310nm, 0.22km, LC, LRM)
LE2MXSC80FF0	Optical Transceiver,SFP+,10G,Single-mode Module(1550nm,80km,LC)
SFP-10G-USR	Optical Transceiver,SFP+,10G,Multi-mode Module(850nm,0.1km,LC)
SFP-10G-ZR	Optical Transceiver,SFP+,10G,Single-mode Module(1550nm,80km,LC)
SFP-10G-BXU1	10GBase,BIDI Optical Transceiver,SFP,10G,Single-mode Module(TX1270nm/RX1330nm,10km,LC)
SFP-10G-BXD1	10GBase,BIDI Optical Transceiver,SFP,10G,Single-mode Module(TX1330nm/RX1270nm,10km,LC)
SFP-10G-BXU2	10GBase-BIDI Optical Transceiver,SFP,10G,Single-mode Module(TX1330nm/RX1270nm,20km,LC)
SFP-10G-BXD2	10GBase-BIDI Optical Transceiver,SFP,10G,Single-mode Module(TX1270nm/RX1330nm,20km,LC)
SFP-10G-ER-SM1330-BIDI	Optical Transceiver,SFP+,10G,BIDI Single-mode Module(TX 1330nm/RX 1270nm,40km,LC)
SFP-10G-ER-SM1270-BIDI	Optical Transceiver,SFP+,10G,BIDI Single-mode Module(TX 1270nm/RX 1330nm,40km,LC)
SFP-10G-AOC3M	AOC Optical Transceiver,SFP+,850nm,1G~10G,0.003km
SFP-10G-AOC10M	AOC Optical Transceiver,SFP+,850nm,1G~10G,0.01km
QSFP-4SFP10-AOC10M	Optical transceiver,QSFP+,40G,(850nm,10m,AOC)(Connect to four SFP+ Optical Transceiver)
QSFP-H40G-AOC10M	Optical transceiver,QSFP+,40G,(850nm,10m,AOC)
SFP-10G-ZCW1571	Optical Transceiver,SFP+,10G,Single-mode Module(CWDM,1571nm,70km,LC)
SFP-10G-ZCW1591	Optical Transceiver,SFP+,10G,Single-mode Module(CWDM,1591nm,70km,LC)
SFP-10G-ZCW1611	Optical Transceiver,SFP+,10G,Single-mode Module(CWDM,1611nm,70km,LC)

40GE-QSFP+ & CFP Optical Transceiver	
QSFP-40G-LX4	40GBase-LX4 Optical Transceiver,QSFP+,40GE,Single-mode(1310nm,2km,LC),Multi-mode(1310nm,0.15km,LC)
QSFP-40G-iSM4	40GBase-iSM4 Optical Transceiver, QSFP+, 40G, Single-mode Module (1310nm,1.4km,MPO)(Connect to four SFP+ Optical Transceiver)
QSFP-40G-eSM4	40GBase-eSM4 Optical Transceiver, QSFP+, 40G, Single-mode Module (1310nm,10km,MPO)(Connect to four SFP+ Optical Transceiver)
QSFP-40G-iSR4	40GBase-SR4 Optical Transceiver,QSFP+,40G,Multi-mode (850nm, 0.15km, MPO)(Connect to four SFP+ Optical Transceiver)
QSFP-40G-LR4	40GBase-LR4 Optical Transceiver,QSFP+,40GE,Single-mode Module(1310nm,10km,LC)
QSFP-40G-eSM4	40GBase-eSM4 Optical Transceiver,QSFP+,40G,Single-mode Module (1310nm,10km,MPO)(Connect to four SFP+ Optical Transceiver)
QSFP-40G-eiSR4	40GBase-eSR4 Optical Transceiver,QSFP+,40G,Multi-mode (850nm,0.3km,MPO)(Connect to four SFP+ Optical Transceiver)
QSFP-40G-ER4	40GBase-ER4 Optical Transceiver,QSFP+,40G,Single-mode Module (1310nm,40km,LC)
CFP-40G-ZR4	High Speed Transceiver,CFP,40G,Single-mode Module(1550nm band,41.25G,80km,straight LC)
CFP-40G-SR4	High Speed Transceiver,CFP,40G,Multimode Module(850nm,4*10G,0.1km,MPO)
CFP-40G-LR4	High Speed Transceiver,CFP,40G,Single-mode Module(1310nm band,41.25G,10km,straight LC)
CFP-40G-ER4	High Speed Transceiver,CFP,40G,Single-mode Module(1310nm band,41.25G,40km,straight LC)
CFP-40G-ZR4	High Speed Transceiver,CFP,40G,Single-mode Module(1550nm band,41.25G,80km,straight LC)
100GE- CFP Optical Transceiver	
QSFP-100G-SR4	100GBase-SR4 Optical Transceiver,QSFP28,100G,Multi-mode (850nm,0.1km,MPO)
QSFP-100G-PSM4	100GBase-PSM4 Optical Transceiver,QSFP28,100G,Single-mode module (1310nm,0.5km,MPO)
QSFP-100G-CLR4	High Speed Transceiver,QSFP28,1310nm,4*25GBase,-6.5dBm,2.5dBm,-10.7dBm,LC/PC,2km
QSFP-100G-CWDM4	High Speed Transceiver,QSFP28,1310nm,4*25GBase,-6.5dBm,2.5dBm,-9.8dBm,LC/PC,2km
QSFP-100G-LR4	100GBase-LR4 Optical Transceiver,QSFP28,100G,Single-mode module (1310nm,10km,LC)
CFP-100G-SR10	100GBase-SR4 Optical Transceiver,QSFP28,100G,Multi-mode (850nm,0.1km,MPO)

