

T1/E1 Fiber Optic Modem

Model TC1630R/S

- Distances up to 80km
- Power/Optical Redundancy
- Local & Remote Loopback
- Extensive trouble-shooting LED Indicators
- No Jitter
- Multimode & Single Mode (850/1300/1550nm)
- One Fiber Bi-Directional (Optional)
- Low Current Consumption
- Replaceable Line Interface Module
- Local Dry Contact Alarm Relay
- RJ45 (RJ48C) and Detachable Terminal Block Connectors



TC1630R/S in Standalone and Rackmount Packaging

The TC1630R/S T1/E1 Fiber Optic Modem provides a highly reliable point-to-point link between two T1/E1 devices and is available in both multimode and single mode (850/1300/1550nm) versions.

It offers several innovative features including Dual Terminal Block and RJ-45 connectors, "Hot-Swappable" cards, 22 diagnostic LEDs, and an extreme temperature (-20°C to 70°C) version.

Standard features include Multiple Power Options, No Jitter, Power Redundancy, Optical redundancy (optional), Local & Remote Loopback, Low Current Consumption (300mA), Local Dry Contact Alarm Relay and a replaceable Line Interface Module.

The 22 different diagnostic LED functions include all 1's detection, Power Alarm, T1/E1 Signal Loss (local & remote ends), BPV violations, and Sync Active. Eight DIP switches, accessible from the front panel, provide line settings for line code, line length, local loopback or remote loopback. An intelligent line code setting switch is provided to eliminate potential user confusion, such as mismatching a line code/line length setting.

The TC1630R/S is transparent to the framing format and supports AMI, B8ZS and HDB3 line codes and DSX-1 (T1) cross connect distances from 0 to 655 feet. An internal elastic buffer removes jitter from transmit data.

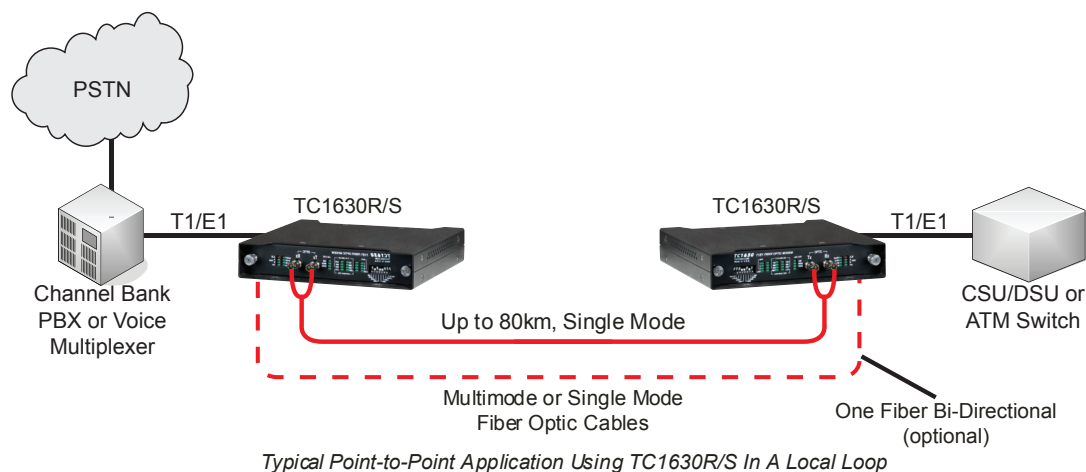
The TC1630R/S supports all popular sizes and types of fiber optic cable. Fiber optic connectors are ST or FC. Electrical connectors are detachable Terminal Blocks and RJ45 (RJ-48C). The TC1630R/S Card version is used with the TCRM192 Rack, which holds up to 10 modems. Cards can be removed or installed under power ("hot-swappable"). Two TC1630R/S Modems can be used with the TCRM196 19" 1 U Rackmount Card Cage.



Applications

The TC1630R/S Fiber Optic T1/E1 Modem is typically used to link Channel Banks, PBX's, and M13 Multiplexers to DSX-1 Cross Connects. It is also used to link Customer Premises Equipment to CSU/DSUs and with metallic medium T1/E1 multiplexers to transmit over fiber optic cable.

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Data Rates

T11.544 Mbps
E12.048 Mbps

Optical

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

Electrical

Interface.....T1 or E1 (G.703)
T1/E1 (100/120 ohm) Connector
.....Detachable Terminal Block
.....J-48C (RJ-45 Female)
E1 Connector (75 ohm)
.....Det. Term. Block & BNC Cable

System

Bit Error Rate1 in 10¹⁰ or better

Alarm

Dry Contact.....Normal OPEN

Visual Indicators

System Status ...PWR A, PWR B, Vcc,
.....ALARM, RMT, LOC
T1/E1 Status.....SYNC, LLOS, RLOS
.....LAIS, AMI, B8ZS, HDB3, BPV
.....CSU, Line Length (5 LEDs)

Diagnostic Functions

.....Local & Remote Loopback

Power

Standard12VDC @300mA
Optional24VDC, -48VDC or
.....115/230VAC (external)

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 (Standalone Unit)

Height(3.53 cm) 1.4"
Width(18.14 cm) 7.2"
Depth(16.57 cm) 6.6"
Weight(635gm) 1.4 lbs

*Contact factory for higher requirements



ISO 9001
QMI-SAI Global
#1045959

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