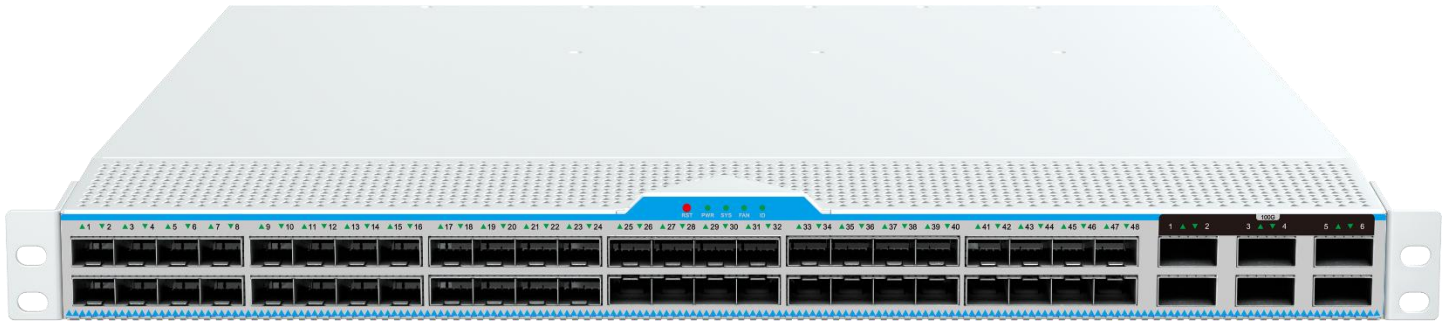# Data Center Switch
S6750-48X6CQM-AC

S6750-48X6CQM-AC is high performance, multi service aggregation or ToR (Top of Rack) switch for telco access, security and cloud, with 48 x 10G (SFP+) + 6 x 100G/40G (QSF28) interfaces.

S6750-48X6CQM-AC switch is an advanced best-in-class, open-source network platform that line-rate L2/ L3 up to 4 Tbps switching performance of Marvell Prestera is paired with multi service feature. It is well suited for enterprise access/aggregation, high bandwidth interconnection for video distribution and security. It can also be used as the cost effective ToR switch for private cloud. S6750-48X6CQM-AC is Compact 1RU standard based open architecture, both its power supply and fan modules are hot-swappable, supporting 1+1 and 4+1 redundancy respectively.

The S6750-48X6CQM-AC switch can be deployed as a top- of- rack (ToR) or leaf switch supporting 10GbE to servers with 100GbE uplinks, each 100G QSFP28 port can be configured 40G as well as 4 x 25GbE or 4 x 10GbE via breakout cables.

Hardware Specification

Model	S6750-48X6CQM-AC
Management ports	1x RJ45 100/1000Base-T out-of-band 1x RJ-45 Console 1x USB Type A
Switch ASIC	Marvell Aldrin 98DX8548
CPU	Maverll Octeon TX2 CN9130
Memory	8GB DDR4
Storage	SSD :64GB eMMC , optional M.2 STAT slot
Power supply units	PSU Input：110V－240 VAC, PSU Output：350W

	1+1 hot pluggable
Power consumption	250W 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° ℃ – 45°C
Storage temperature	-40° ℃ – 70°C
Operating humidity	5% – 95% (non-condensing)
Storage humidity	5% – 95% (non-condensing)
Operating altitude	3000m max
MTBF	40 years
MTTR	1 hour

Performance and Scalability

Model	S6750-48X6CQM-AC
Switching Capacity	2.18 Tbps
Forwarding Rate	600Mpps
Jumbo frames	Yes
Packet Buffer Size	6 MB
Bridge FDB Entries	32K
Router IPv4 Host Entries	Up to 16K Unicast prefixes (LPM) 1
	or
	Up to 3K (*,G) addresses
Router IPv6 Host Entries	Up to 8K Unicast prefixes (LPM) 3
	or
	Up to 0.5K (*,G) addresses
Router LPM	IPv4 - up to 16K unicast prefixes
	IPv6 - up to 8K unicast 64-bit prefixes
TCAM Resources (Shared between TTI, IPCL and EPCL Classification Engines)	9K x 10B rules
Virtual Ports (ePorts)	8K

Bridge Domains (eVLANs)	8K
Multicast Physical Port Groups (VIDX)	4K
Multicast Virtual Port Groups (eVIDX)	16K
Multicast Linked List (MLL) Entries	
Tunnel-Start/ARP Table	Up to one of the following: • 32K ARP entries • 8K non-IPv6 Tunnel Start table entries • 4K IPv6 Tunnel Start table entries.
Router Next Hop Entries	8K
Router ECMP Groups	8K
ePort ECMP Groups	8K
Trunk ECMP Group	4K
Hardware OAM Flows	2K
Spanning Tree Groups	1K
QoS Profiles	1K