

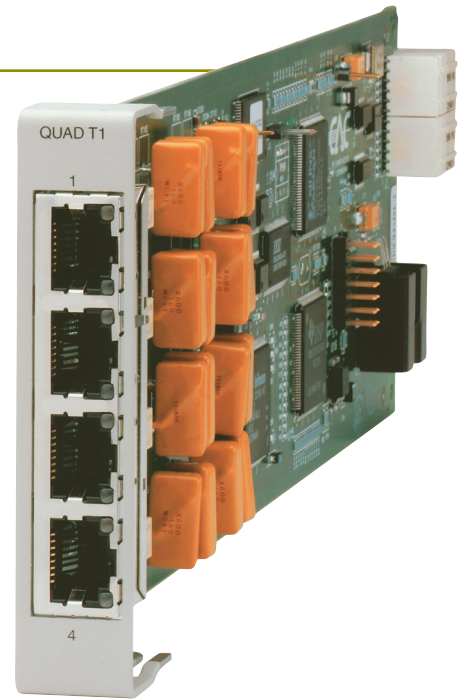
# Adit

## Quad T1 Service Card

Part Number: 740-0044

### High Capacity T1 CSU Access, T1 Customer Demarcations, or Digital Cross Connect for TDM, ATM, or IP Transport

The Adit™ Quad T1 Service Card enables service providers and enterprise network managers to cost-effectively provision and expand network or drop-side T1 bandwidth of an Adit customer service terminal. A broad array of network access technologies can be supported, including TDM, ATM, n x T1 Inverse Multiplexing over ATM (IMA), drop and insert functionality, and fractional and full T1 data and voice trunking.

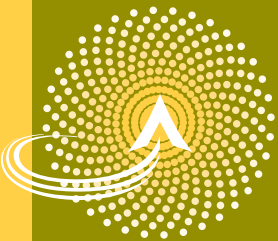


Using the Quad T1 Service Card plus Controller T1s, an Adit 600 customer service terminal can support up to 18 T1s. This wide range of bandwidth enables the Adit 600 to cost-effectively address small- to medium-sized businesses, wireless, as well as carrier office applications. The Quad T1 Service Card provides additional flexibility by allowing physical connections to be made either to the front panel 8-pin connector or the rear-panel 25-pair telco connectors.

On-site installation and maintenance is supported with multi-color channel status LEDs for monitoring port activity and status. Element management software offers simplicity of installation, testing, and monitoring from SNMP, graphical user interface (Adit Pilot), or command line interface (CLI) control.

#### Features At-A-Glance:

- Integrated T1 CSU functionality with FCC registration for direct connection to T1 lines
- Supports B8ZS or AMI encoding and SF (D4) or ESF framing
- Flexible system clock timing may be derived or provided to any T1
- Performance monitoring for each T1
- Up to 4 Quad T1 Service Cards plus the Controller's two T1s may be equipped in a single Adit 600 wall-mounted chassis, for a total of 18 digital cross connect T1/CSUs per chassis
- 36 T1s require only two rack units of equipment space in a 19 inch rack
- Full non-blocking digital cross-connection (DCS) of all timeslots to any Adit service card
- Supports TDM, ATM, IMA or IP network technologies with appropriate common equipment in the Adit chassis
- Solid-state fuseless protection for Central Office NEBS and customer premises FCC and UL safety requirements



CarrierAccess

Access with no limits™

## Technical Specifications:

### ■ Components:

Unit is a service card component for Adit Customer Service Terminals.

### ■ Product Includes:

- Each T1 physical interface incorporates:
  - Line Rate (Transmitted): 1.544 Mbps  $\pm$ 50 bit/s
  - Selectable B8ZS or AMI encoding
  - SF (D4) or ESF framing
  - Integrated CSUs
  - Line Build Out (DSX-1): 655 feet
  - Receive Sensitive (DS-1): -22.5 dB
  - Jitter and Wander ITU-T G.824 (3/93)
  - Solid-state (fuseless) overvoltage & overcurrent T1 line protection
  - Built-in tri-color per-port status LEDs
  - Front or rear connections:
    - Front – uses faceplate-mounted RJ48C connectors
    - Adit rear panel – through RJ-21X connectors
- Less than 3 ms signaling latency for Quad T1 Service Card
- Less than 10 ms overall Adit system signaling latency
- Each port can be remotely placed into or out of service using CLI commands or the Adit Pilot GUI provisioning tool

### ■ Management:

Configured by command line interface or Adit Pilot GUI provisioning tool through platform controller

### ■ Network Interface:

The Adit Quad T1 Service Card may be configured as either a network or drop-side interface

### ■ Clocking:

Any one of four T1 interfaces may be selected by the controller as the Adit platform timing source

### ■ Testing:

Supports

- T1.403 payload loopbacks (ESF only)
- T1.403 remote and local line loopbacks (ESF and SF)
- DSO loopbacks
- T1.231 Performance History (15 min. intervals, 24 hour totals)
- T1.203 Performance Report Messages (PRMs)

### ■ Alarms:

Supports standard T1.403 alarms

### ■ Power:

Less than 3 watts per card

### ■ Environment:

- Operating temperature range: 32° to 104°F (0°C to 40°C)
- Storage temperature range: -40° to +158°F (-40° to 70°C)
- Cooling method is by free air convection and requires long axis of unit to be mounted horizontally
- Maximum operating altitude: 10,000 feet
- Maximum non-operating altitude: 40,000 feet
- Relative humidity (non-condensing) range: 0 to 95%

### ■ Physical:

- Dimensions: 3" H x 3/4" W x 11 7/8" D

### ■ Regulatory Approvals:

- FCC Part 68, CS-03 listed for connection to PSTN
- FCC Part 15, Class A Radiated Emissions Control
- NRTL safety listed: UL 1950, CSA
- National Electrical Code 1996 safety requirements
- NEBS Level 3 certified
- Telcordia TR-NWT-000063, TR-NWT-001089

### ■ Network Standards:

T1.107, T1.102, T1.203, T1.231, T1.403



5395 Pearl Parkway  
Boulder, Colorado 80301

Phone: 303-442-5455  
800-495-5455

Fax: 303-218-5680

[www.carrieraccess.com](http://www.carrieraccess.com)

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