## **T1/E1 Fiber Optic Modem**

# Model TC1630 (Pocket Rocket)

- Distances up to 80km
- Hardened Temperature Version
- Local/Remote Loopback
- Eight LED Indicators
- No Jitter
- Multimode & Single Mode (850/1300/1550nm)
- Low Power Consumption (3 Watts)
- Full Digital Technology Design
- Supports AMI/B8ZS/HDB3 Line Codes
- 12 / 24 /-48VDC, or 115/230VAC Power



TC1630 Pocket Rocket

ggressively priced and small in size, the TC1630 T1/E1 Fiber Optic Modem provides a reliable point-to-point link between two T1/E1 devices. Distances to 80km are possible. It is available both multimode (850/1300nm) and single mode (1300/1550nm). For single fiber (single mode) applications, a wave division multiplexer (WDM) can be used with the TC1630.

User benefits include no jitter, extremely low current consumption (less than 250mA), high reliability and small size (1.1" X 5.0" X 2.5"). Important features include Local and Remote Loopback, multiple power options and a replaceable Line Interface Module.

Diagnostics include eight LED indicators for installation and troubleshooting. Eight DIP switches, accessible from the top panel, provide control settings for line code, line length, local loopback and remote loopback. An intelligent line code setting switch is provided to eliminate confusion - such as when the line code does not match the line length setting.

Transparent to the framing format, the TC1630 supports AMI, B8ZS and HDB3 line codes and DSX-1 (T1) cross connect distances from 0 to 655 feet. It includes an internal elastic buffer to remove jitter from transmit data.

The TC1630 is available rackmount or standalone and is compatible with all popular types and sizes of optic cable. Fiber optic connectors are ST or FC. Special four-position and two-position feed-thru detachable terminals connect the T1/E1 twisted pairs. Input power is 12VDC, optional 24VDC, -48VDC or 115/230VAC with an external power cube. A hardened temperature version (-20°C to 70°C), Model TC1630Q, is also available.

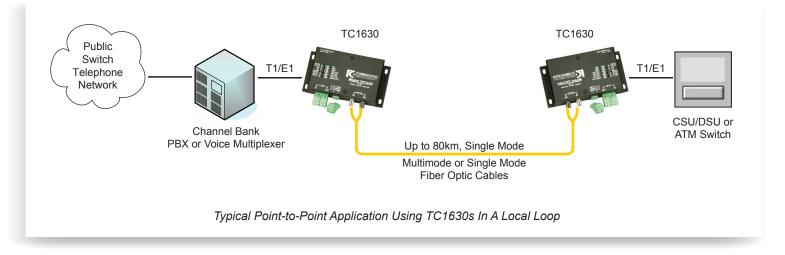


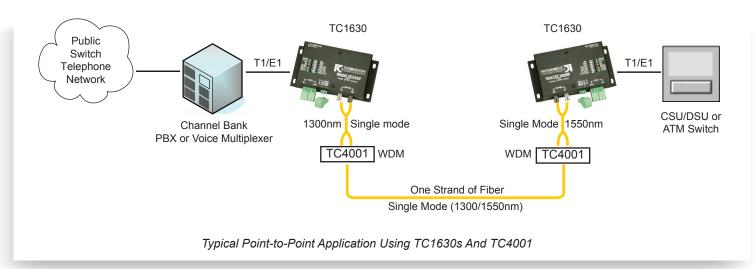
### **Applications**

The TC1630 Fiber Optic T1/E1 Modem is typically used to link Channel Banks, PBX's, and M13 Multiplexers to DSX-1 Cross Connects in Video Conferencing and Distance Learning applications. 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.

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**

| 11 | - |    | <br> | <br> | ٠. | ٠. |  | ٠. | - | <br> | ٠. | <br> |        | ٠. | ′  | 1  | . 5 | 54 | 4 | N | /lb | p: | S |
|----|---|----|------|------|----|----|--|----|---|------|----|------|--------|----|----|----|-----|----|---|---|-----|----|---|
| E1 |   | ٠. |      | <br> |    |    |  |    |   |      |    | <br> | <br>٠. |    | .2 | 2. | C   | )4 | 8 | Ν | 1b  | p  | s |
|    |   |    |      |      |    |    |  |    |   |      |    |      |        |    |    |    |     |    |   |   |     |    |   |

#### **Optical**

| ReceiverPIN Diode              |
|--------------------------------|
| Wavelength850/1300nm MM        |
| 1300/1550nm SM                 |
| Fiber Optic Connectors         |
| ST, Optional FC                |
| Loss Budget* - 850/1300/1550nm |
| Multimode @62.5/125µm15dB      |
| Single Mode @9/125µm20dB       |

| Olligio Mode (60/120piii20db |
|------------------------------|
| Electrical                   |
| InterfaceT1 or E1 (G.703)    |
| T1 Connector (100 ohm)       |
| Detachable Terminal Block    |
| E1 Connector (120 ohm)       |
| Detachable Terminal Block    |
| E1 Connector (75 ohm)        |
| Detachable Terminal Block &  |
| BNC Cable                    |
|                              |

#### Visual Indicators

| System Status | Power, Alarm      |
|---------------|-------------------|
| T1/E1 Status  | O-SYNC, BPV, AIS, |
| T1/E1 OK, RMT | 1-0, RMTLB        |

#### Transmitter.....LED/ELED System

Bit Error Rate ......1 in 10<sup>10</sup> or better

#### **Diagnostic Functions**

.....Local & Remote Loopback

#### **Power**

Standard ......12VDC @ 250mA Optional .....24VDC, -48VDC or 115/230VAC (with power cube)

#### **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**

| Height                    | (2.86 cm) 1.13"  |
|---------------------------|------------------|
| Width                     | (12.70 cm) 5.00" |
| Depth                     | (6.60 cm) 2.60"  |
| Weight                    | (148 gm) 5.22 oz |
| *Contact factory for high | er requirements  |





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