

T1/FT1 CSU/DSU • Managed T1/FT1 CSU/DSUs

Process high-speed T1 data—  
and even share bandwidth—  
with one of these CSU/DSUs.



## FEATURES

- » High reliability.
- » Comply with full and fractional T1.
- » Support Frame Relay services.
- » DSX (drop and insert) model enables you to connect to a PBX and share voice/data bandwidth.
- » Managed models include a DB9 SNMP SLIP port.
- » All models have a DB9 (DCE) console port and V.35 female connector.
- » All include a 6-foot (1.8-m) RJ-48C cable.

## OVERVIEW

These **T1/FT1 CSU/DSUs** provide high-speed T1 format processing at speeds from 56 kbps to 1.544 Mbps for V.35 or RS-530 segments in your network.

They not only give you the framing and formatting of V.35 data for transmission across predefined T1 facilities, they also work with both full and fractional T1 services.

All models feature a V.35 (M/34) data port for delivering T1/FT1 services to the data terminal equipment (DTE) of your end users. Whether you need to connect router traffic, plug it directly into a mux's V.35 interface, bridge networks, or provide video over T1/FT1 lines, our **T1/FT1 CSU/DSUs** deliver. You can also use one to terminate a public Frame Relay link for voice, fax, and data.

Even though the CSU/DSUs support a maximum full-duplex data rate of 1.544 Mbps across the T1/FT1 line, you can set specific speed in 56K (or 64-kbps) increments below that.

The **T1/FT1 CSU/DSUs** go the distance, too! Use them in pairs as line drivers for your point-to-point applications to reliably and economically link two V.35 (or RS-530) devices up to 6000 feet (1828.8 m) apart.

The CSU/DSUs support AMI/B8ZS line coding and D4/ESF framing on the T1/FT1 line, as well as network interface or internal oscillator clocking.

You can control functions with their front-panel dome switches. Plus, you can manage the unit via its standard RS-232 port for local or remote maintenance, monitoring the unit's ports and network connection. Critical alarm info displays with date and time stamps.

What's more, a simple menu structure enables you to easily set up and perform diagnostic testing from any VT100™ compatible device through the unit's serial console port connection. For troubleshooting, you can also run local and remote loopbacks on both the serial and V.35 network segments and generate test patterns.

Four models of the **T1/FT1 CSU/DSU** are available. In addition to our basic V.35 model (MT1500A), we offer three SNMP-manageable models (MT1510A-35, MT1511A, and MT1510A-530), which come with an SNMP agent for setting up real-time alarms and advanced management functions. SNMP MIB II compliance means they're compatible with popular network management systems like HP® OpenView® or SNMPC™.

The managed model with DSX (MT1511A) also has a DSX "drop-and-insert" port that enables you to configure your T1 line to share bandwidth capacity for multiplexing a mixture of both voice and data traffic.

*NOTE: For rackmount and DC versions, contact our FREE Tech Support.*

## TECH SPECS

**Clocking** — Network interface (NI) or internal oscillator

**Data Rates** — T1/FT1: 1.544 Mbps;

T1/FT1 synchronous: N x 56 kbps or N x 64 kbps

Serial: MT1500: 9600 bps;

MT1510A-35, MT1511A, MT1510A-530: 1200, 2400, 4800, 9600, 14400, 19200 bps

SNMP: MT1510A-35, MT1511A, MT1510A-530 only: 1200, 2400, 4800, 9600, 19200 bps;

DSX: MT1511A only: 1.544 Mbps

**Distance (Maximum)** — In Line Driver mode: T1/FT1: 6000 ft. (1828.8 m)

DSX: MT1511A only: 655 ft. (199.6 m)

**Flow Control** — X-ON/X-OFF

**Framing** — T1/FT1: D4/ESF (selectable)

DSX: MT1511A only: D4/ESF/54016/T1.403 (selectable)

**Line Coding** — AMI/B8ZS (selectable)

**Loopbacks** — All: CSU, network interface (NI) line, local and remote payload, remote line, serial remote, serial local

MT1511A also has DSX remote and DSX local loopbacks

**MTBF** — 72,053 hours

**Operating Humidity** — 0 to 95% noncondensing

**Operating Temperature** — 32 to 122°F (0 to 50°C)

**Operation** — Full-duplex

**Parity** — Serial port: None, Even, Odd;

SNMP: MT1510A-35, MT1511A, MT1510A-530 only: None

**SNMP MIB Compatibility** — MT1510A-35, MT1511A, MT1510A-530 only: MIB II

**SNMP Protocol** — MT1510A-35, MT1511A, MT1510A-530 only: SLIP

**Connectors** — All: T1/FT1: (1) RJ-48C (DS-1);

DTE: (1) M/34 F (V.35 or RS-530);

Console: (1) DB9 F (RS-232);

MT1510A-35, MT1511A, MT1510A-530 only:

SNMP: (1) DB9 F (RS-232)

MT1511A also has: DSX: (1) RJ-48C

**Power** — External 117 VAC, 60 Hz (for DC power options, contact our FREE Tech Support)

**Size** — 2"H x 8.5"W x 5.5"D (5 x 21.5 x 14 cm)

**Weight** — 3 lb. (1.36 kg)

### What's included

#### MT1500A, MT1510A-35, MT1511A:

- ◆ TCSU/DSU
- ◆ 6-ft. RJ-48C cable
- ◆ 6-ft. V35 female/male cable

#### MT1510A-530:

- ◆ CSU/DSU
- ◆ 6-ft. RJ-48C cable
- ◆ 6-ft. V.35 female to RS-530 male cable

### Item

### Code

T1/FT1 CSU/DSU  
V.35

**MT1500A**

Managed T1/FT1 CSU/DSUs  
V.35  
V.35 with DSX  
RS-530

**MT1510A-35**  
**MT1511A**  
**MT1510A-530**