



SKU: 0110-0098

Category: Cards/Units

# LET Integrated Services Digital Network (L-ISDN)

The LET Integrated Services Digital Network (L-ISDN) plug-in card has six ISDN circuits. The L-ISDN card transports the 2B+D data from the local exchange as three 64-kbps timeslots through the Tellabs 1000. At the remote terminal the R-ISDN recreates the physical 2B+D format for relay to the customer. The L-ISDN card utilizes mixed analog and digital signal processing circuit technology as described in TR-397.

## Features

- Three (3) DSO TDM
- BER measurement with 2 thresholds
- Supports 2B+D and B1+D configuration
- Loopbacks as described in TR-397
- Responds to ANSI EOC messages
- Provides six, 2-wire DDS circuits
- Can provide system timing
- Six (6) ISDN circuits per card

## Highlights

### Six (6) ISDN lines.

Each L-ISDN plug-in card accepts six ISDN lines. It uses 2B1Q (2 binary 1 quaternary) line coding for full-duplex transmission at 144-kbps data rate. The transmission format delivers 12 kbps for synchronization, 144 kbps for 2B+D customer data, and 4 kbps for DSL overhead functions. The customer data is divided into two 64-kbps channels (B channels) and one 16-kbps channel (D channel).

### Flexible Functionality

The L-ISDN plug-in card provides the interface towards the switch, including the DC termination of the sealing current. The L-ISDN card supports three (3) DSO TDM and has built-in BER measurement.

### Digital Data Service

The L-ISDN plug-in card supports 2-wire Digital Data Service (2w DDS). When deployed in a 2w DDS circuit, the counterpart R-ISDN plug-in card can emulate the 2B1Q (1B+D) Integrated Digital Subscriber Line (IDSL) signal.

### LED Indicators

The L-ISDN channel unit has three LED indicators on the faceplate. A green ACTV LED indicates the plug-in card is busy. A steady red FAIL LED indicates that the plug-in card has failed, and a flashing red FAIL LED indicates illegal signaling. An amber LOOP LED indicates the plug-in card is in loopback.

## Specifications

### Physical

- Height: 5.125 inches (13.018 cm)
- Width: 0.563 inch (1.429 cm)
- Depth: 10.5 inches (26.67 cm)
- Weight: 0.5 pound (0.23 kg)

### Interfaces

- Six (6) ISDN circuits per card

### Power

- Typical power consumption: 5.5 W

## Environmentals

- Operating temperature: -40 F / -40 C to +149 F / +65 C
- Humidity (relative): 5 to 95% non-condensing

## Compliance

- TR-NWT-000393
- TR-NWT-000397

## Signaling

- Line coding: 2B1Q
- Data rate (throughput): 144 kbps
- Loopback modes: Equipment, Facility and DDS Latching

## Faceplate LED Indicators

- FAIL Red: Plug-in card failure, or card unable to communicate with the CPU
- FAIL Flashing Red: Illegal signaling detected
- ACTV Green: At least one circuit is active (busy) or supporting testing
- LPBK Amber: A loopback is in progress

## Management

- Tellabs Panorama Element Management System (EMS)
- Craft User Interface (CUI)

## Software Support

- Minimum base software FP16 and higher

## Installations

- Supported in Tellabs 1000 MSAP CBA1120 and CBA1048

## Analog Parameters

- Input impedance: 135  $\Omega$   $\pm$  5%
- Equalization Receive: x
- Equalization Transmit: 12.5 dB (2.5 Vpk)
- Sealing current termination: 400  $\Omega$