

TraverseEdge 100

Multiservice Edge Multiplexer

Key Features

- Carrier-class design provides full protection for all ports/services and common components
- SFP transceivers provide flexible connectivity for high-speed optical and GigE interfaces)
- Ideally suited for metro access as well as OSP and cell site deployments
- Global solution supports ANSI and ETSI/ITU-T network environment
- Complements the Traverse Multiservice Transport Switch

Model	DESCRIPTION
TE100-CHASSIS-KIT	Shelf (includes fan module)
TE100-SYSTEM-OC48	2.5Gbps System Card
TE100-SYSTEM-OC3-12	622Mbps System Card



TraverseEdge™ 100 contains a Fully integrated SONET/SDH ADM and Ethernet switching in a 2RU shelf. TE 100 offers an affordable delivery of Ethernet Fast Ethernet, Gigabit Ethernet, DS1/E1 and DS3/E3 services from a compact system. The multiplexers' Full Ethernet over SONET/SDH feature set includes GFP, HO/LO VCAT and LCAS.

Carrier-Class Multiservice Edge Multiplexer

The TraverseEdge100 (TE-100) is a cost-effective and efficient edge multiplexer that delivers differentiated new Ethernet and IP services as well as legacy voice and TDM services. The flexible and compact (2RU) shelf aggregates a combination of Fast Ethernet, Gigabit Ethernet, DS1/E1 and DS3/E3 services onto dual OC-3/12/48 or STM-1/4/16 trunk interfaces. Targeted for wireless, wireline and private network applications, the TE-100 is ideally suited for metro access rings, MTUs (offering both AC or DC), outside plant cabinets, cell sites, and other locations.

Ethernet Switching & Transport

The TE-100 platform integrates layer 2 Ethernet switching and statistical multiplexing functions to enable delivery of point-to-point and multipoint Ethernet services. Advanced features such as such as 802.1Q/p VLAN prioritization and intelligent flow control mechanisms support differentiated classes of service and carrier-grade SLAs. In addition, the TE-100 platform implements standards-based GFP, LCAS, and VCAT technologies to maximize Ethernet over SONET/SDH (EoS) bandwidth efficiency and lower the cost of service delivery. The evolutionary TE-100 design enables new Ethernet services to co-exist with legacy voice and TDM private line services with maximum efficiency.

Carrier-Class, Multiservice Flexibility

The TE-100 delivers carrier-class reliability with optional 1:1 equipment protection, as well as support for UPSR/SNCP ring and linear 1+1 APS/MSP facility protection on the optical trunk interfaces. Hot-swappable SFP (Small Form-Factor Pluggable) transceivers also provide optical media and interface rate flexibility. The TE-100 complements the Traverse® Multiservice Transport Switch, as well as the Traverse PacketEdge™, and other TraverseEdge products. As is the case with the Traverse platform, the TE-100 is a global solution that supports ANSI and ETSI/ITU-T network environments.

TE-100 Multiservice Edge Multiplexer

Chassis

Dimensions: 3.5" (H) x 17.25" (W) x 11.8" (D)
90 mm (H) x 438 mm (W) x 300 mm (D)

Weight: 9.65 lbs. (3.38 kg) - fully configured

Mounting Options: Rack- or wall-mountable

Power

Voltage: 48VDC (Min. -40V to Max. -70V)

Dual redundant DC power inputs, -40 V to -60 V operating range (-48 V nominal)

Optional AC power supply

Power Consumption: 100 watts maximum

Environmental

Operational: -40°C to 65° C, 85% max. relative humidity

Storage: -40°C to 85° C, 95% max. relative humidity

Altitude: 13,123 ft. (4000 m) above sea level

Airborne Contaminants: NEBS Section 4.5, GR-1274-CO

Protection Options

1+1 APS/MSP, UPSR/SNCP on network interfaces

1:1 equipment protection on tributary interfaces

1:1 equipment protection on system card/electronics

Interfaces

Network Interfaces (on system card)

(2) OC-3/OC-12 or OC-48 ports
– LC SMF connectors, IR or LR optics using SFP transceivers

(2) STM-1/4 or STM-16 ports
– LC SMF connectors, IR or LR optics using SFP transceivers

Tributary Interfaces (fixed configuration)

(2) Gigabit Ethernet
– LC connectors, SX or LX optics using SFP transceivers

(6) Fast Ethernet
– RJ45 connectors

(3) DS3 or E3
– Mini-BNC connectors

(28) DS1 or (21) E1
– RJ45 connectors

Functional

SONET Multiplexing: STS-1, STS-3c, VT1.5*

SDH Multiplexing: VC-3, VC-4, VC-12*

Synchronization: Line and backup Stratum 3 timing, G.957, G.691

Ethernet over SONET/SDH:

LO and HO Virtual Concatenation (VCAT)
Up to 8 Virtual Concatenation Groups (VCGs)
Link Capacity Adjustment Scheme (LCAS)
Generic Framing Procedure (GFP)

Ethernet:

Layer 2 switching 802.1Q VLANs, rate limiting in 1 Mbps increments Port or VLAN-based CoS Point-to-point and multipoint services

Management

Local: RS-232 craft interface

Node Management: SNMP over Ethernet DCC

Management Transport: TCP/IP direct connection (100BaseTX RJ45) or DCC

Regulatory Standards

ANSI T1.105.02, T1.319-2002

ETSI ETS 300 019-1-3, 019-1-3 (Environmental)

IEEE 802.3i, 802.3u, 802.3x, 802.3z, 802.1D, 802.1p, 802.1Q, 802.1W

ITU-T Rec. G.707, G.783 (VCAT), G.7042 (LCAS), G.7041 (GFP)

Telcordia GR-253

NEBs Level 2 Certified, Zone 4 Earthquake, GR-63-CORE, GR-1089-CORE, TRW-NWT-000-295 IBN

Safety CSA C2.22 No. 60950; UL/IEC/EN60950

Eye Safety

Class 1

EMI FCC Part 15, Class A; EN 300; EN 55022, Class A, EN 61000

* VT1.5/VC-12 Multiplexing is included with the 622Mbps System Card..