

T1/E1 Fiber Optic Multiplexer

Model
TC8300

- 1 to 4 Channels of T1/E1 or Combo
- Multimode or Single Mode (1300/1550nm)
- Distances up to 100km
- Up to 8 Extra Data Channels
- Built-in Power Redundancy
- Optional Optic Redundancy
- No Jitter
- Local Dry Contact Alarm Relay
- Individual Local & Remote Loopback
- Rackmount or Standalone



TC8300S



TC8300P

The TC8300 is a 1-to-4 channel T1/E1 Fiber Optic Multiplexer that offers several advanced features including extensive diagnostics, extra data channels, power and optical redundancy, jitter removal and a replaceable Line Interface module. It is available both multimode and single mode and is compatible with all popular types and sizes of optic cable. Distances to more than 100km are possible with the single mode 1550nm option (34dB loss budget).

Diagnostics are extensive. Each channel offers six LED indicators to ease installation and troubleshooting - one each for Rx/D, Alarm, T1/E1 Signal Loss, BPV violations, Remote Loopback and Remote Signal Loss. Individual channels provide 4 DIP switches, accessible from the front panel, to control settings for line code, line length, local loopback or remote loopback. Local dry contacts relays are also provided. The extra out-of-band data channels are intended for multi-purpose communications. Up to eight RS-232 channels are available in addition to the T1/E1 channels.

Power redundancy is standard; optical redundancy is optional. Both provide automatic switchover in the event of failure. The TC8300 is transparent to the framing format and supports all applicable standards and line codes including CCITT G.703 and AMI/B8ZS/HDB3 Line Codes. Line distances from 0 to 655 feet (for connecting to DSX-1 cross connects) are supported. Jitter is eliminated because of a built-in elastic buffer and jitter attenuator.

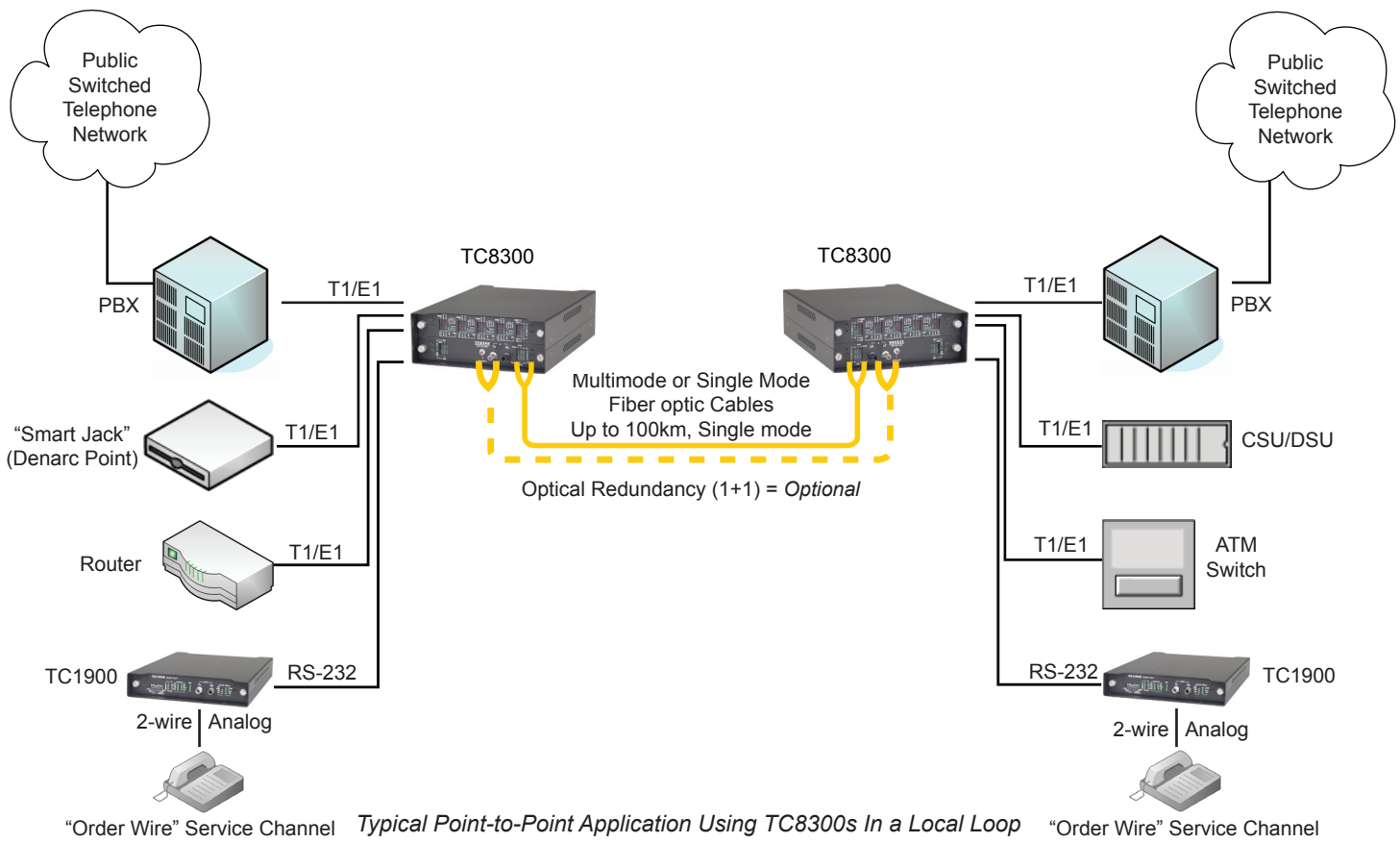
Fiber optic connectors are ST or FC. Input power is 12VDC (standard); optional 24VDC, -48VDC, or 115/230VAC with a built-in or external power supply. Special two-position feed-thru detachable terminals are provided for connecting the T1/E1 twisted pairs. High temp option (-20°C to 70°C), Model TC8300, is also available.



