Telco Systems’ T-Metro 8001 is a next generation high density service aggregation platform that provides Carrier Ethernet over both MPLS and Ethernet transport technologies, and is integrated with massive service scalability, carrier class resiliency, and an industry-leading feature set that supports Hierarchical QoS (HQoS), operations administration and management (OAM) capabilities. This best-in-class service switch allows carriers to offer cloud-based, business Ethernet and mobile backhaul services to the edge. With 200GE capacity in a compact 1RU chassis, the T-Metro 8001 provides industry-leading throughput, port density, management and resiliency. Enabling a wide variety of services and an easy migration to a converged service environment, the T-Metro 8001 is the platform of choice to enable wide-scale Carrier Ethernet adoption, implementation, and transformation.

The T-Metro 8001 is designed for service providers who need the reliability of the traditional SONET/SDH quality of service and the flexibility to deliver multiple services at 1GE/10GE port rates in a metro Ethernet environment. This carrier-class device offers a full MPLS provider edge (PE) solution with integrated advanced MPLS/HVPLS capabilities in compact form factor, and per port network flexibility with either 10GE or 1GE SFP+ in each port.

**MPLS Cloud Services Solution**

Cloud-based services pose new challenges for service providers. The T-Metro 8001 addresses these challenges using MPLS to provide low latency L2VPN, high availability, end-to-end service assurance using advanced OAM tools and increased scalability.

The T-Metro 8001 complements the T-Metro 8006 cloud gateway and service aggregation platform, and drives high capacity 10GE rings into the aggregation layer to support the high bandwidth required for cloud applications and mobile backhaul networks. With it, Telco Systems offers service providers cloud-to-edge and cloud-to-cloud services end-to-end, assuring an exceptional level of experience for the end-user while optimizing carrier resources.

**Best Price/Performance MPLS and L2 Multi 10GE Aggregation Switch**

Advanced Layer 2 networking allows total flexibility in deployment, provisioning, and delivery of Ethernet/MPLS services. Physical and virtual networking capabilities provide automated address management and discovery, bandwidth profiles, advanced traffic classes, and complete control over how subscriber traffic is transported across a service provider's network. Its reliable, non-blocking architecture and redundancy features ensure maximum uptime.

The T-Metro 8001 leverages Telco Systems' field proven, carrier grade BiNOX operating system – common among all its platforms – to provide a robust and advanced multi-layer software platform to support operations, administration, and maintenance requirements. Hardware-based QoS and HQoS allows for very high QoS granularity independent of physical ports or services, while an embedded test head supports end-to-end SLA measurement and assurance. It also offers advanced OAM supporting hundreds of services with ITU-T Y.1731 SLM, RFC 2544 and Y.1564 measuring the network performance.

**SDN Support**

T-Metro 8001 provides full SDN support with comprehensive adoption of NETCONF, the network configuration protocol, and YANG, its data modeling language. It also support OpenFlow 1.3.1 with a simple software upgrade to ViNOX OS (ordered separately).
**T-Metro® 8001**

**HIGH DENSITY SERVICE AGGREGATION PLATFORM AND CLOUD GATEWAY**

---

**PRODUCT SPECIFICATIONS**

**Hardware Characteristics**
- 20x10GE/1GE SFP+ ports, wire speed non-blocking 200GE switching capacity in 1RU, support for short and long-haul optical interconnect

**Services**
- E-LAN, E-Line, E-Tree and E-Access MEF services compliance, IEEE 802.1Q bridging, IEEE 802.1ad Q-in-Q (TLS), MPLS L2VPN - Full VPLS PE, MTU HVPLS, VPWS, **OpenFlow support**

**Timing**
- SyncE and IEEE 1588v2* PTP

**Resiliency**
- Sub-50ms RSVP-TE FRR, secondary LSP
- ITU-T G.8032, G.8031*, xSTP, resilient link, dual homing VPLS/HVPLS*, 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
- SP, WRR and hybrid frames scheduling, CoS marking and mapping per EVC

**Multicast Management**
- IGMP v1/v2/v3

**OAM**
- Hardware-based IEEE 802.3ah EFM, IEEE 802.1ag CFM

**Testing & Monitoring**
- ITU-T Y.1564 and RFC2544 test head and service performance analyzer
- In-service testing capabilities, ITU-T Y.1731 SLIM
- Per port/EVC/LAN/VLAN, hardware-based flexible MAC-based loopbacks*

**Management**
- Console, Telnet, SSHv2, Radius, TACACS+, SNMP v1/2/3, xFTP, TACACS+, Radius, SSHv2, SNMPv3, SFTP, port security, broadcast storm prevention, secured access

**General Specifications**
- Dimensions: 1.75"H (1RU) x 19"W x 20"D (44.45 x 482.6 x 508mm)
- Weight: 12.68lbs. (5.75kg)
- Power: Dual redundant, hot-swappable 100-240VAC and -48VDC (-36VDC to -60VDC)
- Max power consumption: 150W
- Operating temp: 0°C to 45°C
- Extended temp: -5°C to 55°C (up to 96 hours)
- Humidity: Up to 95%, non-condensing
- Fan: Load sharing, speed controlled, hot-swappable

**Regulatory Compliance**

**Environmental Compliance**
- Full RoHS, NEBS Level 3 compliant

**Safety Requirements**
- UL 60950, EN 60950, IEC 60825-1, CSA 22.2 No. 905, Class 1 Laser product safety (eye safety)

---

**KEY APPLICATIONS**

- 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 and OpenFlow support
- Cloud gateway – cloud to cloud and cloud to edge connectivity
- Cost-optimized DSLAM, CMTS and OLTs aggregation
- 10GE service aggregation
- 10GE OAM collector
- Carrier exchange, interconnect

---

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM8001-AC-x</td>
<td>T-Metro 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</td>
</tr>
<tr>
<td>TM8001-DC</td>
<td>T-Metro 8001 platform with fixed twenty (20) 1GE/10GE ports, unpopulated SFP+, fan tray, 2x-48VDC PEM</td>
</tr>
<tr>
<td>ViNOX-TM8001-L</td>
<td>ViNOX is a next generation carrier grade networking operating system which supports multiple transport technologies such as Carrier Ethernet, IP/MPLS and OpenFlow 1.3.1, and supports MEF CE2.0 services, high resiliency, HQoS, OAM and next generation management protocols like NETCONF and YANG. ViNOX-TM-8001-L run on TM-8001 products</td>
</tr>
</tbody>
</table>

---

**©2014 Telco Systems Inc. All rights reserved. All trademarks are property of their respective owners. Specifications are subject to change without notice.**

---

**Support**

Int’l Headquarters
- Tel: +972-9-866-2525
- Fax: +972-9-866-2500
- sales.emea@telco.com

US Headquarters
- Tel: +1-800-221-2849
- Fax: +1-781-551-0538
- sales@telco.com

EMEA
- FR: +33-95-314-7731
- DE: +49-241-463-5490
- sales.emea@telco.com

Asia Pacific
- Tel: +65-6224-3112
- Fax: +65-6220-5848
- info.apac@telco.com

Latin America
- Tel: +1-800-221-2849
- Fax: +1-781-551-0538
- sales.latam@telco.com

ViNOX®
- ViNOX is a next generation carrier grade networking operating system which supports multiple transport technologies such as Carrier Ethernet, IP/MPLS and OpenFlow 1.3.1, and supports MEF CE2.0 services, high resiliency, HQoS, OAM and next generation management protocols like NETCONF and YANG. ViNOX-TM-8001-L run on TM-8001 products

---

**PN:TM8001-OCT14**