QuantaMesh T1048-LB9

1G/10G Datacenter & Enterprise-Class Ethernet switch

- OSPF, BGP4, ECMP
- OpenFlow Support
- Network Automation

The QuantaMesh T1048-LB9 is a high perfor-mance layer 2/3/4 Ethernet switch with 48 10Base-T/100Base-TX/1000Base-T ports and 4 dual speed 1GbE/10GbE SFP+ ports in a compact rack unit size.

Simplicity

The QuantaMesh T1048-LB9 can be managed through an industry standard command-line Interface (CLI) which reduces training and operat-ing costs. A user friendly Web GUI is provided via a standard Web browser for switch manage-ment. The QuantaMesh T1048-LB9 also supports Simple Network Management Protocol (SNMP) both from standard MIB and private MIB for network administrator to easily configure, monitor, and manage operation remotely. The Auto-Installation feature implemented in the QuantaMesh T1048-LB9 helps centralized management to simplify deployment of a truly plug-and-play experience. With the evolution from IPv4 to IPv6, the QuantaMesh T1048-LB9 is a IPv6 integrated management device.

High Availability

The QuantaMesh T1048-LB9 is designed for high availability from both hardware and software perspective. The key features include:

- 1+1 hot-swappable power supplies
- Out-of-band management supported
- 802.1D, 802.1w, and 802.1s supported
- Up to 8 ports per link aggregation group (LACP) and up to 64 groups
- Up to 32 paths ECMP routing for load balancing and redundancy
- Virtual Router Redundancy Protocol supported

Advanced IPv4 and IPv6 routing

The QuantaMesh T1048-LB9 is a fully layer 2 and layer 3 routing switch that supports advanced IPv4 and IPv6 routing features such as RIP v1/v2, OSPF, ECMP, RIPng and OSPFv3. The multicast routing features for IGMP v1/v2/v3, DVMRP, PIM-DM/SM, MLD v1/v2 and PIM-DM6/SM6 are all supported in the QuantaMesh T1048-LB9.

About QCT

QCT (Quanta Cloud Technology) is a global datacenter solution provider extending the power of hyperscale datacenter design in standard and open SKUs to all datacenter customers. Product lines include servers, storage, network switches, integrated rack systems and cloud solutions, all delivering hyperscale efficiency, scalability, reliability, manageability, serviceability and optimized performance for each workload. QCT offers a full spectrum of datacenter products and services from engineering, integration and optimization to global supply chain support, all under one roof. The parent of QCT is Quanta Computer Inc., a Fortune Global 500 technology engineering and manufacturing company.

Found at: www.QCT.io/wheretobuy

QCT authorized partner

QuantaMesh T1048-LB9

Physical ports
- **Port configuration:** 48 10/100/1000BASE-T and 4 1/10Gbe SFP+ ports
- **Management Port:** Out-of-band management port (RJ-45, 10/100/1000Base-T)
- **Console Port:** 1 (RJ-45)

Performance
- **Switching capacity:** 176Gbps
- **Maximum forwarding rate:** 131Mpps
- **MAC:** 32K

L2 Features
- **Switching mode:** store-and-forward
- **Spanning Tree:**
  - 802.1D, 802.1w & 802.1s
  - Fast Forwarding
  - Edge port
  - Loop guard
  - BPDU filter/guard
  - Auto Edge
  - TCN guard
  - Root guard
- **VLAN :**
  - IEEE 802.1Q tagged base
  - Port-based: 4093
  - Private VLAN
  - GVRP/GMRP
  - 802.1v protocol VLAN
  - Voice VLAN
  - MAC-based VLAN
  - IP-subnet VLAN
  - MAC-based Voice VLAN
  - QinQ
- **Storm control:**
  - Broadcast
  - Unknown multicast
  - DLF (Unknown unicast)
- **IGMP snooping:**
  - v1/v2/v3
  - v1/v2 Querier
  - Immediate Leave
- **Link Aggregation:**
  - 802.3ad with LACP (64 groups)
  - Static Trunk
  - Unicast/Multicast Traffic Balance over Trunking Port
  - LACP Fallback
- **Link state**
- **Port backup**
- **Error-Disable Recovery**

QoS Features
- **Scheduling for priority queue:** WRR, Strict, and Hybrid
- **COS:** 802.1p, IP TOS precedence, & DSCP
- **DiffServ**
- **iSCSI optimization**
- **Auto VoIP**
- **Port rate limit**

