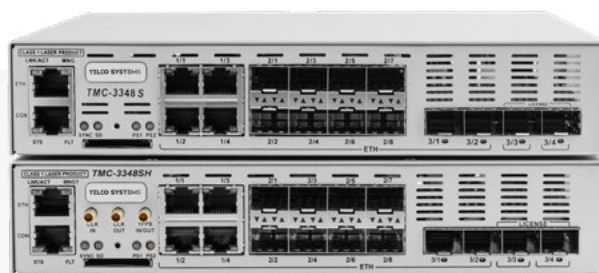


TELCO SYSTEMS

TM-3348S/SH



10GE Ethernet/MPLS/IP Aggregation & Demarcation Device

Telco Systems TM-3348S/SH is a high-capacity, carrier-grade demarcation device designed to cost-effectively connect business customers and mobile sites. It supports advanced L2/L3 managed services, including VLANs, Q-in-Q, and MPLS transport technologies, ensuring flexible, future-proof service delivery while minimizing risks.

With 10GE and GE interfaces in a compact 1RU (1/2-width) form factor, the TM-3348S/SH provides one of the industry's densest demarcation solutions. Redundant power supplies and wide-range DC input make it an ideal choice for mobile backhaul and business service deployments.

Highlights

Enhanced Traffic Engineering

Advanced QoS and hierarchical traffic management ensure predictable performance and SLA assurance.

Advanced Hardware-Based OAM

Carrier Ethernet and MPLS OAM tools provide proactive monitoring, fault detection, and in-service testing for reliable service assurance.

Carrier-Grade Resiliency

Supports protected 10GE ring designs with link-level (LAG/MC-LAG, FRR, BFD) and network-wide (xSTP, G.8032) protection mechanisms for high availability.

SDN Support

NETCONF/YANG programmability and SDN/NFV-ready management allow seamless integration into modern, automated networks.

General Specifications

Dimensions (H x W x D) 1.75"(1RU) × 8.7" × 9.25" (44 mm x 221 mm x 235 mm)

Weight 2.42 lbs. (1.1 kg)

Input Power 100-240 VAC, 50/60 Hz -24/48VDC to-72VDC

Operating Temperature TM-3348S: 0°C to 50°C / 32°F to 122°F
TM-3348SH: -40°C to 70°C / -40°F to 149°F

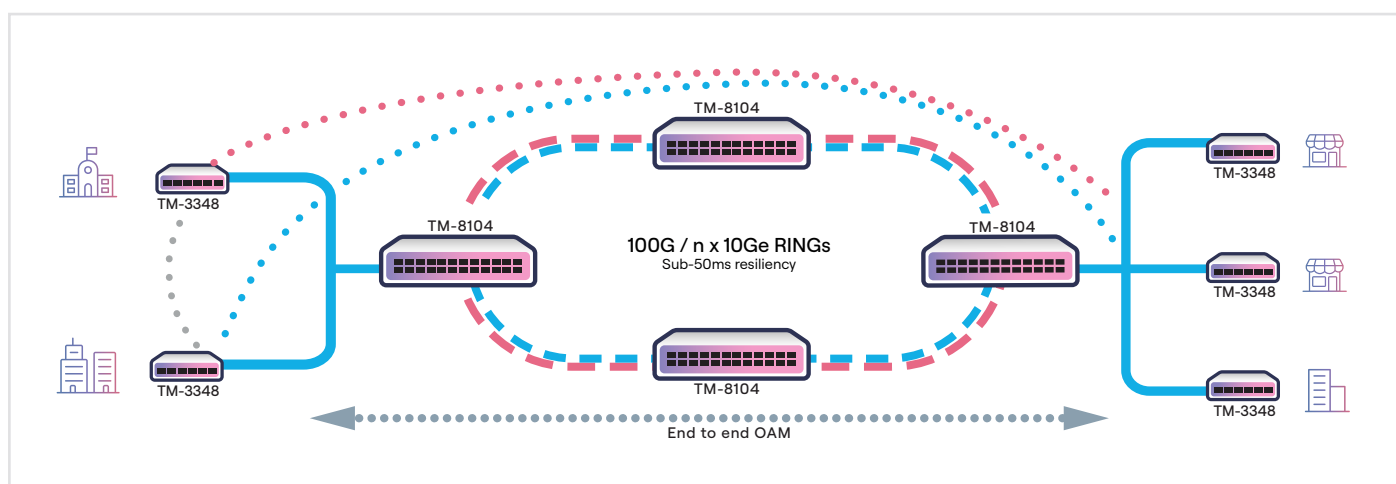
Humidity 5% to 95% non-condensing

Management ACLs, RADIUS, SSHv2, SNMPv3, SFTP, port security, broadcast storm prevention, secured access, ARP protection



Capabilities

- Provides advanced traffic engineering with hierarchical QoS, supporting per-service, per-EVC, and per-flow shaping, policing, and scheduling. This enables strict SLA enforcement, service differentiation, and predictable performance across business, wholesale, and mobile backhaul networks.
- Includes a comprehensive hardware-based OAM toolkit for Carrier Ethernet and MPLS, supporting IEEE 802.1ag CFM, ITU-T Y.1731, ITU-T Y.1564, and RFC 2544. These features allow proactive monitoring, latency and loss measurements, in-service testing, and rapid fault isolation to assure service continuity.
- Delivers carrier-grade resiliency with multiple protection mechanisms. It supports protected 10GE ring topologies (2×10GE east, 2×10GE west) and implements link-level protection with LAG, MC-LAG, FRR, dual homing, and BFD, as well as network-wide resiliency protocols such as xSTP and ITU-T G.8032 Ethernet ring protection switching.
- Supports precise synchronization and timing with IEEE 1588v2 Precision Time Protocol (PTP) and Synchronous Ethernet (SyncE), complemented by external timing input and output interfaces. These capabilities make the TM-3348S/SH well-suited for LTE and 5G mobile backhaul applications requiring phase and frequency accuracy.
- Enables smooth migration to next-generation networks with full SDN support. NETCONF/YANG programmability, Zero-Touch provisioning, and integration with Telco Systems EdgeGenie as well as third-party SDN/NFV orchestration systems ensure automation, scalability, and simplified service lifecycle management.



