TSU LT

Full Featured T1/FT1 DSU/CSU

Product Features

- Single V.35 DTE interface

- Nx56 or Nx64 operation for data rates to 1.536 Mbps

- Auto and Manual D4(SF) or ESF framing support

- B8ZS or AMI line coding

- Easy to use front panel keypad or EIA-232 control port for unit configuration and monitoring

- Remote TSU LT configuration via FDL or 8k in-band

- Local and remote loopback capability

- Extensive built in test capabilities

- Network T1 Test Access jacks

- Support for T-Watch PRO™ software for optional PC based configuration

- IEC standard power connection

- Industry-leading five-year North American warranty

The ADTRAN™ TSU LT™ is a low cost, full-featured T1/FT1 Data Service/ Channel Service Unit (DSU/CSU). The TSU LT provides an interface between T1 or Fractional T1 service and the end user's Data Terminal Equipment (DTE) for applications such as LAN to LAN bridging, Frame Relay circuit termination and videoconferencing. The TSU LT provides access to traditional dedicated point-to-point T1 services as well as network termination for Frame Relay.

Housed in a compact, durable plastic housing the TSU LT supports synchronous data rates from 56 Kbps to 1.536 Mbps at Nx56 or Nx64 Kbps. A single V.35 physical interface provides a connection to the end user's DTE equipment.
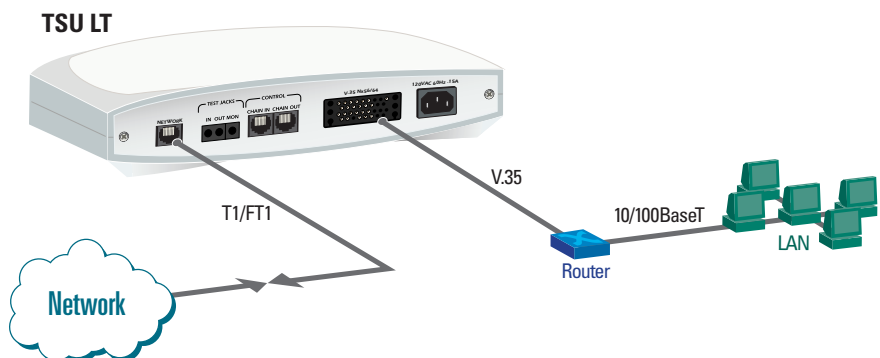
For configuration and testing, the TSU LT provides the capability to control a remote TSU LT through the T1 FDL channel. If the FDL channel is unavailable, the TSU LT can use 8 kbps of the data traffic to provide configuration and control of the remote unit. The in-band control channel is used on an as-needed basis and is automatically controlled by the TSU LT.

The TSU LT responds to standard local and remote loopback commands from the telephone company central office. In addition,

the user has several built-in test capabilities including V.54 remote loopback and 511 BERT test patterns. Complete configuration and performance data is available from the front panel keypad and two-line by 16 character LCD display. For additional configuration and monitoring options, the TSU LT supports a VT100 terminal configuration and control mode which is available through the control port. For direct serial connections or for remote devices, optional Windows® based PC Management is available through the comprehensive, easy to use T-Watch PRO™ software package.

The ADTRAN TSU LT desktop unit also provides integrated keyholes in the bottom housing for wall mount applications or can be rackmounted using ADTRAN's custom designed 19″ shelves.

ADTRAN provides several T1 DSU/CSUs for a variety of customer applications. Additional products in the TSU family include the TSU™, TSU ESP™, TSU100™, TSU120™, TDU120™, and the TSU600™. These T1/FT1 DSU/CSUs offer flexibility, modularity and end user configuration. The modular approach allows the ADTRAN TSU family to serve in point to point T1 applications with a mixture of voice, data and video.

TSU LT

V.35

T1/FT1

10/100BaseT

LAN

Router

Network

TSU LT

Full Featured T1/FT1 DSU/CSU

Product Specifications

Network Interface
- **Line Rate:** T1/FT1 (1.544 Mbps)

Physical Interface
- **RJ48C:** 8-Pin Modular

Framing
- SF/ESF
- Auto Detection

ESF Format
- AT&T 54016
- ANSI T1.403

Line Code
- AMI/B8ZS

Input Signal
- 0 to -36dB

DS0 Assignment
- Contiguous
- Alternating

T1 Transmit Timing
- Network Loop Timed
- Internal
- DTE

DTE Interface
- **Bit Rate:** 56 Kbps to 1.536 Mbps, Nx56 or Nx64 Kbps (N=1 to 24)

Electrical
- CCITT V.35

Mechanical
- V.35 (Winchester Type 34 pin)

DTE Transmit Clock
- Automatic

Control Port
- EIA-232
- RJ 48C

Performance Monitor Performance Data
- BPVs/CRCs, ES, SES, UAS, % AS, % EFSEC, Alarms, Errors

Reports
- NI information stored for last 24 hours in 15 minute increments

PRMS
- ANSI Performance Report Messages (User selectable)

Tests
- **Local:** Payload/Line Loopback, DTE Loopback
- **Remote:** Payload/Line Loopback, V.54 (DTE) Loopback
- **Network:** CSU and DSU loopbacks
- Test Access jacks for Network T1

Built-In Test Patterns
- 511 (active DS0s) with error insert available
- 1:8 (all DS0s)
- All 1's (all DS0s)
- All 0's (all DS0s)

Agency Approvals
- FCC part 15, Class A, FCC Part 68, Industry Canada CS03, UL, CUL

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

Physical
- **Dimensions:** 1.5" H, 6.25" D, 9.0" W
- **Weight:** 2 lbs.
- **Power:** 115 VAC, 60Hz, 5W

Ordering Information

Equipment	Part #
TSU LT	1203060L1

19" Rackmount Shelves	Part #
HRM-1MA Shelf - single unit	1200411L1
VRM-7MA Shelf - up to 7 units	1200417L1