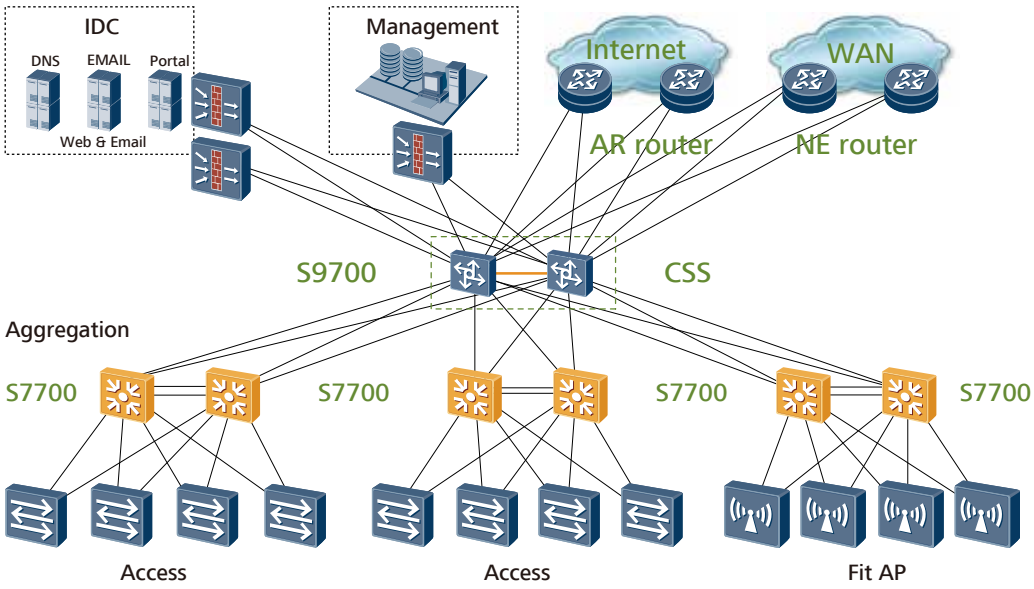
CFP-100G-LR4	High Speed Transceiver,CFP,100G,Single-mode Module(1310nm band,4*25G,10km,straight LC)
CFP-100G-ER4	High Speed Transceiver,CFP,100G,Single-mode Module(1310nm band,4*25G,40km,straight LC)
QSFP-100G-CU1M	High Speed Cable,100G QSFP28 Passive High Speed Cable,1m,QSFP28,CC8P0.254B(S),QSFP28,ETH 100GbE
QSFP-100G-CU3M	High Speed Cable,100G QSFP28 Passive High Speed Cable,3m,QSFP28,CC8P0.254B(S),QSFP28,ETH 100GbE
QSFP-100G-CU5M	High Speed Cable,100G QSFP28 Passive High Speed Cable,5m,QSFP28,CC8P0.4B(S),QSFP28,ETH 100GbE
BIDI-SFP Optical Transceiver	
SFP-FE-LX-SM1310-BIDI	Optical Transceiver-eSFP-FE-BIDI Single-mode Module (TX1310/RX1550,15km,LC)
SFP-FE-LX-SM1550-BIDI	Optical Transceiver-eSFP-FE-BIDI Single-mode Module (TX1550/RX1310,15km,LC)
SFP-GE-LX-SM1310-BIDI	Optical Transceiver-eSFP-GE-BIDI Single-mode Module (TX1310/RX1490,10km,LC)
SFP-GE-LX-SM1490-BIDI	Optical Transceiver-eSFP-GE-BIDI Single-mode Module (TX1490/RX1310,10km,LC)
SFP-GE-BXU1-SC	1000Base,BIDI Optical Transceiver,SFP,GE,Single-mode Module(TX1490nm/RX1310nm,10km,SC)
LE2MGSC40ED0	Optical Transceiver,eSFP,GE,BIDI Single-mode Module(TX1490/RX1310,40km,LC)
LE2MGSC40DE0	Optical Transceiver,eSFP,GE,BIDI Single-mode Module(TX1310/RX1490,40km,LC)
SFP-GE-ZBXD1	Optical Transceiver,eSFP,GE,BIDI Single-mode Module(1570nm(Tx)/1490nm(Rx),80km,LC)
SFP-GE-ZBXU1	Optical Transceiver,eSFP,GE,BiDi Single-mode Module(1490nm(Tx)/1570nm(Rx),80km,LC)
Power Module	
ES02PSD16	1600W DC Power Module(Black)
W2PSA0800	800W AC Power Module(Black)
PAC-2200WF	2200W AC Power Module
W2PSD2200	2200W DC Power Module(Black)
LE0W01DPDB	DC Power Distribution Unit(Four 40A outputs, maximum 1600W per output, include power cable)
IN6W18L10A	AC Power Distribution Unit(Eight 10A Outputs, maximum 1600W per output, include power cable)

