Fiber Optic Phone/Data Multiplexer

TC8800 Series

- Up to 28 Telephone Lines and/or 2/4-wire 600 Ohm Analog, RS-232, RS-422, TTL, Dry Contact Closure, Dry Contact Detector

- 2-Wire Analog PBX and Key System Compatible

- Multimode or Single Mode (850/1300/1550nm)

- Built-In Power Redundancy

- Optical Redundancy (optional)

- Hi-Temp & Extreme Temp (optional)

- Hot Swappable Rackmount Cards

- Tested and Compatible with:

Code Blue®

RAMTEL®

TALK A PHONE Creating Communications Solutions®

TC8800 Fiber Optic Phone/Data Multiplexer

TC COMMUNICATIONS
FIBER OPTIC CONNECTIVITY

The TC8800* is a 4-to-28 channel telephone and data fiber optic multiplexer that extends multiple telephone lines and data channels to remote sites such as other buildings in campus networks. Users can mix or match telephone channels or 2/4-wire 600 Ohm Analog, RS-232, RS-422, TTL and Dry Contact Interfaces in increments of four up to a maximum of 28 channels. For example, a user could multiplex 20 telephone channels and 8 RS-232 data channels.

The TC8800 Series converts 2-wire FXS to fiber optics on the telephone side with ring down capability and FXO on the PBX side. Distances up to 80km are possible over single mode fiber, 4km over multimode fiber. Because the TC8800 digitizes the analog signals (PCM), voice quality does not degrade over extended distances.

It supports Telephone channels from 300Hz to 3.4Khz and asynchronous data rates to 19.2 Kbps. Twelve LEDs are available for status monitoring and diagnostics. A local dry contact alarm relay is standard. Diagnostic LEDs for each channel include TX, RX, Ring, and Hook.

The TC8800R PC Card version requires the TCRM191 or TCRM195 19" Rackmount Card Cage. Each TC8800R card can be removed or installed on the TCRM191 without powering down the system ("hot swappable"). The TC8800S Standalone version currently supports up to 8 telephone or data channels. High and extreme operating temperature versions (−20°C to 70°C, -40°C to 80°C), are also available.

The TC8800 works with all types and sizes of multimode or single mode fiber optic cable at 850/1300/1550nm**. Fiber optic connectors are ST or FC. RJ-11F ports are provided on the rear side to connect with telephones. Power redundancy is standard; optical redundancy is optional. Power is 12VDC; optional 115/230VAC, 24VDC and -48VDC.

