

TELCO SYSTEMS

TM-8001



Compact 10GE Service Demarcation Device

Telco Systems TM-8001 is a cost-effective Carrier Ethernet demarcation and aggregation device for business, wholesale, and mobile backhaul services. It combines advanced L2 and L3 features, hardware-based OAM, and traffic engineering in a compact 1RU form factor, making it an ideal

choice for operators seeking reliable, SLA-enabled connectivity at the network edge. With its support for MEF CE 2.0 services, MPLS transport, and SDN programmability, the TM-8001 provides a scalable and future-ready solution for high-performance service delivery.

Highlights

MPLS Cloud Services Solution

Delivers low-latency L2/L3 VPNs, high availability, and end-to-end OAM assurance for cloud and mobile backhaul.

Ethernet/MPLS/IP Multi-10GE

Advanced L2/L3 networking with automated management, traffic control, and non-blocking architecture for maximum uptime.

Carrier-Grade OAM & QoS

BiNOX-powered platform with hardware QoS/HQoS, embedded test head, and standards-based tools for SLA measurement.

SDN Support

Full SDN integration with NETCONF/YANG for programmable, automated, and future-ready networks.

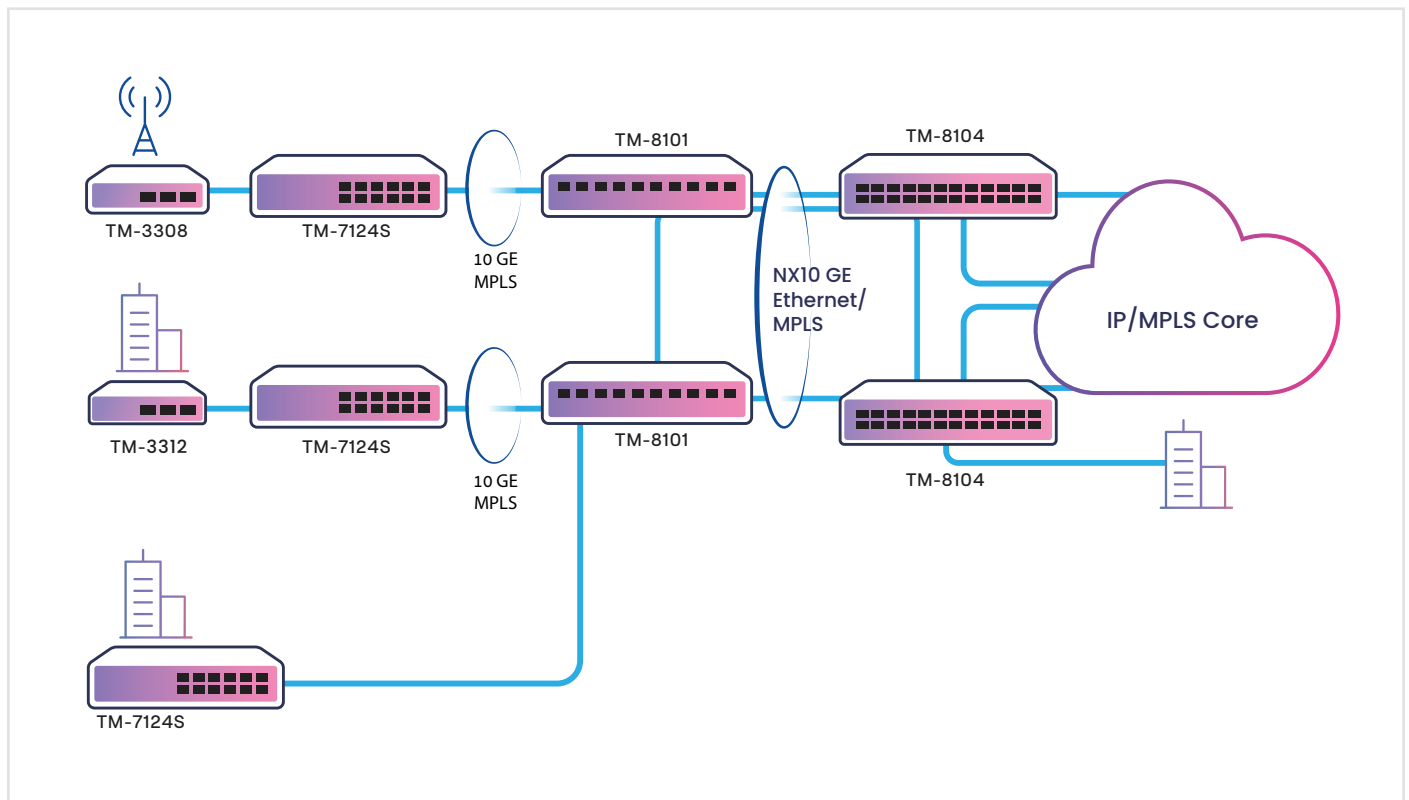
General Specifications

Dimensions (H x W x D)	1.75" (1RU) x 19" x 20" (44.45 mm x 482.6 mm x 508 mm)
Weight	5.75kg
Power Supply	Dual redundant, hot-swappable AC/DC 100-240VAC /-48VDC (-36VDC to -60VDC)
Operating Temperature	Max power consumption: 150W Operating temperature 0°C to 45°C (32°F to 113°F) Extended temp: -5°C to 55°C (23°F to 131°F) up to 96 hours
Humidity	Up to 95%, non-condensing
Fan	Load sharing, speed controlled, hot-swappable
Management	Console, Telnet, SSHv2, RADIUS, TACACS+, SNMP v1/2/3, xFTP, NTP, DHCP client/server & Zero Touch Provisioning

