Data Center Switch S6750-48HX8CQM-AC



S6750-48HX8CQM-AC TOR switch – with superior port density of 48×25 Gbps and 8×100 Gbps ports is ideally suited for deployment at the server access layer in large enterprise data centers.

S6750-48HX8CQM-AC delivers high-performance, high interface density and low latency to allow enterprises and carriers to build cloud-oriented data center networks. With port speeds spanning from 10Gbps to 100Gbps per port and port density that enables full rack connectivity to any server at any speed S6750-48HX8CQM-AC switch is an ideal leaf and top of rack (ToR) solution, allowing maximum flexibility.

Hardware Specification

Model	S6750-48HX8CQ-AC
Management ports	1x RJ45 100/1000Base-T out-of-band 1x RJ-45 Console
	1x USB Type A
Switch ASIC	Marvell Falcon 98CX8514
CPU	Intel Broadwell-DE D1507
Memory	Default 8GB DDR4
	Max 32GB DDR4
Storage	16GB eMMC NAND FLASH
	SSD module optional
BMC	AST2520 optional
Power supply units	2 x 100-240 VAC, 650W
	Redundant, hot swappable
Power consumption	520W max
Fan unit	5 (4+1 redundant)

	Hot swappable
Form factor and dimension	1 RU
	(W) 445 mm x (D) 468mm x (H) 44 mm
Weight, kg	9.7 kg
Operating temperature	0° C − 45°C
Storage temperature	-40° C − 70°C
Operating humidity	5% - 95% (non-condensing)
Storage humidity	5% - 95% (non-condensing)
Operating altitude	3000m max
Safety regulation compliance	UL/CSA, cUL, CB, CCC

Performance and Scalability

Model	S6750-48HX8CQ-AC
Switching Capacity	4.0 Tbps
Forwarding Rate	2.9 Gpps
Jumbo frames	Yes
Packet Buffer Size	24 MB
Transmit Descriptors	192K
Bridge FDB Entries	Up to 256K
Router IPv4 Host Entries	Up to 256K
Router IPv6 Host Entries	Up to 128K
Router LPM	IPv4 - up to 512K unicast prefixes
	IPv6 - up to 256K unicast 64-bit prefixes
TCAM Resources (Shared between TTI, IPCL and EPCL Classification Engines)	36K x 10B rules (18K x 10B per dual control pipe)
Virtual Ports (ePorts)	8K
Bridge Domains (eVLANs)	Up to 8K
Multicast Physical Port Groups (VIDX)	Up to 4K
Multicast Virtual Port Groups (eVIDX)	16K
Multicast Linked List (MLL) Entries	16K
Tunnel-Start/ARP Table	U p to 192K ARP entries
	Up to 48K Non-IPv6 Tunnel-Start entries
	Up to 24K IPv6 Tunnel-Start entries



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Router Next Hop Entries	24K
Router ECMP Groups	12K
ePort ECMP Groups	16K
Trunk ECMP Group	Up to 4K
L2 ECMP Table (Shared by ePort ECMP group and Trunk ECMP groups)	16K ECMP members Each ECMP group may contain up to 4K EMCP members
Hardware OAM Flows	16K ECMP members 4K OAM flows (1K OAM flows per control pipe)
Spanning Tree Groups	Up to 4K