



SPECIFICATIONS

T1/FT1 Interface

Line Rate: 1.544 Mbps +/- 75 bps
 Line Code: AMI or B8ZS
 Framing: D4 (SF) or ESF
 FT1 Line Rate: DS0 Channelized (multiples of 56/64 kbps)
 Input Signal: 0 to -36 dB (DS1)
 Line Build-Out: 0, 7.5, 15, 22.5 dB
 Connector: RJ-48C

DSX-1 Interface

Line Interface: DSX-1 per ANSI T1.102
 DSX Receiver Input Range: -10 dBdsx to +6 dBdsx
 Line Rate: 1.544 Mbps
 Capacity: 1 to 24 DS0s
 Line Code: AMI, B8ZS
 DSX-1 interface to PBX
 Framing: D4 (SF) or ESF

Clock Source

Network, Internal, and DSX-1

Diagnostics

Test pattern generation and detection: 511
 Network loopbacks (local and remote)
 Responds to Inband loop codes
 Alarm generation and detection
 Network and user sets of performance data (15 minutes and 24 hours)

INSTALLATION INSTRUCTIONS

1. Remove power from the unit.
2. Slide the Network Interface Module (NIM) into the option slot until the NIM is firmly seated against the back of the chassis.
3. Secure the pins at both edges of the NIM.
4. Connect the cables to the associated device(s).
5. Complete installation of the base unit.
6. Restore power to the unit.

WAN-T1 NETWORK (RJ-48C) CONNECTION PINOUT

Pin	Name	Description
1	R1	Receive data from the network
2	T1	Receive data from the network
3	—	Unused
4	R	Transmit data toward the network
5	T	Transmit data toward the network
6-8	—	Unused

DSX-1 (RJ-48C) CONNECTION PINOUT

Pin	Name	Description
1	R	Transmit data toward the DTE
2	T	Transmit data toward the DTE
3	—	Unused
4	R1	Receive data from the DTE
5	T1	Receive data from the DTE
6-8	—	Unused

DBU (RJ-48C) CONNECTION PINOUT

Pin	Name	Description
1-2	—	Unused
3	R1	Network-Ring 1
4	R	Network-Ring
5	T	Network-Tip
6	T1	Network-Tip 1
7-8	—	Unused



An optional Dial Backup Interface Module (DIM) is required for dial backup applications.

T1/FT1 + DSX-1 NIM COMMANDS

coding {ami | b8zs}

Configures the line coding for the T1 physical interface. The settings must match the line coding supplied on the circuit by the service provider.

ami Alternate Mark Inversion

b8zs* Bipolar Eight Zero Substitution

description <text>

Comment line to provide an identifier for this interface (for example, circuit ID, contact information, etc.).

framing {d4 | esf}

Configures the framing format of the T1 interface. This setting must match the framing format supplied by the service provider.

d4 Superframe T1 framing

esf* Extended superframe T1 framing

line-length <value>

Defines the line buildout (LBO) for the DSX-1 interface. Valid options include -7.5 dB or 0-655 feet.

T1/FT1 + DSX-1 NIM COMMANDS (CONTINUED)

loopback network {line | payload}

Initiates a loopback on the interface toward the network. Deactivate using the **no loopback network** command.

line Initiates a metallic loopback of the physical T1 network interface.

payload Initiates a loopback of the T1 framer (CSU portion) of the T1 network interface.

loopback remote line {inband}

Sends a loopback code to the remote unit to initiate a line loopback. Deactivate using the **no loopback remote line** command.

inband Uses the inband channel to initiate a full 1.544 Mbps physical loopback (metallic loopback) of the signal received from the network.

remote-loopback

Configures the interface to respond to loopbacks initiated by a remote unit (or service provider).

The **no** version of this command configures the interface to ignore T1 loop commands.

shutdown

Turns off the interface. The **no** version of this command turns the interface on and allows it to pass data.

signaling mode {message-oriented | none | robbed-bit*}

Configures the signaling type for the DS0s mapped to the DSX-1 port.

message-oriented Clear channel signaling on Channel 24 only. Use with QSIG installations.

none Clear channel signaling on all DS0s. Use with data-only or PRI DSX-1 installations.

robbed-bit* Robbed bit signaling on all DS0s. Use with voice-only DSX-1 applications.

snmp trap {line-status | link-status}

Controls the SNMP variable to enable the interface to send SNMP traps when there is an interface status change.

test-pattern {ones | zeros}

Initiates sending the specified test pattern.

ones Generates continuous ones.

zero Generates continuous zeros.

* Indicates default values.