S6750 Series Data center Switches

Product Overview

S6750 series switches delivers high performance, high port density, and low latency for cloud-oriented data center networks and high-end campus networks. It supports an extensive range of data center features, Software-Defined Networking (SDN) capabilities, and high-performance stacking technologies.

S6750 enables you to build scalable, simplified, open, and secure networks.

Product Appearance

FIBERWDM S6750 Series configurations listed as below:

S6750-48X6QB-AC

48×1/10GE SFP+
6×10/40GE QSFP+
2×hot-swapped fans
1+1 power redundancy

S6750-48X8CQB-AC

48×1/10GE SFP+
8×40/100GE QSFP28
2×hot-swapped fans
1+1 power redundancy

S6750-48HX8CQB-AC

48×25GE SFP28
8×40/100GE QSFP28
2×hot-swapped fans
1+1 power redundancy

S6750-32CQB-AC

32×40/100GE QSFP28
2×hot-swapped fans
1+1 power redundancy

Product Features & Benefits

◆ **High Reliability**

The S6750 provides enhanced Ethernet reliability technologies such as STP/RSTP/MSTP, R-link at millisecond-level protection switchover, as well as LB(loopback check) to ensure link-level reliability.

All S6750 models support 1+1 redundant hot swappable power supply and an AC power supply and a DC power can be used simultaneously. Moreover, the switch supports fault detection and alarms for power modules and fan, fan speed can be automatically adjusted according to temperature variations.

◆ **High Switching Capacity**

The backplane capacity of S6750 is up to 6.4T to provide all ports with non-stop forwarding. The S6750 high performance makes sure to build a reliable, sustainable high speed IP networks.

The S6750 provided high density 10/25/40/100GE port. It can meet the high density, high bandwidth access and aggregation application scenarios of data center and campus network.

◆ **Powerful Services Support**

The S6750 supports IGMP snooping, IGMP proxy, IGMP filter, and IGMP fast leave for robust multicast. It offers wire-speed replication of multicast packets between VLANs, and multicast load balancing among trunk member interfaces to meet requirements for IPTV services and other multicast services.

◆ **Superior Quality of Service**

The S6750 offers Gigabit Ethernet with intelligent services that keep everything flowing smoothly with mechanisms for marking, classification, and scheduling.

It supports traffic classification based on abundant criteria such as MAC/IP address, Layer 4 TCP/UDP port number, protocol, port and VLAN.

Each port supports 8 priority queues with multiple queue scheduling algorithms such as SP/PQ, DRR, SP/PQ+DRR to ensure the highest-priority packets are processed ahead of all other traffic.

◆ **Advanced Security**

The S6750 offers a comprehensive security solution by providing service security in three aspects: subscriber, switch and network.

Subscriber security helps create protections among customers with multiple features. DHCP Snooping, ARP Inspection, and IP Source Guard help to identify each customer based on MAC, IP address and port information to help prevent malicious attack.

Switch security means CPU can be protected from DoS attack and storm. The port security feature allows controlling the number of MAC addresses against overwhelming the switch memory.

Network security is to filter all incoming traffic for ensuring only valid traffic passing through by applying different ACL rules and IEEE 802.1x authentication prevents insecure terminals to intrude illegally into the entire network.

Product Specifications

S6750 Series 10GE Switch

Features	S6750-48X6QB-AC	S6750-48X8CQB-AC	S6750-48HX8CQB-AC	S6750-32CQB-AC
Ports	48×1/10GE SFP+ 6×10/40GE QSFP+	48×1/10GE SFP+ 8×40/100GE QSFP28	48×10/25GE SFP28 8×40/100GE QSFP28	32×40/100GE QSFP28
Throughput	1000Mpps	1000Mpps	2000Mpps	2000Mpps
Switching capacity	1.44Tbps	2.56Tbps	4Tbps	6.4Tbps
VLAN	4K VLANs; 1:1 & 2:2 VLAN Mapping; QinQ, selective QinQ; MAC based VLAN; Protocols based VLAN Guest VLAN; Voice VLAN			
Port trunk	LACP; 32 trunk groups at most, up to 8 ports in each group			
MAC	128K MAC; Static MAC; Dynamic MAC;			
IP routing	Static routing; OSPF;ISIS;BGP,GRE			
Multicast	IGMP snooping, IGMP filter, IGMP Proxy and IGMP fast leave; Multicast replication between VLANs; PIM-SM;PIM-DM; Source Specific Multicast (SSM)			
Reliability	STP, RSTP, MSTP;R-Link protection, VRRP, Trunk, Redundancy power BPDU Guard, Loop protection, Root protection;			
QoS/ACL	Packet filtering at Layer 2 to Layer 4, filtering out invalid frames based on source MAC address, destination MAC address, source IP address, destination IP address, TCP/UDP port number, protocol type and VLAN ID			
	Time range ACL			
	Rate limiting with granularity at 64Kbps			
	Port-based traffic policing and two-rate three-color CAR			
	8 queues on each port			
	Flexible scheduling algorithms, including SP/PQ、DRR、SP/PQ+DRR			
	Re-marking of the 802.1p priority and DSCP priority			
Security	User privilege management and password protection			
	DoS attack defense, ARP attack defense, IP source guard			
	Binding of the IP address, MAC address, interface			
	Port isolation, Port security			
	Black hole MAC address entries			
	Limit on number of learned MAC addresses			
	802.1x authentication, RADIUS authentication			
	SSH v2.0			
	CPU protection			
Data Center feature	EVPN,VXLAN,M-Lag			
Energy saving	Dynamic fan speed adjusting			
Management & maintenance	Port mirroring and Flow-based mirroring			
	Configuration via CLI, Telnet, Console port			
	SNMP v1/v2/v3, RMON, LLDP, Cluster network, Syslog, Traplog			
	Third-Party GUI management platform based on SNMP			
	Loading and upgrade via FTP、TFTP			
	Port loopback detection			

Operating environment	Operation temperature: 0℃ to 55℃ Relative humidity:10%-90% (non-condensing)			
Input voltage	AC: Rated voltage range:100V to 240V AC, 50/60Hz Maximum voltage range:90V to 264V AC, 50/60Hz			
	DC: Rated voltage range: -48V to -60V DC Max voltage range: -36V to -72V DC			
Dimensions (W×D×H）mm	440×400×44	440×400×44	440×400×44	440×400×44
Power consumption	≤180W	≤200W	≤230W	≤360W
Weight(GW)	<8 kg			