Key Applications

- L2/L3 managed service
- Pre-aggregation device with advance security separation
- Business services – MTU or high capacity site NID
- Private cloud demarcation gateway
- E-NNI for service providers' inter-connection & exchanges
- OAM monitored networks for SLA assurance
- Advanced automatic traffic engineered (TE) networks

Technical Specifications

Hardware Characteristics	4 × 1000FX/10000BaseX SFP+ ports, 4 × 10/100/1000BaseT RJ45 ports 8 × 100FX/1000BaseX SFP ports 1 x Console RJ45 port Non-blocking 52Gbps FD platform, 19" rack and wall-mounting options
Services	MEF Services: E-LINE, E-LAN, E-TREE, and E-ACCESS L2 Services: IEEE 802.1Q bridging, IEEE 802.1ad Q-in-Q and TLS MPLS Services: VPWS, VPLS and HVPLS MPLS Signaling: RSVP-TE, BGP, LDP/T-LDP and Static MPLS IP Services: VRFLite, DHCP client/server, VRRP IP Routing: Static routing, OSPFv2, IS-IS and BGPv4 L3 Services: MPLS L3VPN
Resiliency	Sub-50ms ITU-T G.8032, R-APS, STP/RSTP/MSTP, Sub-50ms Fast Ring, Sub-50ms FRR, HVPLS dual homing, secondary LSP, Resilient Link, LAG (static/IEEE 802.3ad LACP/Multi-Chassis), BFD, redundant AC/DC power supply
Quality of Service	Service classification per port/EVC/flow single/dual rate limiting, hierarchical rate limit per EVC. Hierarchical SP, DWRR and hybrid scheduling and shaping, with 8 queues per EVC / per port. CoS marking and mapping per EVC, flow control for congestion handling
Multicast Management	IGMP snooping v1/v2/v3, IGMP Proxy, Multicast VLAN registration (MVR)
OAM	IEEE 802.3ah EFM, Hardware-based IEEE 802.1ag CFM, OAM over VPLS, MPLS Ping
Testing & Monitoring	Hardware-based ITU-T Y.1564 and RFC 2544 test head, loopback and service performance analyzer, MEF46 Latching Loopback controller and responder, ITU-T Y.1731 PM, SM and SLM, Per-port/EVC/VLAN/COS, hardware-based MAC Swap loopbacks, TWAMP w/auto-testing
Security	ACLs, RADIUS, SSHv2, SNMPv3, SFTP, port security, broadcast storm prevention, secured access, ARP protection
Regulatory compliance	Europe: EMC DIRECTIVE 2014/30/EU, including EN 300386 NA: FCC 47 CFR Part 15B Class A (USA), ICES-003 Class A (Canada) Japan: VCCI Class A Australia/NZ: AS/NZS-CISPR 32 Class A
Environmental and Safety	Europe: LVD DIRECTIVE 2014/35/EU – EN 62368-1 RoHS DIRECTIVE 2011/65/EU, Directive (EU) 2015/863 NA: UL 62368-1/CAN.CSA 22.2 No. 62368-1 Class 1 Laser product safety (eye safety) IEC 60825-1

Ordering Information

Part Number	Description
TMC-3348S-2AC-x	Ethernet/MPLS/IP 10G Demarcation: 4 × 10/100/1000Base-T UNI/NNI, 8 × 100Base-FX/1000Base-X UNI/NNI, 4 × 1000Base-FX/10000Base-X (SFP+) UNI/NNI (Activation license required for ports 3 & 4 by LIC-3348-10G-2PORT), 1 x RJ-45 ASCII management console port; 1 x RJ-45 ASCII out of band management port; 2 x Internal AC power supplies; SyncE support.
TMC-3348S-2DC	Ethernet/MPLS/IP 10G Demarcation: 4 × 10/100/1000Base-T UNI/NNI, 8 × 100Base-FX/1000Base-X UNI/NNI, 4 × 1000Base-X/10000Base-X (SFP+) UNI/NNI (Activation license required for ports 3 & 4 by LIC-3348-10G-2PORT), 1 x RJ-45 ASCII management console port; 1 x RJ-45 ASCII out of band management port; Dual feed -24/-48 VDC 3A power supplies.
LIC-3348-10G-2PORT	Activation license for 2 × 1000/10000Base-FX/10000Base-X (SFP+) UNI/NNI
Only in 3348SH	SyncE support, with the addition of BITS in/out interfaces support clock and hardened temperature (-40°C to 70°C / -40°F to 149°F)

Experience the Power of Telco Systems T-Series: Invest in **TM-3348S/SH** to boost your network. Contact us at salesnetworks@batm.com or visit our website www.telco.com.