RS-449/RS-422 High Speed Sync/Async Fiber Optic Modem

Model TC1720

- Async data rates up to 10 Mbps
- Sync data rates up to 5 Mbps
- Distances up to 80km*
- Interchangeable Interfaces
- Multimode (1300nm) or Single Mode (1300/1550nm)
- Built-In Test Signal Generator
- Local & Remote Loopback
- Built-In Power Redundancy
- Optical Redundancy (optional)
- Local Dry Contact Alarm Relay
- Rackmount, Standalone or Wall Mount
- Hardened Temperature Version

TC1720S Standalone Unit

2 X TC1720R (Housed in TCRM196 19" Rackmount Card Cage)

The TC1720 is ideal for applications requiring high data rates. It supports asynchronous data rates up to 10Mbps and synchronous rates up to 5Mbps.

Distances up to 80km* are possible depending on various factors including electrical interface, optical transmitter, fiber type and quality. Power redundancy is standard. Optical redundancy is optional.

Available for multimode (1300nm) or single mode (1300/1550nm), the TC1720 is compatible with all popular sizes and types of fiber optic cable. Fiber optic connectors are ST or FC. Electrical connectors are DB37 female. Power is 12VDC (standard), 24VDC, -48VDC, 125VDC or 115/230VAC with an external power cube.

Diagnostics are extensive and include a built-in Test Signal Generator, local & remote loopback tests and LEDs for Power, Alarm, Tx, Rx and all applicable control signals. The Test Signal Generator verifies both device and fiber optic link operation.
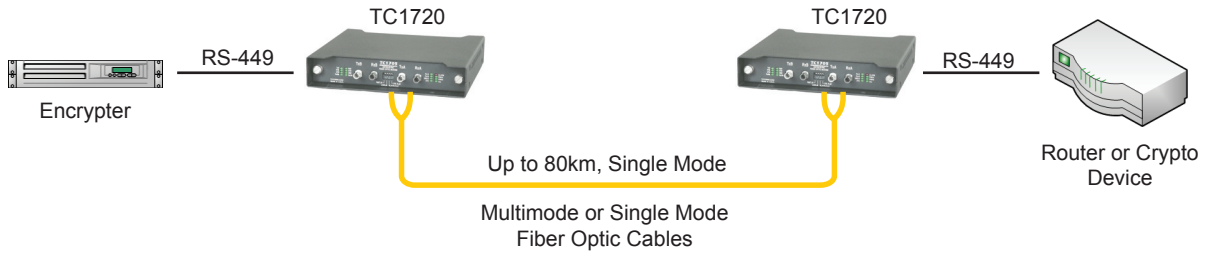
The TC1720 is available in two versions: TC1720R Rackmount Card for installation in a 19" rack assembly (TCRM192 or TCRM196) or TC1720S Standalone version. Standalone or rackmount versions can be mixed or matched on either end. There are two optional versions (Model TC1720T) for high temp and extreme temp applications (-20°C to 70°C & -40°C to 80°C).

*Contact factory for higher requirements (Laser version)

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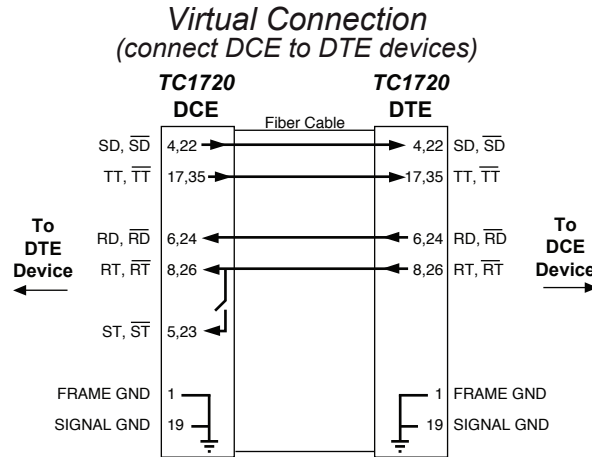### FIBER OPTIC CONNECTIVITY

The TC1720 is often used to link a wide variety of synchronous or asynchronous devices to a central CPU in a campus or intra-building fiber optic network.

Typical Point-to-Point Application Using TC1720 Multi-Interface Fiber Optic Modems

Virtual Connection
(connect DCE to DTE devices)

Data Rates

RS-422/RS-449 (Async)
.....................................up to 10 Mbps
RS-422/RS-449 (Sync)
......................................up to 5 Mbps

Optical

Transmitter
.......................LED/LASER* with AGC
Receiver...............................PIN Diode
Wavelength.......................1300nm MM
.............................1300/1550nm SM
Fiber Optic Connectors..........ST or FC
Loss Budget* - 1300/1550nm
  Multimode @ 62.5/125µm..........15dB
  Single Mode @ 9/125µm............20dB

Electrical

Interfaces/Connector
  RS-449 ....DB37 Male

System

Bit Error Rate ....1 in 10^9 or better
Dry Contact Alarm ....Normal OPEN

Diagnostic Functions

.................Local & Remote Loopback,
........Signal Generator, Disable Alarm

Visual Indicators

System Status ....PWRA, PWRB,
....Vcc, ALARM
Electrical Signal Status.......TxD, RxD
.................DTE, "data & timing LEDs"
Optic Signal Status.............Rx-A, Rx-B

Power

Standard ....12VDC @300mA
Optional ....24Vdc, −48Vdc, 125Vdc
...........or 115/230VAC w/ power cube

Temperature

Operating ....−10°C to 50°C
Hi-Temp1 (option) ....−20°C to 70°C
Hi-Temp2 (option) ....−40°C to 80°C
Storage..........................−40°C to 90°C
Humidity ....95% non-condensing

Physical (Standalone Unit)

Height..........................(3.53 cm) 1.39"
Width..........................(18.13 cm) 7.14"
Depth..........................(16.59 cm) 6.53"
Weight.......................(544 gm) 1.2 lbs

*Contact factory for higher requirements (LASER)

TC COMMUNICATIONS®
FIBER OPTIC CONNECTIVITY

Certified System
ISO 9001
QMI-SAI Global
#1045959

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