



NT1 ACE

ISDN Network Termination

Product Features

- Compatible with 2B1Q basic rate services and standard ISDN terminals
- Provides 2B+D basic rate service
- Conforms to ANSI T1.601-1992 and ANSI T1.605-1991
- Supports multiple switch vendors: Lucent SESS, NTI DMS-100, Siemens EWSD, NEC, and National ISDN-1
- Responds to Quiet Mode and Insertion Loss Test
- Provides automatic overcurrent protection for S/T power
- Selectable terminating impedance: 50 Ohm, 100 Ohm, or unterminated
- Provides U-interface lightning protection
- Standard five-year warranty

The 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 Layer 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. The wall-mount power supply provides up to 8.9 W 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 1,500 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.





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Product 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 V, 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

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 T1.605-1991
- **Rx Source Impedance:** As per ANSI T1.605-1991
- **Receiver Sensitivity:** As per ANSI T1.605-1991

Switch Compatibility

- Lucent SESS, NT1 DMS-100, NEC National ISDN-1

Physical

- **Size:** 1.35" H, 3.75" D, 8.25" W
- **Weight:** 2 lbs
- **Power:** 110 vAC, 60 Hz, 1.1 W dissipation Sources
S/T power to 8.3 W

Environmental

- **Operating Temperature:** 0° to 50°C, 32° to 122°F
- **Storage Temperature:** -20° to 70°C, -4° to 158°F
- **Relative Humidity:** Up to 95%, non-condensing

Approvals

- FCC Part 15, Class B
- FCC Part 68
- UL
- CUL
- CSA
- CSD3

Product Includes

- Manual
- NT1 ACE
- 6 ft. telephone cable (RJ45 to RJ45)
- 110 V wallmount power supply

Ordering Information

Equipment	Part #
NT1 ACE & wallmount power supply	1203019L1



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