Data center networks face changes with hardware and meeting the requirements of the software it hosts. Quanta Cloud Technology provides a series of Bare Metal Switches, the QuantaMesh BMS product line, that addresses these changes in the data center market. The QuantaMesh BMS product lines support speeds up to 100G speeds on their Ethernet Switches. To meet the requirements of high performance, high availability, fast scale out, low latency performance, and continuous serviceability in data center applications, the QuantaMesh BMS product line is the best choice.

BMC (Baseboard Management Controller) embedded on the server as the core of the Intelligent Platform Management Interface (IPMI) architecture can now be implemented in the Ethernet switch. In addition to providing health monitoring of the temperature, power status, and cooling fans; BMC also aids in the deployment and management of software and hardware peripherals.

QuantaMesh T3048-LY7 supports 48 SFP+ (1/10GbE speed) ports and 4 QSFP28 (40/100GbE speed) in a compact rack unit size. By leveraging merchant silicon chip, T3048-LY7 is a high performance high density Ethernet switch with advanced features such as smart table, dynamic load balancing, and RIOT support. With ONIE (Open Network Installation Environment) pre-loaded it could be used for any OS which supports ONIE installer to achieve agile installation and fast response for the changing demand.

About QCT
Quanta Cloud Technology (QCT) is a global data center solution provider. We combine the efficiency of hyperscale hardware with infrastructure software from a diversity of industry leaders to solve next-generation data center design and operation challenges. QCT serves cloud service providers, telecoms and enterprises running public, hybrid and private clouds.

Product lines include hyper-converged and software-defined data center solutions as well as servers, storage, switches, integrated racks with a diverse ecosystem of hardware component and software partners. QCT designs, manufactures, integrates and services cutting edge offerings via its own global network. The parent of QCT is Quanta Computer, Inc., a Fortune Global 500 corporation.
### Physical ports
- **Port configuration:**
  - 48 SFP+ ports support 1/10GbE and 4 QSFP28 ports support 40/100GbE
- **Management Port:**
  - 1 RJ-45 out-of-band management port (10/100/1000M)
- **Console Port:**
  - 1 RJ-45 console port
- **USB:**
  - 1 USB 2.0 port

### Performance
- **Switching capacity:** 1.02Tbps
- **Maximum forwarding rate:** Line Rate Performance (>427B)
- **Latency:** <900ns (10G speed)
- **MAC:** Unified Forwarding Table to dynamically allocate the L2/ L3 tables

### CPU Board 1
- **CPU:** Intel Atom® processors
- **Memory:** 8GB DDR3/ECC
- **SSD:** 32GB

### High Availability
- **Redundant power supply:** 1+1
- **Hot-swappable fan tray:** N+2

### BMC
- **IPMI:** v1.5/v2.0 compliance
- **Serial over LAN**
- **SNMP:** v1/v2/v3
- **SMASH**
- **HTTPS**
- **Health status and hardware monitoring**
- **Event log**
- **PEF and PET**
- **Chassis management**
- **Watchdog and system re-start**

### Mechanical
- **Dimension (HxWxD):** 43.4x440x508mm
- **Weight:** 8.88kg (NET)

### Environmental Specifications
- **Operating temperature:** 0~45°C
- **Operating humidity:** 90% maximum relative humidity

### Electrical
- **Power requirement:** 100~240VAC, 50/60Hz
- **Power consumption:** 174W (100% fan duty)
- **Safety:** UL, cUL, CB, CCC
- **EMC:** CE, FCC, VCCI

### RoHS
- **Reduction of Hazardous Substances (RoHS) 6**

### Supported Optics and Cables
- **DAC cable (SFP+):** 0.5m, 1m, 1.5m, 2m, 2.5m, 3m, and 5m
- **AOC cable (SFP+, 850nm, MMF):** 1m, 3m, 7m, 10m, 20m, and 100m
- **DAC cable (QSFP+):** 1m, 3m, and 5m
- **DAC cable (QSFP+, fan-out):** 1m, 3m, and 5m
- **AOC cable (QSFP+, 850nm, MMF):** 7m and 10m
- **DAC cable (QSFP28):** 1m, 3m, and 5m
- **DAC cable (QSFP28, fan-out):** 3m
- **AOC cable (QSFP28, 850nm, MMF):** 1m, 3m, 5m, and 10m
- **10G optic (SFP+, LC, 850nm, MMF):** 10GBASE-SR optic
- **10G optic (SFP+, LC, 1310nm, SMF):** 10GBASE-LR optic
- **40G optic (QSFP+, MPO, 850nm, MMF):** 40GBASE-SR4
- **40G optic (QSFP+, LC, 1310nm, SMF):** 40GBASE-LR4
- **100G optic (QSFP28, MPO, 850nm, MMF):** 100GBASE-SR4
- **100G optic (QSFP28, MPO, 1310nm, SMF):** 100GBASE-PSM4
- **100G optic (QSFP28, LC, 1310nm, SMF):** 100GBASE-LR4

### Order Information
- **BMS T3048-LY7 (1LY7UZZ05T2) Front to Back, with rail kit**
- **BMS T3048-LY7 (1LY7UZZ05T3) Back to Front, with rail kit**
- **BMS T3048-LY7 (1LY7UZZ05T4) (F-2-B, AC, Rangeley with CL OS pre-loaded, US only)**
- **BMS T3048-LY7 (1LY7UZZ05T5) (B-2-F, AC, Rangeley with CL OS pre-loaded, US only)**
- **PSU - Red (AFS000800074) (F-2-B, AC, 500W)**
- **PSU - Blue (AFS000800075) (F-2-B, AC, 500W)**
- **FAN Module (1HYQZZ0165) (F-2-B)**
- **FAN Module (1HYQZZ0166) (B-2-F)**

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**QCT authorized partner**

All specifications and figures are subject to change without prior notice. Actual products may look different from the photos.

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