

## TELCO SYSTEMS

# TM-8106



## Modular 1.2Tbps Service Demarcation Device (SDD)

Telco Systems TM-8106 is the industry's leading 1.2Tbps MEF CE 3.0-ready modular platform, delivering ultra-high capacity and flexibility. It supports 100GE demarcation with line-rate OAM tests, managed services (L2/L3 VPN), and aggregation of large numbers of 1/10GE interfaces-ensuring rapid adaptability to evolving service provider needs.

With industry-leading scalability, carrier-class resiliency, and advanced features (IPv4/6, OAM, L2/L3 VPN), the TM-8106 enables diverse use cases such as off-net aggregation, DIA, Carrier-of-Carriers demarcation, 100GE fan-out, and 100GE add & drop.

### Highlights

#### Basic Future-Proof 2U Design

Scalable 2U rack unit with optional expansion cards to grow port density as needed.

#### Carrier-Grade Resiliency

Hot-swappable fans, dual AC/DC power, and 100GE OAM ensure maximum reliability.

#### OPEX and CAPEX Reduction

Single flexible platform reduces deployment and management costs while supporting a high number of interfaces for multi-service environments.

#### Business Agility Growth

Rapid service rollout and scalable growth enabled by modular design supporting multiple use cases.

### General Specifications

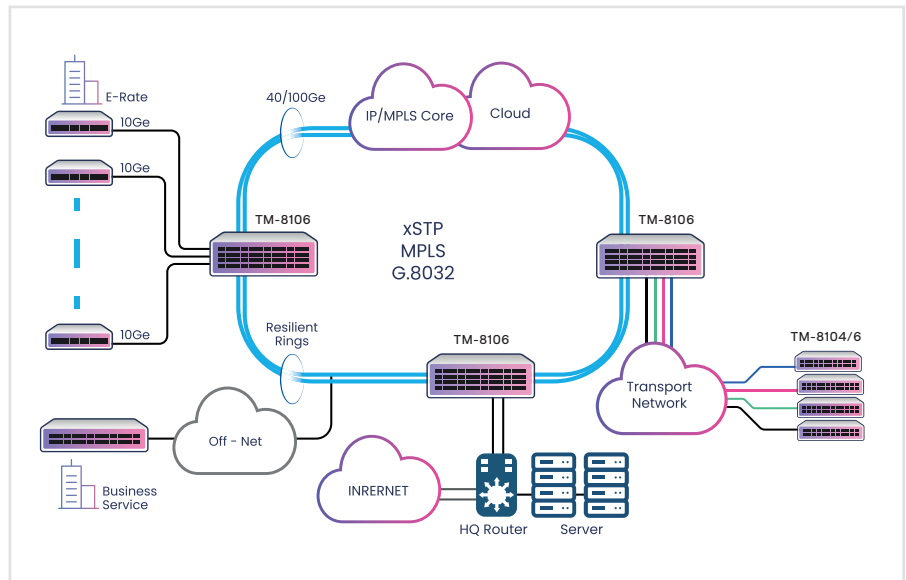
|                               |  |
|-------------------------------|--|
| <b>Dimensions (H x W x D)</b> | 2RU x 19" x 13.7" (133.35 mm x 482 mm x 350mm)   |
| <b>Weight</b>                 | 9kg – 14.5kg   |
| <b>Power Supply</b>           | Dual redundant, hot-swappable AC or DC 24/-48VDC                                       |
| <b>Operating Temperature</b>  | Max power consumption:<br>400W Operating temperature: 0°C to 50°C / 32°F to 122°F      |
| <b>Humidity</b>               | Up to 95%, non-condensing  |
| <b>Fan</b>                    | Load sharing, speed controlled, hot-swappable  |
| <b>Management</b>             | Console, Telnet, SSHv2, Radius, TACACS+, SNMP v1/2/3, xFTP, NTP, DNS resolver, NETCONF |

**Business Services - L2/L3 VPN**

- On-net/off-net with multi-tenancy support
- 100GE Hardware OAM
- Flexible SLA Management

**E-Rate/Education**

- Campus interconnectivity & aggregation
- 100GE Hardware OAM
- Flexible, software-configurable & modular SLA management
- Multi-tenancy support



**Cloud & Data Center Connectivity**

- Cloud access aggregation
- High bandwidth
- Low latency
- Flexible SLA management with assured connectivity

**10G GPON**

- Premium Broadband
- Cost effective price
- Flexible SLA Management
- Shared & dedicated BW
- Low Latency

