

#### PRODUCT FEATURES

- Extends range of ISDN service to remote locations
- Transports ISDN Basic Rate Interface (2B+D) information over T1 carriers
- Provides power for up to eight terminal equipment units
- Eliminates the need for an NT1 by delivering the ISDN S/Tinterface directly to the TE
- Industry standard D4 channel unit plugs into ADTRAN ACT or BR1TE bank
- Complies with ANSI T1.605-1992 and CCITT I.430 specifications
- Supports multiple switch vendors including Lucent 5ESS®, Northern Telecom DMS-100™, and Siemens EWSD®
- Built-in maintenance and testability features
- Provides automatic overcurrent protection for the S/T Bus
- Industry leading 5 year warranty

# T-BR1TE

# ISDN T-BASIC RATE TRANSMISSION EXTENDER

The ADTRAN T-BR1TE is an economical way of offering Basic Rate ISDN by extending Basic Rate Service from an ISDN-equipped PBX or switch over T1 carrier lines to remote locations. Using the T-BR1TE, the S/T-interface can be deployed from a remote location serving a maximum of 3,000 feet, making it ideal for customer-owned networks.

The T-BR1TE is a standard D4 channel unit that plugs into a T1 multiplexer such as a D4 channel bank, SLC-96, ADTRAN ACT, or BR1TE bank. The T-BR1TE transports 2B+D information over T1 carriers by inserting the two B channels at 64 kbps and a single D channel at 16 kbps into three DS-0 time slots. The Basic Rate Interface information is transported from a T-BR1TE in the T1 multiplexer at the switch location, over the T1 carrier, to the remote T-BR1TE and T1 multiplexer. The T-BR1TE can be optioned as either the adjacent to the switch unit or the adjacent to the customer unit, reducing inventory requirements.

The T-BR1TE provides a standard 4-wire S/T-interface which operates at 192 kbps full-duplex and utilizes separate twisted wire pairs for transmit and receive signals. The S/T-interface conforms to the ANSI T1.605-1992 S/T-interface standard and the CCITT I.430 Layer 1 standard.

The T-BR1TE can supply power in a PS1 or PS2 arrangement for up to eight pieces of terminal equipment in a short or extended passive bus. This power is derived from the T1 multiplexer -48 VDC supply. PS1 (phantom power) provides power on the transmit and receive wires of the S/T-interface. PS2 provides power to the terminal equipment over an additional dedicated pair of wires. In both cases, the T-BR1TE monitors the S/T-interface for an overcurrent fault condition. In the event of such a condition, the T-BR1TE automatically limits the amount of current being delivered until the fault condition is removed.

The front panel of the T-BR1TE contains a display, controls, and Bantam test jacks for local test access.



#### **CORPORATE OFFICE**

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## TELCO TECHNICAL SUPPORT

800 726-8663

#### **REGIONAL OFFICES**

Irvine, CA 800 788-5408

**Denver, CO** 800 471-8651

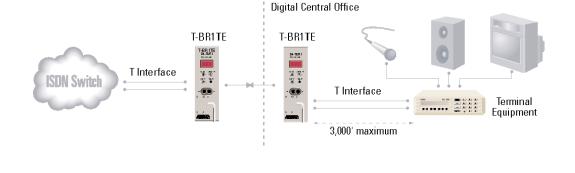
Atlanta, GA 800 332-6945

Kansas City, KS 800 471-8649

Philadelphia, PA 800 471-8656

> Dallas, TX 800 471-8648

**Canada** 800 232-6811



### **Product Specifications**

#### **LOOP INTERFACE**

- Line: 4-wire (Tx and Rx pair)
- Operating Mode: Full-duplex
- Data Rate: 192 kbps total; 144 kbps available to customer
- Signal Format: Alternate Mark Inversion, 100% pulse width
- Output Amplitude: 0.75 volt, zero-to-peak
- Tx Source Impedance: Per ANSI T1.605-1992
- Rx Source Impedance: Per ANSI T1.605-1992
- Receiver Sensitivity: Per ANSI T1.605-1992

#### **DS1 FACILITY INTERFACE**

 Fully compatible with WECO D4 channel bank equipment

#### **NETWORK COMPATIBILITY**

Interface: ISDN and other digital service

#### **FACEPLATE CONTROLS AND INDICATORS**

- Controls: B1/B2, LP/CR, Select, Test
- Indicators: Four-character display is used to select loopback address and display loopback status
- Test: Bantam test jacks for TPI 108/109 RT II or equivalent test sets

#### **MECHANICAL**

- Size: 4.4" H, 10" D, 1.4" W
- Weight: 10 oz
- Mounting: Mounts in WECO D4 channel bank, SLC-96 terminals, ADTRAN ACT and BR1/8 BR1TE Bank

#### **POWER**

- -48V: 250 mA, 1.35 watts dissipation (when supplying a maximum of 12 watts to terminal equipment)
- +12V: 45 mA nominal
- *-12V:* 1 mA
- 5V:
  - 10 mA Display OFF
  - 45 mA Display ON

### **Ordering Information**

EQUIPMENT	PART #
T-BR1TE	1100019L1
BR1/8 BR1TE Bank	1150018L1

Specifications subject to change without notice.



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