Applications

The TC8300 is a remarkably flexible one-to-four channel T1/E1 Fiber Optic Multiplexer that is frequently used to link PBXs, Channel Banks, Customer Premise Equipment and M13 Muxes to DSX-1 Cross Connects. The out-of-band RS-232 channels can be used for telephone service with the Model TC1900 "Quick-Talk" Telephone Extenders.

TC Communications, Inc.
17881 Cartwright Rd. Irvine, CA 92614 U.S.A.
Tel: (949) 852-1972, Fax: (949) 852-1948
Sales: (800) 569-4736
Web Site: www.tccomm.com
E-mail: sales@tccomm.com



Data Rates

- T11.544 Mbps
- E12.048 Mbps
- RS-232, RS-422 Async56 Kbps

Channel Capacity

- T1, E1, or any combination4
- RS-232, RS-422, TTL, Dry Contact ...8

Optical

- TransmitterLED/ELED/LASER*
- Receiver.....PIN Diode
- Wavelength
-1300nm MM
-1300/1550nm SM
- Fiber Optic Connectors..ST, FC or SC
- Loss Budget* - 850/1300/1550nm
- Multimode @ 62.5/125µm15dB
- Single Mode @ 9/125µm.....20dB

Electrical

- T1/E1 Connector (100/120 ohm)
-Detachable Terminal Block
- E1 Connector (75 ohm)
- Terminal Block with BNC Adapter
- InterfaceT1/E1 (G.703)

System

- Bit Error Rate1 in 10¹⁰ or better

Alarm

- Dry Contact.....Normal OPEN

Visual Indicators

- Channel Status.....RxD, RLOS, LOS, RLPB, BPV, Alarm
- System.....Power A & B, Vcc, VccA, VccB, Alarm
- OpticSyncA, SyncB, Optic in Use
- RxA & RxB, VLIN

Power

- Standard12VDC @1.2 Amp
- Optional24VDC, -48VDC, or 115/230VAC external or built-in

Temperature

- Operating-10°C to 50°C
- Hi-Temp (optional).....-20°C to 70°C
- Storage-40°C to 90°C
- Humidity95% non-condensing

Physical (TC8300S)

- Height.....(6.71 cm) 2.7"
- Width.....(18.2 cm) 7.2"
- Depth.....(24.9 cm) 9.8"
- Weight.....(1.36 kg) 3 lbs

Physical (TC8300P)

- Height.....(4.5 cm) 1.75"
- Width.....(48.3 cm) 19.0"
- Depth.....(21.9 cm) 8.6"
- Weight.....(2.0 kg) 4.3 lbs

*Contact factory for higher requirements (LASER)



ISO 9001
QMI-SAI Global
#1045959

TC Communications, Inc.
17881 Cartwright Road
Irvine, CA 92614 U.S.A.
Factory Tel: (949) 852-1972
Fax: (949) 852-1948

Sales Office
U.S.A. Domestic International
(800) 569-4736 (949) 852-1973

Web Site: www.tccomm.com
E-mail: sales@tccomm.com