



APOGEE LABS

2044/2045

DS1LNK / DS1CX Inverse T1 Mux Link



FEATURES

- Up to 14 T1 links can be combined
- Duplex and Simplex Operation
- Auto re-sequencing of T1 connections
- Automatic load shedding of lower priority data
- Full loop quality feedback
- Delays of 0 to 600ms supported

OVERVIEW

The Inverse T1 Multiplexer accepts data from the application modules (PCM, Video, Ethernet, etc) and transmits this data in parallel over multiple T1 communication links. The system is useful in environments where the combined data load varies between communication sessions requiring a varying number of T1 links. The system is also useful in locations where there is more data than a single T1 link, but a higher bandwidth link is not available or feasible.

The system is capable of automatically prioritizing links based on link quality. The user can prioritize the application modules to place the most important data on the highest priority and most robust links. Bi-directional links utilize full-loop quality feedback where received data is passed back to the sending module allowing the sending system to adjust the communications configuration based on the quality of transmitted data.

The system allows from one (1) to a maximum of fourteen (14) individual bi-directional T1 links for a maximum composite data transmission greater than 20 Mbps (Total transfer bandwidth of 40 Mbps on a full duplex system).

SPECIFICATIONS

PHYSICAL

- Each module requires a single slot
- 2045 (no connections); 2044 (RJ-45 connectors (2) on rear panel for T1 links)

ELECTRICAL

- AMI, B8ZS Bipolar signal type; isolated transformer coupled
- D4/ESF Selectable frame format
- Auto select, long and short haul
- 0dB to -36dB Rx sensitivity (supports up to 6000 feet)

ELECTRICAL (cont'd)

- Selectable Tx Output: CSU 0 to -22.5 dB, DSX1 0 to 655 feet
- Each channel supports Simplex or Duplex Operation
- Transmit using Receiver Timing Loop Back or local oscillator (25 ppm)
- Up to 600ms T1 Link data buffering (user selectable input)
- All channels on T1 are utilized (1.536 Mbps Transfer Bandwidth used)