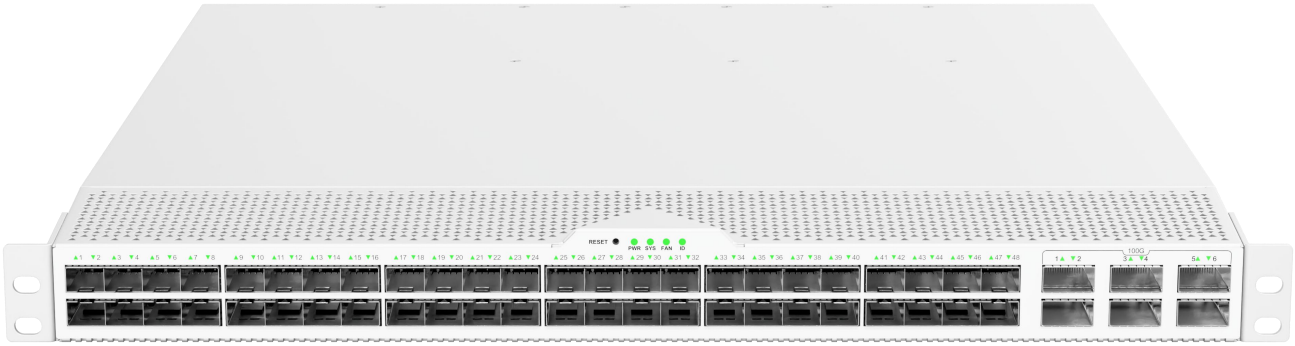
# Data Center Switch
# S6750-48X6CQM-AC



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<br>1x RJ-45 Console<br>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<br>1+1 hot pluggable |
| Power consumption | 250W max |
| Fan unit | 5 (4+1 redundant)<br>Hot swappable |
| Form factor and dimension | 1 RU<br>(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 |
| 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<br>or<br>Up to 3K (*,G) addresses |
| Router IPv6 Host Entries | Up to 8K Unicast prefixes (LPM) 3<br>or<br>Up to 0.5K (*,G) addresses |
| Router LPM | IPv4 - up to 16K unicast prefixes<br>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:<br>• 32K ARP entries<br>• 8K non-IPv6 Tunnel Start table entries<br>• 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 |