

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 for unit configuration
- Remote configuration from host TSU via FDL or 8k in-band
- Local and remote loopback capability
- Extensive built in test capabilities
- Standard 5-year warranty

TSU ACE

LOW COST T1/FT1 DSU/CSU

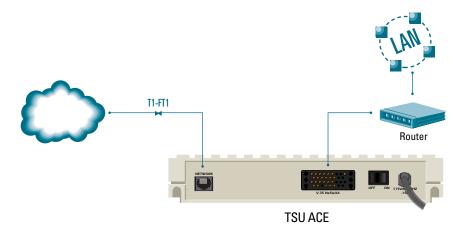
The ADTRAN® TSU ACE is a low cost, full-featured T1/FT1 Data Service/ Channel Service Unit (DSU/CSU). The TSU ACE provides an interface between T1 or Fractional T1 service and the end user's Data Terminal Equipment (DTE) for applications such as LAN-to-LAN bridging, Frame Relay circuit termination and video-conferencing. The TSU ACE 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 ACE 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 ACE provides the capability for remote control from a host TSU through the T1 FDL channel. If the FDL channel is unavailable, the host TSU can use 8 kbps of the data traffic to provide configuration and control of the remote TSU ACE. The in-band control channel is used on an as needed basis and is automatically controlled by the host TSU.

The TSU ACE 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.

ADTRAN provides several T1 DSU/CSUs for a variety of customer applications. Additional products in the TSU family include the TSU LT, 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.





CORPORATE OFFICE

ADTRAN, Inc. 901 Explorer Boulevard P.O. Box 140000 Huntsville, AL 35814-4000

800 9ADTRAN 256 963-8000 fax: 256 963-8699 fax back: 256 963-8200 e-mail: info@adtran.com web site: www.adtran.com

REGIONAL OFFICES

 Chicago, IL
 800 436-4217

 Seattle, WA
 800 390-1573

 Washington, DC
 800 794-9798

FIELD OFFICES

Atlanta, GA	800 289-0966
Chicago, IL	800 471-8655
Columbus, OH	888 865-2237
Dallas, TX	800 471-8648
Denver, CO	800 471-8651
Irvine, CA	800 788-5408
Kansas City, KS	800 471-8649
Los Angeles, CA	888 223-7668
Nashville, TN	888 223-7657
New York, NY	800 471-8657
Portland, OR	888 223-7660
Richmond, VA	800 689-9915
San Jose, CA	888 223-7655

INTERNATIONAL CONTACTS

Asia Pacific/Australia 852-2824-8283 (Hong Kong)

> Canada 800 232-6811

Caribbean/Latin America 954 746-5355

All other International inquiries 256 963-2500



ADTRAN is an ISO 9001 registered company.



Printed in the U.S.A. on recycled paper. 61200295L1-8A February 1999 ©1999 ADTRAN, Inc. All rights reserved.

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

DSO ASSIGNMENT

- Contiguous
- Alternating

T1 TRANSMIT TIMING

- 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

PERFORMANCE MONITOR & 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

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)

REMOTE CONFIGURATION

Required Software

■ ADTRAN T-Watch Pro[™]

Required Hardware (one of the following)

- TSU LT (1202060L1)
- TSU (1200060L2)
- TSU RM (1202077L1)
- TSU ESP (1200169L1)

AGENCY APPROVALS

■ FCC part 15, Class A, FCC Part 68, Industry Canada CS03, UL, CUL

ENVIRONMENT

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

PHYSICAL

Dimensions

■ 1.5" H, 6.25" D, 9" W

Weight

2 lbs

Power

■ 115VAC, 60Hz, 5W

Ordering Information

EQUIPMENT	PART #
TSU ACE	1200295L1

T-Watch PRO is a trademark of ADTRAN, Inc.
Windows is a registered trademark of Microsoft Corporation

Specifications subject to change without notice.