

# ISDN Access

## ISDN to T1 Conversion

Featuring  
ATLAS 800



The figure shows ATLAS integrating a non-ISDN PBX system into an ISDN network using the PBX T1 port. In this application solution, ATLAS provides a T1 port to connect to the PBX and an ISDN port to connect to the public ISDN network. With the ATLAS technology, all of the translations are handled inside ATLAS and offloaded from the PBX. ATLAS converts the out-of-band D-channel signaling of ISDN into the in-band robbed bit signaling of T1. ATLAS also provides CALLING and CALLED numbers from the ISDN network to the PBX T1 through DTMF on the T1 line. So the PBX can now make use of standard ISDN signaling involving CALLING/CALLED or ANI/DNIS phone numbers.

The Automatic Number Identification (ANI) is a series of digits that correspond to the phone number that is calling. In the ISDN network, these digits are represented in a separate channel called the D-channel and are not compatible with the T1 channel. The same holds true for Dialed Number Identification (DNIS) which is the destination or called telephone number. ATLAS converts the ANI and DNIS signaling from standard ISDN signaling formats and converts those formats into standard T1 formats for the PBX.

The PBX can now use the ANI and DNIS information as it is encoded in the standard T1 robbed bit signaling protocol. ATLAS passes ANI and DNIS information according to the industry standard formats including ANI/DNIS, ANI, or DNIS.

PBX systems which have little or no ISDN capability can now easily and economically connect to ISDN networking. ATLAS 800 from ADTRAN® is easy to install, fully manageable and so economical that it should pay for itself in a matter of months.

### SOLUTION FEATURES

- Provides cost-effective migration to PRI
- Maintains existing T1 based PBX systems
- Avoids costly PBX upgrades for PRI support
- Makes use of ISDN signaling involving ANI and DNIS

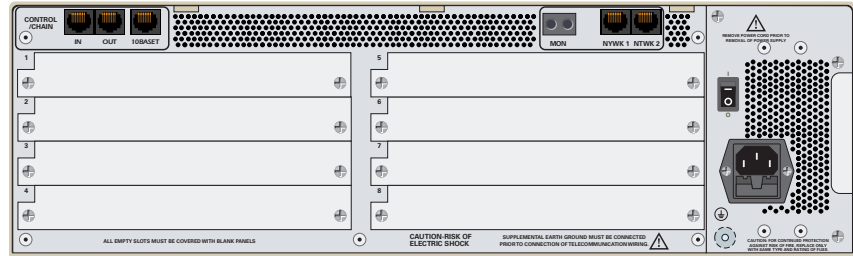
**ADTRAN**

## ATLAS 800

1200180L1

- Supports 6M of Frame Relay
- Public or private Frame Relay support
- Integral router
- Two built-in T1/DSX-1 ports
- Includes two T1/PRI interfaces on base chassis

## ATLAS 800



- Atlas 800 functions as T1/T3 bandwidth manager, ISDN access switch, remote access concentrator, and Digital Access Cross-connect System (DACS)
- Standalone, rackmount, or wallmount installations
- Two network interfaces, each independently configurable for T1, DSX-1 or PRI operations
- Eight expansion slots accept hot-swappable modules
- 10BaseT Ethernet interface for SNMP or Telnet management
- Optional redundant power supply

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