

# T1 CSU

## T1 NETWORK FACILITY INTERFACE



Provides the necessary T1 facility interface and jitter tolerance specified in ANSI T1.403 and AT&T TR 62411

Allows user access to the facility for test and diagnosis independent of the network carrier

Minimizes telco maintenance dispatches

Reduces time to sectionalize T1 line problems

Space saving Type 400 design can be mounted in a stand-alone housing or a multi-mount shelf

Equalization on the DTE side allows up to 655 feet of cable between the CSU and the DTE

Supports framed (B8ZS or AMI) or unframed signal formats

Passive to ESF formatted data

Line or locally powered

Easily configured

Standard 5 year warranty

The ADTRAN T1 CSU is a Type 400 circuit pack with a metal stand-alone housing that can be wall or table mounted. The ADTRAN Type 400 T1 CSU is the same circuit pack which can be installed in a standard Type 400 multiple mount shelf. The T1 CSU can be either line or locally powered by -48 VDC (switch selectable). If local is selected, the -48 VDC may be provided by an optional wall-mounted powerpack.

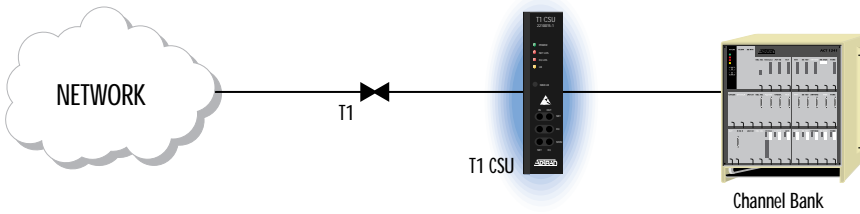
The ADTRAN T1 CSU is designed to interface the customer's Data Terminal Equipment (DTE) to the telco or private T1 facilities at 1.544 Mbps. Network and customer site connections are made by means of an internal barrier strip or RJ-48C modular jacks mounted on the rear panel of the housing.

On the network receive side the unit has automatic line build-out for signals from 0 to -28 dB. The network transmit path contains a T1 facility pad which is DIP switch selectable to -22.5, -15, -7.5, or 0 dB.

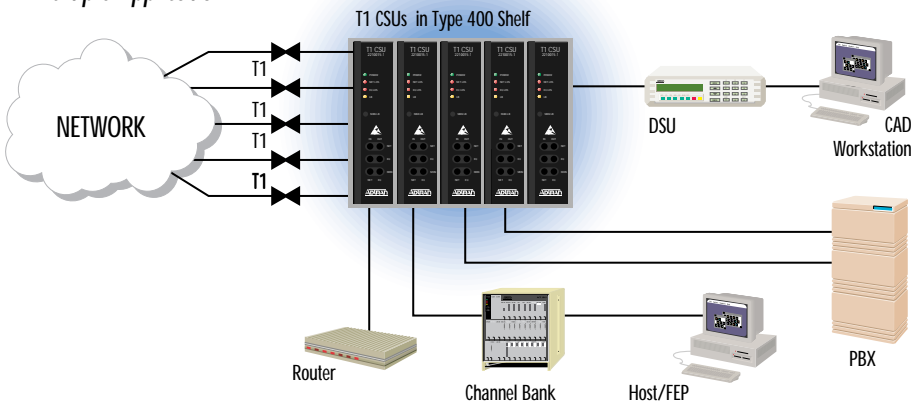
Toward the DTE, a DIP switch selectable DSX-1 pre-equalizer supports a range from 0 to 655 feet. Automatic line build-out is provided for the incoming DTE signal.

On the faceplate of the unit are Bantam test access jacks. These provide interruptive transmit and receive access toward the network or toward the DTE. Additionally, a non-interruptive monitor jack is provided to allow bridging of data coming from the network or from the DTE. By use of these jacks, the user can verify T1 performance and diagnose problems before they reach a critical state. Also located on the faceplate is a latching pushbutton that invokes manual loopback. Four LED indicators display the status of the unit including indicators for Power, Loopback, and two Loss of Signal LEDs (DTE and Network).

## Single Application



## Multiple Application



# SPECIFICATIONS

## TRANSMISSION TYPE

Regenerative transparent in both directions

### KEEP ALIVE SIGNAL

Unframed all 1s on loss of signal from DTE equipment

## LINE

### INTERFACE

Signal specifications and jitter tolerance per AT&T TR62411 and ANSI T1.401

### SIGNAL TYPE

Bipolar, return to zero at 1.544 Mbps  $\pm 200$  bps

## PULSE

### AMPLITUDE

3.0 V  $\pm 0.03$  V peak to base

### WIDTH

324 ns  $\pm 30$  ns at half amplitude point

## RECEIVER

### EQUIPMENT

Automatic line build-out for 0 to 655 feet of ABAM cable

### NETWORK

Automatic line build-out from 0 to -28 dB

## PHYSICAL

### SIZE

5.625" H, 6.0" D, 1.375" W

### WEIGHT

T400 card: 10 oz  
Unit with housing: 10 lbs

### MOUNTING

Industry standard Type 400 circuit card design

### POWER

Selectable between local -48 V or line  
Local: -48 V (-42 to -56 V), 60 mA Max  
Line power: 57 to 150 mA with 30 V nominal drop

## FACEPLATE

### BANTAM JACKS

Accessible on front panel  
Break and test signal access points toward network and toward the equipment  
Non-interrupt signal receive monitor for network and equipment

### LED INDICATORS

Power  
Network loss of signal (NET)  
Equipment loss of signal (EQ)

## OPTION SWITCHES

Line buildout (0, -7.5, -15, and -22.5 dB)  
DSX-1 line buildout (0 to 655 feet)  
Power source (local or line)

# ADTRAN

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## ORDERING INFORMATION

Equipment	Part Number
T1 CSU circuit pack	1210018L1
T1 CSU stand alone	1210015L1



I.S. EN ISO 9001

ADTRAN is an ISO 9001 registered company.

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