**Features and Capabilities**

|                           |  |
|---------------------------|--|
| <b>Interfaces</b>         | <ul style="list-style-type: none"> <li>- 2 × 40/100Ge + 16 × 1/10Ge</li> <li>- 2 × 40/100Ge + 64 × 1/10Ge</li> <li>- 6 × 40/100Ge + 16 × 1/10Ge</li> </ul>   |
| <b>Service Assurance</b>  | <ul style="list-style-type: none"> <li>- Hardware-based 100Ge service tests</li> <li>- ITU-T Y.1564 and RFC2544 test head and service performance analyzer</li> <li>- In-service testing capabilities</li> <li>- ITU-T Y.1731 SLM/DMM per port/EVC/VLAN/COS</li> <li>- MEF 46,48,49 - SAT Power Play</li> <li>- TWAMP</li> </ul> |
| <b>Supported Services</b> | <ul style="list-style-type: none"> <li>- MPLS L2/L3 VPN</li> <li>- IEEE 802.1Q bridging</li> <li>- IEEE 802.1ad Q-in-Q</li> <li>- 2-tag management (push / pop / swap) for c-tag and s-tag</li> <li>- Full VPLS PE, MTU, HVPLS, VPWS</li> <li>- BFD</li> <li>- MPLS L2/L3 VPN</li> </ul>   |
| <b>Resiliency</b>         | <ul style="list-style-type: none"> <li>- Sub-50ms RSVP-TE FRR</li> <li>- Dual-homing VPLS/HVPLS</li> <li>- Secondary LSP</li> <li>- ITU-T G.8031 (1:1), G.8032, xSTP, resilient links</li> <li>- LAG (Static/IEEE 802.3ad LACP/Multi-chassis)</li> <li>- Up to 44 LAGs</li> </ul>  |

## Technical Specifications

|                                 |   |
|---------------------------------|---|
| <b>Hardware Characteristics</b> | 2xQSFP28 + 16xSFP+ or 2xQSFP28 + 64xSFP+ or 6xQSFP28 + 16xSFP+ ports<br>Wire speed non-blocking up to 1.2Tbps full duplex switching capacity in 2RU   |
| <b>Services</b>                 | IEEE 802.1Q bridging, IEEE 802.1ad Q-in-Q (TLS), MPLS<br>L2VPN- Full VPLS PE, MPLS L3 VPN (BGP), MTU HVPLS, VPWS, IPv6 PE,<br>Ipv4/6 Dual Stack networking  |
| <b>Resiliency</b>               | Sub-50ms RSVP-TE FRR, secondary LSP<br>ITU-T G.8032, G.8031, xSTP, resilient link, dual homing<br>VPLS/HVPLS LAG (Static/IEEE 802.3ad LACP/Multi-chassis)   |
| <b>Quality of Service</b>       | <b>Per port/EVC/flow single/dual rate limiting.</b> Hierarchical rate limit per port/EVC/flow<br>SPWRR and hybrid frames scheduling CoS marking and mapping per EVC   |
| <b>Multicast Management</b>     | IGMP v1/v2/v3   |
| <b>OAM</b>                      | Hardware-based IEEE 802.1ag CFM, IEEE 802.3ah EFM   |
| <b>Testing &amp; Monitoring</b> | MEF 46, 48, 49 ITU-T Y.1564 and RFC2544 test head and service performance<br>analyzer In-service testing capabilities, ITU-T Y.1731 SLM/DMM Per port/EVC/VLAN/<br>COS, hardware-based flexible MACbased loopbacks |
| <b>Network Protocols</b>        | MPLS/L3: IS-IS, OSPF, BGP, RSVP-TE, LDP, Segment Routing L2: xSTP, G.8032, LACP,<br>MC-LAG, L2-Tunneling  |
| <b>Security</b>                 | ACLs, RADIUS, SSHv2, SNMPv3, SFTP, port security, broadcast storm prevention,<br>secure access  |
| <b>Regulatory compliance</b>    | <b>Europe:</b> EMC DIRECTIVE 2014/30/EU, including EN 300386<br><b>NA:</b> FCC 47 CFR Part 15 Class A (USA)<br>ICES-003:2020 Issue 7 Class A (Canada)   |
| <b>Environmental and Safety</b> | <b>Europe:</b> LVD DIRECTIVE 2014/35/EU<br>RoHS DIRECTIVE 2011/65/EU, Directive (EU) 2015/863<br><b>NA:</b> UL 62368-1/CAN CSA-C22.2 NO.62368-1<br>Class 1 Laser product safety (eye safety) IEC 60825-1          |

## Ordering Information

| Part Number         | Description   |
|---------------------|---|
| TM8106-2QS-O-2XX    | TM810x Expansion Module With 48x1G/10G  |
| TM8106-2QS-64-O-2XX | TM-8106 Service Demarcation Device, high Capacity, 2RU Chassis includes:<br>2 x QSFP28 + 16 x SFP+, Line Card, hot-swappable Fan Tray,<br>O = HW OAM module, hot-swappable redundant AC or DC PSU (XX= AC or DC). |
| TM8106-6QS-O-2XX    | TM-8106 Service Demarcation Device, high Capacity, 2RU Chassis includes:<br>6 x QSFP28 + 16 x SFP+, Line Card, hot-swappable Fan Tray,<br>O = HW OAM module, hot-swappable redundant AC or DC PSU (XX= AC or DC). |
| TM810x-48SFP+       | TM810x Expansion Module With 48x1G/10G  |
| TM810x-4QSFP28      | TM810x Expansion Module With 4x100G   |
| TM810x-OAM          | TM810x Full FPGA Expansion Module for Base System Enables hardware OAM capabilities   |
| TM810x-BRKT-XXIN    | XXIN = 19IN or 23IN (inches) Ear Side<br>TM810x Rack Mount Brackets   |
| TM810x-FAN          | Fan for TM-810x   |

Experience the Power of Telco Systems T-Series: Invest in **TM-8106** to boost your network.

Contact us at [salesnetworks@batm.com](mailto:salesnetworks@batm.com) or visit our website [www.telco.com](http://www.telco.com).