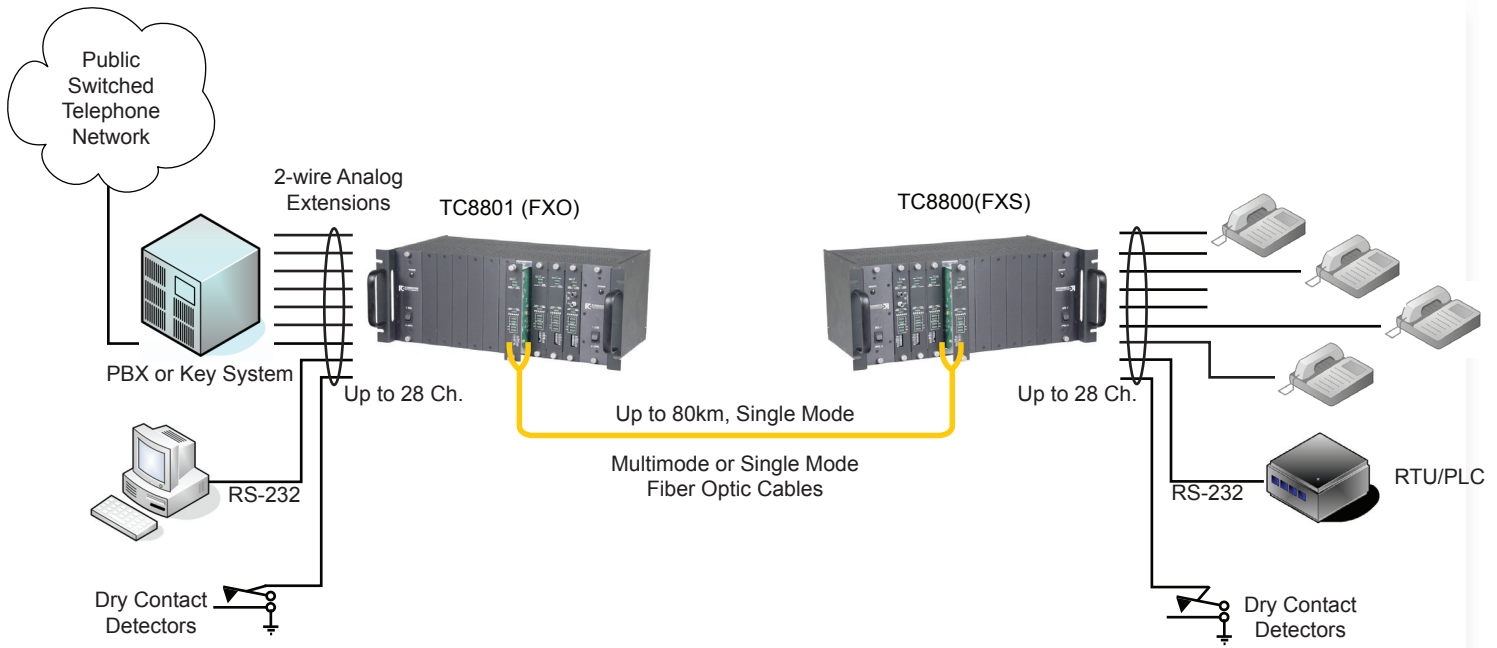*The TC8800 consists of the TC8800(FXS), TC8801(FXO) and/or TC8802(data)

**Contact factory for higher loss budget requirements (Laser version)

Applications

The TC8800 is typically used to link or extend data and telephone lines in campus networks. In many instances the TC8800 can replace expensive channel banks.

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

Typical Point-to-Point Application Using TC8800 Telephone/Data Fiber Optic Multiplexers.

Audio Bandwidth

Telephone ....300 Hz to 3.4 Khz

2/4-wire Analog........300 Hz to 3.4 Khz

Data Interfaces

Async RS-232, RS-422, TTL, or Dry
  Contact Closure/Detector

Data Rates ....Up to 19.2 Kbps

*Contact factory for other requirements

Channel Capacity

TC8800S.....................................4 or 8

TC8800R.......4, 8, 12, 16, 20, 24 or 28

Optical

Transmitter...........................LED/ELED

Receiver..............................PIN Diode

Wavelength...............850/1300nm MM

..............................1300/1550nm SM

Fiber Optic Connectors..........ST or FC

Loss Budget* - 850/1300/1550nm

  Multimode @ 62.5/125μm.........15dB

  Single Mode @ 9/125μm 20dB

*Contact factory for higher requirements

Electrical

Connector ....RJ11 Female

System

Bit Error Rate ....1 in 10^9 or better

Visual Indicators

Power A & B, Vcc, FXS-0, Tx, Rx,
Monitor, Optic-Rx, Sync, TxFCLK,
LOCLB, RMTLB

For each channel: Tx, Rx, Ring, Hook

Power

Standard 12VDC

Optional........................24, -48VDC, or

.....................................115/230VAC*

*Currently available for TC8800R. Future release

  for TC8800S.

Temperature

Operating ....-10°C to 50°C

Hi-Temp (optional) ......-20°C to 70°C

Hi-Temp2 (optional) ....-40°C to 80°C

Storage ....-40°C to 90°C

Humidity ....95% non-condensing

Physical (Rackmount Card)

Height.........................(3.18 cm) 1.25"

Width.........................(15.06 cm) 5.93"

Depth........................(21.84 cm) 8.60"

Weight....................(477 gm) 1.05 lbs

TC COMMUNICATIONS®
FIBER OPTIC CONNECTIVITY

Certified System ™

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