# TransAccess 200

# **Modular Multiplexer**

## **Key Features**

- Supports 1+1 APS/MSP for STM-1/ OC-3 optical trunks
- 1:1 protection switching for electrical T1/E1 and DS3/E3 tributary modules
- Global solution supports ANSI/ SONET and ETSI/SDH network environments
- Complements the Traverse<sup>®</sup>
   Multiservice Transport Switch
- Standard Amphenol/Telco connectors for T1/E1 connections (optional 3RU version only)
- Software programmable M13 multiplexing



- High-density / low-power M13 muliplexing in co-location environments
- Consolidating T1/E1 and DS3/E3 connections onto SONET (OC-3) rings



This modular, cost-effective multiplexer is optimized for consolidating T1/E1 and DS3/E3 connections onto SONET/SDH at trunk rates up to OC-3/STM-1. It also features a carrier-grade NEBS Level 3 certified design.

# Consolidating T1/E1 and DS3/E3 Connections onto the SONET/SDH Transport Network

The TransAccess<sup>™</sup> 200 (TA-200) is a flexible, cost-effective edge multiplexer optimized for consolidating T1/E1 and DS3/E3 connections onto the SONET/SDH transport network at trunk rates up to OC-3/STM-1. The chassis-based design of the TA-200 integrates the functionality of up to seven M13 muxes in a small (2 or 3RU) footprint making it ideal for deployments where space is at a premium, such as CPE and co-location environments. The TA-200 is also a global solution that supports both ANSI/SONET and ETSI/SDH applications.

## Flexibility and Efficiency

TA-200 takes multiplexing to a new level of flexibility and space efficiency. Connect your T1s or E1s and transport them as traditional T1s in an OC-3 or as E1s in an STM-1. Choose a number of multiplexing options including T1 to T3 to OC-3, T1 to VT1.5 to STS-1 to OC-3, E1 to T3 to OC-3, E1 to VT2 to STS-1 to OC-3, or E1 to TU-12 to AU3 to STM-1. The low power consumption and small footprint make it ideal for co-locations. A carrier-class solution, the TransAccess 200 provides redundancy on both the high-speed and drop ports for added reliability. Integrated T1/E1 testing make fault isolation routine, and unlike most M13 muxes, T1/E1 framing information is included to provide additional performance statistics.



- 7 fully redundant M13 MUXes is 2 rack mounting spaces
- Only MUX available with both T3 and STS-1 interfaces
- Terminal, Telnet, SNMP, Web and TL-1 management interfaces
- Ideal for co-locations or wherever space is at a premium





# TransAccess 200 Modular Multiplexer

# **Chassis**

#### TransAccess 200 Multiplexer

Dimensions 19" Shelf
 Sorvice module starting

10 service module slots (5 pairs) 2RU: 3.5" H x 17.37" W x 12" D 3RU: 5.25" H x 17.37" W x 12" D)

- · Weight (19"): Max of 20 lbs. fully loaded
- Dimensions 23" Shelf
   14 service module slots (7 pairs)
   2RU: 3.5" H x 21" W x 12" D
   3RU: 5.25" H x 21" W x 12" D
- · Weight (23"): Max of 25 lbs. fully loaded

#### **Power**

- -48VDC or +24VDC, 118 watts (23" shelf) or 90 watts
- · Separate A & B battery feeds

# **Environmental**

- Ambient Operating Temp: 0°C to +45°C
- · Humidity: To 95% max. relative humidity

# **System Management**

- VT100 terminal
- Telnet
- SNMP (Fully-compliant Charles Industries MIB)
- · Web Browser
- TL-1
- · Serial interface, 1200 baud to 115 kilobaud
- Ethernet 10BaseT, RJ45 Connector
- · Remote management via SONET DCC

#### OC-3/STM-1 Interfaces

- Line Rate: 155.52 Mbps +/- 20ppm
- · Output Power (IR): -8 dbm to -15 dbm
- Input Sensitivity (IR): -29 dbm
- · Output Power (LR): 0dbm to-5dbm
- · Input Sensitivity (LR): -32 dbm
- · Optical Connector: LC
- · Optical Cable: Single-mode 1310 nm or 1550 nm

#### T3 Interfaces

- Line Rate: 44.736 Mbps +/- 20ppm
- · Line Format: Bipolar B3ZS encoded
- · Framing: C-Bit Parity or M13
- · Line Build-Out: 0-900 feet
- · Input Level: 35mV to 900mV
- · Clocking: Loop or Internal Timed

#### STS-1/AU3 Interfaces

- Line Rate: 51.84 Mbps +/- 20ppm
- · Line Format: Bipolar B3ZS encoded
- Payload Mapping: Asynchronous T1/ E1/ T3
- · Line Build-Out: 0-900 feet of cable
- · Input Level: 35mV to 900mV
- · Clocking: Loop or Internal Timed

#### T1 Interfaces

- Line Rate TX: 1.544 Mbps +/- 50 ppm
- RX: 1.544 Mbps +/- 130
- · Line Code: AMI or B8ZS
- · LBO Settings: 0 to 655 ft.
- · Line Framing: SF (D4), ESF, or Unframed
- · Line Interface: Six 68-pin SCSI

#### E1 Interfaces

- DLine Rate: 2.048 Mbps +/- 50ppm
- · Line Code: AMI or HDB3
- · Line Framing: CCS, CAS, Unframed
- · Line Interface: Six 68-pin SCSI

## **Performance Monitoring**

**Cumulative and Severely Errored Seconds:** 

- T1/E1 BPV
- T1/E1 CRC errors
- · T3 CP-bit errors
- · STS-1 Section (B1)
  - errors

errors

- STS-1 Line (B2)
- T1/E1 Frame Bit errors
- · T3 P-bit errors
- T3 FEBE errors
- · VT1.5 Parity errors
- VT2 Parity errors

### Certifications

- · NEBS level 3
- UL/C-UL
- FCC Part 15
- NEBS Level 3
- CE Mark

