



TDU 120e

T1/FT1 Rackmounted DSU/CSU with Embedded SNMP

Product Features

- T1/FT1 DSU/CSU
- 1U high 19" rackmount enclosure
- NEBS compliant
- V.35 interface operates at data rates of Nx56 or Nx64 where N=1 to 24
- Provides a base V.35 with DBU and DSX-1 interface
- Embedded SNMP management
- TFTP Support
- Slot accepts option modules used in ADTRAN's TSU units
- Ability to store two DS0 maps and switch configurations at predetermined times
- Front panel test and monitor jacks
- LEDs on the front panel indicate the status of each port
- 8 Kbps inband management channel
- Optional Management Software
- AC and DC versions available

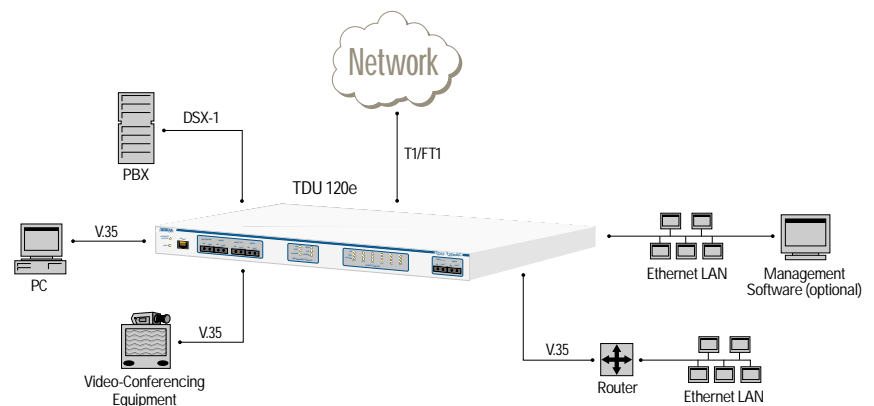
The TDU 120e™ (T1 Distribution Unit) is an intelligent, full-featured, NEBS compliant, T1 DSU/CSU in a 1U high 19-inch rackmount enclosure. Designed to interface customers data terminal equipment (DTE) to T1 or fractional T1 services, the TDU 120e is fully compatible with D4 or ESF framing formats with AMI or B8ZS coding. When in ESF framing mode, the unit satisfies ANSI T1.403 and AT&T 54016 modes for utilization of the facility data link (FDL). It uses option modules identical to those used with ADTRAN® TSU™ units. The TDU 120e also provides complete monitoring and control of the T1 network with embedded simple network management protocol provided through both a SLIP and a 10Base-T ethernet interface.

A base V.35 and DSX-1 (PBX) interface is provided on the rear of the unit. The V.35 interface can be configured to operate synchronously at Nx56 or Nx64 data rates where N=1 to 24. The channels used can be selected at random. The DSX-1 interface is a short haul T1 interface intended for connection to a PBX,

cellular/PCS switch or similar device. The channels used by the DSX-1 port can also be selected at random.

To further add to the flexibility of the TDU 120e a slot on the rear of the unit is featured that accepts a single expansion module. A wide variety of application specific modules are available to provide flexibility and expandability.

Configuration and management of the TDU 120e is available through a variety of methods. The TDU 120e supports SNMP with gets, sets, and traps functionality through a built-in agent. ADTRAN MIBs support management for the TDU 120e and all installed expansion modules. For access to SNMP features, the TDU 120e has both a 10Base-T Ethernet and a SLIP (EIA-232) connection. In addition to SNMP, the unit utilizes the management capabilities found in a variety of optional software products from ADTRAN.





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Product Specifications

Network Interface

- **Line Rate:** T1 (1.544 Mbps)
- **Physical:** RJ-48C
- **Framing:** D4/ESF
- **Line Code:** AMI/B8ZS
- **ESF:** AT&T 54016 or ANSI T1.403
- **Input Signal:** 0 to -36dB
- **DS0 Assignment:** User selectable
- **T1 Transmit Timing:** Loop timed, internal, Base DSX-1, Base DTE, or secondary interface (if installed)

DTE Interface (DBU Capable)

- **Data Rate:** Nx56/64 Kbps (N=1 to 24)
- **Electrical:** CCITT V.35
- **Mechanical:** V.35-Winchester type 34 pin

Dial Backup

- Accessible on base V.35 DTE Port
- Requires optional V.35 "Y" cable
- **DBU Dialing:** DTR dialing
- **DBU Test:** Loopback to DCE, test dialup network, force dial backup

DSX-1 Interface

- **Line Length:** 0-655 ft
- **Physical:** RJ-48C
- **Framing:** D4/ESF
- **Line Coding:** AMI/B8ZS

Tests

- **Local:** Payload/Line (NI)
- **Remote:** Payload/Line (NI) V.54 (DTE)
- **Pattern:** 511 (selectable DS0s), QRSS (selectable DS0s)

Performance Monitoring

- **Error Counts:** ES, SES, UAS, % AS, % EFSEC, Alarms, error rates
- **Reports:** NI information stored for last
- 24 hours in 15 minute increments
- **PRMS:** ANSI Performance Report Messages (selectable)

Management Options

Control In / Control Out Ports

- **Interface:** EIA-232, PC serial port, modem or SLIP connection to router
- **Physical Connector:** RJ-45, modular 8-pin

10BaseT Interface

- **Interface:** IEEE 802.3 compliant, 10 Mbps
- **Physical Connector:** RJ-45, modular 8-pin
- **Service:** SNMP, Telnet, ICMP, ARP, PING, T-Watch PRO™

Physical

- **Dimensions:** 1.7" H, 11.625" D, 17" W fits 1U high 19" rack space
- **Weight:** 7 lbs
- **Power**
120 vAC, 9 W (AC)
21-26 vDC 40 W (DC)
40-56 vDC, 40 W (DC)

Agency Approvals

- UL 1950, CUL
- FCC Part 15 (Class A)
- FCC Part 68
- GR 1089 and GR 63

Environment

- **Operating Temperature:** 0° to 50°C, (32° to 122°F)
- **Storage Temperature:** -20° to 70°C, (-4° to 158°F)

Ordering Information

Equipment	Part #
TDU 120e AC	1202156L1
TDU 120e DC	1202155L1
V.35 "Y" Cable	1200196L1

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