

T1-ESF CSU

Specifications

• Network Interface

Line Rate:	1.544 Mbps \pm 75 bps
Line code:	Bipolar RZ AMI or B8ZS
Output Level:	2.7 – 3.3 V peak (0 dB LBO)
Input level:	0 to –25 dB equivalent line loss
Impedance:	100 ohms nominal, input and output
Line Build-Out:	0, 7.5, or 15 dB
Surge Protection:	1000 V per AT&T Pub 43601

• DTE Interface

Line Rate:	1.544 Mbps \pm 75 bps
Line code:	Bipolar RZ AMI or B8ZS
Output Level:	2.7 – 3.3 V peak; 4.5 – 5.5 V peak (at 655 line length)
Input level:	2.7 – 3.3 V peak (referred to DTE output)
Impedance:	100 ohms nominal, input and output
Surge Protection:	1000 V per AT&T Pub 43601

Pulse Density Maintenance: AMI; 1 pulse every 8 bits, 12.5% (AMI with pulse stuffing); B8ZS

• Keep-Alive Generation

Code:	Unframed all ones
Activation:	Loss of DTE signal for 150 ms

• General

Alarms: Minor alarm – yellow alarm from network or AIS signal;
Major alarm – loss of network or DTE receive signal or loss of frame sync

Power Requirements: 120 VAC \pm 10%; 47 – 60 Hz; 3.5 watts (typical); Span line powered from central office; –48 VDC local central office power

Dimensions: Width: 7 inches; Height: 2 inches; Length: 10 inches

Environmental: 0 to 50° C; 95% relative humidity, noncondensing

Indicators

LED indicators on the front panel of the T1-ESF CSU display signal status, alarm status, and test modes. The LEDs are arranged in two rows, the top row for DTE indications and the bottom for network indications.

☐ **DTE LBK** — Yellow LED on when DTE is looped back. Flashes for errors in LLTP test.

☐ **DTE LOS** — Red LED on when loss of signal is detected from the DTE.

☐ **NWK AIS** — Red LED on when an alarm indication signal is detected from the network.

☐ **NWK LBK** — Yellow LED on when network is looped back. Flashes for errors in LLTP test.

☐ **NWK LOS** — Red LED on when loss of signal is detected from the network.

☐ **DTE D** — Red LED indicates that signal from the DTE may have low ones density.

☐ **DTE SYN** — Green LED on when correct framing pattern is detected from DTE.

☐ **DTE AIS** — Red LED on when an alarm indication signal is detected from the DTE.

☐ **NWK Y** — Red LED on when a “yellow alarm” signal is detected from the network.

☐ **NWK SYN** — Green LED on when correct framing pattern is detected from network.