Capabilities

- MPLS and Carrier Ethernet services (VPWS, VPLS, HVPLS) for business, wholesale, and backhaul.
- Advanced L2/L3 features: VLAN, Q-in-Q, VRF, static routing, OSPF, and BGP.
- Hardware-based OAM (802.1ag, Y.1731, Y.1564, RFC 2544) for SLA monitoring and assurance.
- Hardware QoS and HQoS with granular shaping, policing, and scheduling.
- Carrier-grade resiliency with LAG, MC-LAG, FRR, BFD, xSTP, and G.8032 ring protection.
- Compact 1RU design with 10GE interfaces for efficient service demarcation.
- SDN/NFV-ready with NETCONF/YANG, zero-touch provisioning, and orchestration support.
- Unified BiNOX OS across all Telco Systems platforms for consistent management.

Cloud & Data Center Connectivity



Business Services

- L2/L3 VPN
- Off-net/on-net
- Multi-tenancy support
- 100GE Hardware OAM
- Flexible SLA Management

E-Rate / Education

- Campus network interconnectivity and aggregation
- 100GE Hardware OAM
- Flexible SLA management
- Modular hardware
- Multi-tenancy support

Cloud & Data Center Connectivity

- Any cloud
- High bandwidth
- Low latency
- Flexible SLA management
- Assured connectivity

Mobile Backhaul

- 100GE Hardware OAM
- Segment Routing
- Flexible SLA Management
- Low latency

Technical Specifications

Hardware Characteristics	20×1GE/10GE SFP+ ports, wire speed non-blocking 200GE switching capacity in 1RU, support for short and long-haul optical interconnect
Services	IEEE 802.1Q bridging, IEEE 802.1ad Q-in-Q (TLS), MPLS L2VPN- Full VPLS PE, MTU HVPLS, VPWS, MPLS L3 VPN (BGP), can act as CE and PE
Resiliency	Sub-50ms RSVP-TE FRR, secondary LSP ITU-T G.8032, xSTP, resilient link, dual homing VPLS/HVPLS, BFD, LAG (Static/IEEE 802.3ad LACP/Multi-chassis)
Quality of Service	Per port/EVC/flow single/dual rate limiting, hierarchical rate limit per port/EVC/flow Hierarchical QoS. Support for multi-level SP, WRR and hybrid frames scheduling and shaping, 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	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 & reponder, inservice testing capabilities, ITU-T Y.1731 PM, SM and SLM, Per-port/EVC/VLAN/COS, hardware-based MAC Swap loopbacks, TWAMP w/auto-testing
Network Protocols	MPLS/L3: IS-IS, OSPF, BGP, RSVP-TE, LDP, Segment Routing L2: xSTP, G.8032, LACP, MC-LAG, L2-Tunneling
Security	ACLs, RADIUS, SSHv2, SNMPv3, SFTP, port security, broadcast storm prevention, secured access
Regulatory compliance	Europe: EMC DIRECTIVE 2014/30/EU, including EN 300386 NA: FCC 47 CFR Part 15 Class A (USA) ICES-003 Issue 4 Class A (Canada) Telcordia GR-1089 issue 4
Environmental and Safety	Europe: LVD DIRECTIVE 2014/35/EU RoHS DIRECTIVE 2011/65/EU, Directive (EU) 2015/863 NA: UL 60950-1/CAN CSA 22.2 No. 60950-1 NEBS3 compliant Class 1 Laser product safety (eye safety) IEC 60825-1

Ordering Information

Part Number	Description
TM8001-AC-x	TM-8001 platform with fixed twenty (20) 1GE/10GE ports, unpopulated SFP+, fan tray, 2xAC PSU and AC power cord. Notes: 'x' for power supply and cord types. NA for North America, EUR for Europe, UK for United Kingdom
TM8001-DC	TM-8001 platform with fixed twenty (20) × 1GE/10GE ports, unpopulated SFP+, fan tray, 2 x -48VDC PEM

- Multi-service aggregation of Carrier Ethernet networks
- High-density business services and Carrier Ethernet network aggregator
- Mobile backhaul Carrier Ethernet/MPLS aggregator
- SDN networks with NETCONF/YANG support
- Cloud gateway – cloud to cloud & cloud to edge connectivity
- Cost-optimized DSLAM, CMTS and OLTs aggregation
- 10GE service aggregation
- 10GE OAM collector
- Carrier exchange, interconnect

Experience the Power of Telco Systems T-Series: Invest in **TM-8001** to boost your network.

Contact us at salesnetworks@batm.com or visit our website www.telco.com.