IM1W24APD	AC Power Distribution Unit(Four 16A Outputs, maximum 2500W per output, include power cable)
Software	
ES0SMS277700	Quidway S7700 Basic SW, V200R007
ES0SMS287700	Quidway S7700 Basic SW, V200R008
ES0SMS297700	Quidway S7700 Basic SW, V200R009
ES0SMS2A7700	S7700 Basic SW, V200R010
ES1SMS2B7700	S7700 Basic SW, V200R011C10
ES1SMS2C7700	S7700 Basic SW, V200R012C00
ES0SSVFF7700	SVF Function License(with S7700 used)
ES0SMPLS7700	MPLS Function License
ES0SNQAF7700	NQA Function License
ES0SIPV67700	IPV6 Function License
ES1SVXLAN000	VXLAN enhanced function license(used in S7700 series)
ES1SFIB128K0	X-series LPU FIB Resource License-128K
ES1SWL512AP0	WLAN Access Controller AP Resource License-512AP (with the X-series LPU used)
ES1SWL128AP0	WLAN Access Controller AP Resource License-128AP (with the X-series LPU used)
ES1SWL64AP00	WLAN Access Controller AP Resource License-64AP (with the X-series LPU used)
ES1SWL16AP00	WLAN Access Controller AP Resource License-16AP (with the X-series LPU used)
L-ACU2-128AP	ACU2 Wireless Access Controller AP Resource License(128 AP)
Documentation	
EH1IV2RCC0E0	S7700 Series Agile Switches Product Documentation

Applications

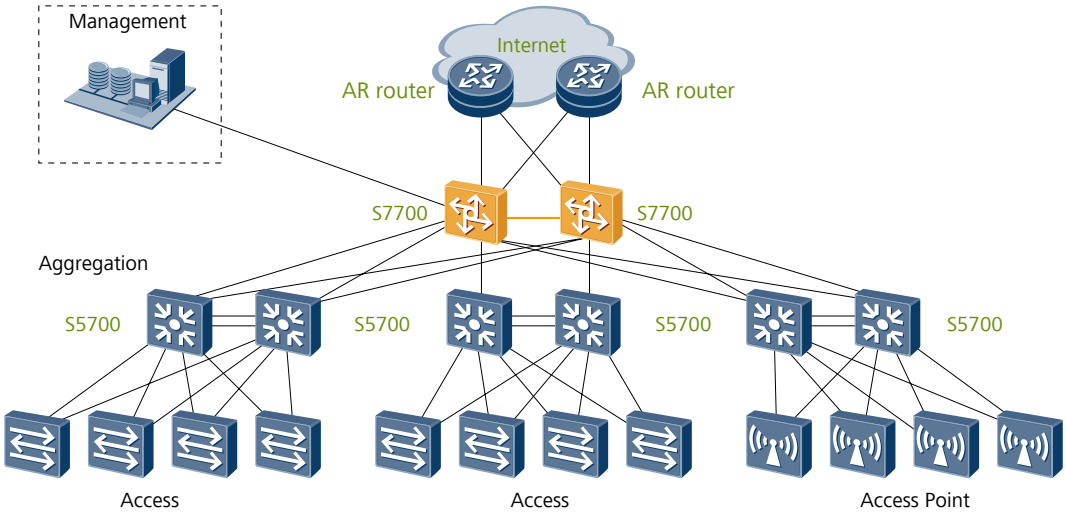
Large-Sized Campus Networks

The S7700 can be used as an aggregation switch on a large-scale campus network, helping to build a highly reliable, scalable, and manageable enterprise network. With hardware-based CPU queue scheduling and firewall modules, the S7700 enhances security at the aggregation layer and protects the enterprise's core network from DDoS attacks and other security threats.



Small - and Medium-Sized Campus Networks

The S7700 implements line-speed forwarding of OSPF, BGP, and MPLS packets. With its firewall and IPSec modules, the S7700 can work at the core layer of small- and medium-sized campus networks. It provides a cost-effective, reliable, and easy-to-deploy network solution for small- and medium-sized enterprises.



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