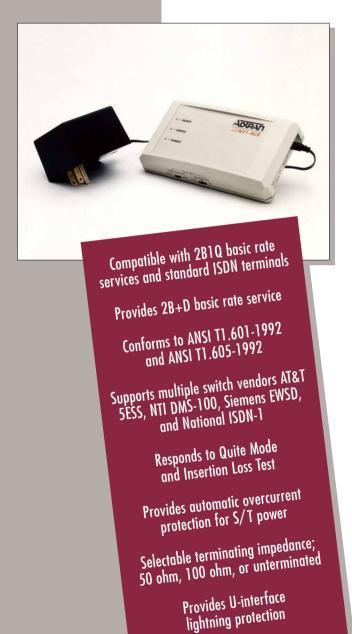


ISDN NETWORK TERMINATION



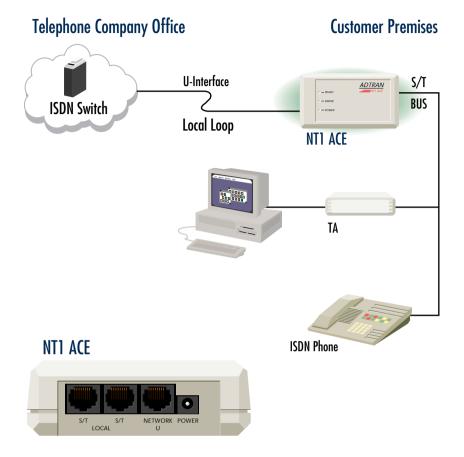
he ADTRAN NT1 ACE provides the network termination for 2B1Q ISDN basic rate service. The NT1 ACE provides a 2B+D basic rate interface between the subscriber's terminal equipment and the ISDN network. Basic rate ISDN consists of two 64 kbps "B" channels and a single 16 kbps "D" channel. Connection to the ISDN network is made with a "U" interface. Connection to the subscriber's terminal equipment is by an "S/T" interface. The U and the S/T interfaces conform to ANSI and CCITT standards and perform all Laver 1 functions.

The NT1 ACE is designed with aesthetics as well as functionality in mind. The unit is enclosed in an attractive, durable plastic housing appropriate for desk-top use. The NT1 ACE is powered by the wall-mount power supply included with the unit or with an external power source. The wall-mount power supply provides up to 10 watts of power for terminal equipment. The NT1 ACE monitors the S/T interface for overcurrent fault conditions. In the event of such a condition, the unit automatically limits the amount of delivered current until the fault condition is removed.

As many as eight passive bus devices may be connected to the S/T interface of the NT1. These connections can be in one of the following two modes: multiple terminals within 50 meters of each other over the full 1500 meter range of the interface, or multiple terminals of arbitrary spacing within 200 meters. Also, termination impedance options include 50 ohm, 100 ohm, or unterminated. The NT1 ACE is protected from lightning and harmful line transients on the network interface.

Three LED status indicators on the NT1 ACE aid in fault isolation. Indicators display the status for Power, Network Ready, Network and Customer Errors, and Network Test.





SPECIFICATIONS

NETWORK INTERFACE

LINE

2-wire (TIP and Ring)

OPERATING MODE

Full-duplex

DATA RATE

160 kbps total; 144 kbps available to customer

SIGNAL FORMAT

2B1Q

OUTPUT AMPLITUDE

2.5 Volt, Zero-to-Peak

TX SOURCE IMPEDANCE

As per ANSI T1.601-1992

RX SOURCE IMPEDANCE

As per ANSI T1.601-1992

RECEIVER SENSITIVITY

As per ANSI T1.601-1992

FCC APPROVAL

FCC Part 15, Class B

CUSTOMER 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% duty cycle

OUTPUT AMPLITUDE

0.75 V, Zero-to-peak

TX SOURCE IMPEDANCE

As per ANSI T1.605-1992

Rx Source Impedance:

As per ANSI T1.605-1992

RECEIVER SENSITIVITY

As per ANSI T1.605-1992

SWITCH COMPATIBILITY

AT&T 5ESS, NTI DMS-100, NEC National ISDN-1

PHYSICAL

SIZE

1.35" H, 3.75" D, 6.25" W

WEIGHT

9.5 oz

Power

-48 VDC, 1.1 W dissipation Sources S/T power to 10 W

ENVIRONMENTAL

OPERATING TEMPERATURE

0°C to 50°C

STORAGE TEMPERATURE

-20°C to 70°C

RELATIVE HUMIDITY

Up to 95%, non-condensing

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ORDERING **I**NFORMATION

Equipment

Part Number

NT1 ACE & wall-mount power supply 1202019L1



ADTRAN is an ISO 9001 registered company.

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