Security Features
- **static and dynamic port security (MAC-based)**
- **802.1x:** Port-based, MAC-based, auto VLAN assignment, guest VLAN, unauthenticated VLAN
- **Access Control List:** L2/L3/L4
- **IPv6 ACL:** L3/L4
- **RADIUS:** Authentication and accounting
- **TACACS+:** Authentication
- **HTTPS and SSL:** AES128-cbc, 3ES-cbc, Blowfish-cbc
- **SSH 1.5/V2.0:** AES128-cbc, 3ES-cbc, Blowfish-cbc
- **User name and password:** Local Authentication, Remote Authentication via RADIUS/TACACS+, AAA
- **Denial of Service control**
- **Management IP filtering:** SNMP/Web/Telnet/SSH
- **MAC filtering**
- **IP Source Guard**
- **Dynamic ARP inspection (DAI)**
- **DHCP snooping**

Management Features
- **Industrial command-line interface**
- **CLI filtering**
- **Web Based Management/HTTPs**
- **Telenet/SSH**
- **Software download/upload:** TFTP, Xmodem, FTP, and SCP/SFTP
- **Configuration download/upload:** TFTP, Xmodem, FTP, and SCP/SFTP
- **Dual Image**
- **SNMP v1/v2c/v3**
- **SNMP inform:** v2/v3
- **RMON 1, 2, 3, & 9**
- **BOOTP:** client/relay
- **DHCP client**
- **DHCP relay**
- **DHCP L2 option 82 Relay**
- **DHCP L3 option 82 Relay**
- **EVENT/Error log:** Local Flash
- **DDNS**
- **DNS client**
- **DNS relay**
- **Remote PING**
- **Traceroute**
- **SNTPv4**
- **LDAP client**
- **LLDP:** 802.1ab
- **UDLD**
- **Port mirroring:** SPAN
- **sFlow v5**
- **Cable test**
- **Email alerting**
- **CLI scheduler**
- **Auto Install**

IPv6 Management
- **IPv4/IPv6 Dual Protocol Stack**
- **ICMPv6**
- **ICMPv6 Redirect**
- **IPv6 Path MTU Discovery**
- **IPv6 Neighbor Discovery**
- **Stateless Autoconfiguration**
- **Manual Configuration**
- **DHCPv6**
- **SNMP over IPv6**
- **HTTP over IPv6**
- **SSH over IPv6**
- **IPv6 Telnet Support**
- **IPv6 DNS Resolver**
- **IPv6 RADIUS Support**
- **IPv6 TACACS+ Support**
- **IPv6 Syslog Support**
- **IPv6 SNTP Support**
- **IPv6 TFTP Support**
- **Remote IPv6 Ping**

Layer 3 Features
- **IP Multinetting/CIDR**
- **/31 subnets**
- **Proxy ARP**
- **IRDP**
- **Static route**
- **RIP v1/v2**
- **OSPF**
- **ECMP**
- **BGP4**
- **IGMP v1/v2/v3**
- **DVMRP**
- **PIM-DM/-SM**
- **VRRP**
- **Source IP configuration**
- **Policy-based routing**

IPv6 L3 Features
- **Static route**
- **RIPng**
- **OSPFv3**
- **MLD v1/v2**
- **PIM-DM6/-SM6**

SDN
- **OpenFlow**

High Availability
- **Redundant power supply:** 1+1

Mechanical
- **Dimension (HxWxD):** 42.8x435x393mm
- **Weight:** 7.15kg/ 15.76lbs (NET)

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

Electrical
- **Power requirement:** 100~240VAC, 50/60Hz
- **Power consumption:** 95 watts (L2 64B line rate;10G-SR optics, 100% fan duty)
- **Safety:** UL, cUL, CB, BSMI, CCC
- **EMC:** CE, FCC, VCCI, MSIP, CCC, RCM, Anatel

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

Order Information
- **T1048-LB9 (1LB9BZZ0000) (F-2-B)**
- **T1048-LB9 (1LB9BZZ0001) (B-2-F)**
- **PSU - Blue (1HY9ZZZ0061) (F-2-B, AC, 470W)**
- **PSU - Green (1HY9ZZZ002P) (B-2-F, AC, 470W)**