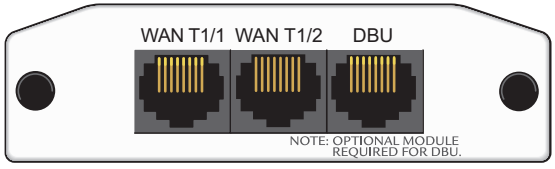
ADTRAN
Quick Start Guide

NETVANTA DUAL T1 NETWORK INTERFACE MODULE (NIM) P/N 1200872L1



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 64 kbps) Input Signal: 0 to -36 dB (DS1) Line Build-Out: 0, -7.5, -15, -22.5 dB Connector: RJ-48C DS0 Assignment: Programmable
Clock Source	Network, Internal
Diagnostics	Test pattern generation and detection Network loopbacks (local and remote) Responds to both inband and FDL 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 front of the chassis.
3. Secure the pins at both edges of the NIM.
4. Connect the cables to the associated device(s).
5. Complete the installation of the base unit.
6. Restore power to the unit.

WAN T1/1 AND T1/2 NETWORK (RJ-48C) CONNECTION PINOUT

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

NOTE *This module is to be installed in NetVanta Series products only.*

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

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T1/FT1 NIM COMMANDS

clock source {***line*** | ***internal*** | ***through***}

Configures the source timing used for both T1 interfaces.

line*	Recovers clock from the primary circuit
internal	Provides clocking using the internal oscillator.
through	Recovers clock from the circuit connected to the alternate interface.

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, 8 zero substitution

fdl {***ansi*** | ***att*** | ***none***}

Configures the format of the facility data link channel on the T1 circuit. FDL channels are only available on point-to-point circuits.

ansi*	Configures the FDL for ANSI T1.403 standard.
att	Configures the FDL for ATT TR54016 standard.
none	No FDL available on this circuit.

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

lbo {***0**** | ***-7.5*** | ***-15*** | ***-22.5***}

Sets the line build out (in dB) for the T1 Interface.

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 {***fdl*** | ***inband***}

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

fdl	Uses the facility data link (FDL) to initiate a full 1.544 Mbps loopback of the signal received by the remote unit from the network.
inband	Uses the inband channel to initiate a full 1.544 Mbps physical loopback (metallic loopback) of the signal received from the network.

loopback remote payload

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

remote-alarm rai

Enables transmission of RAI in response to a loss of frame. Use the **no** form of this command to disable.

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.

show test-pattern

Displays the current status of T1 test patterns.

shutdown

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

snmp trap link status

Enables the interface to send SNMP traps when there is an interface status change.

tdm-group *<group#>* **timeslots** *<DS0 range>* **speed** [***64***]

Creates a group of contiguous DS0s on this interface to be used during the **cross-connect** process.

<group#>	Number label to identify this TDM group.
<DS0 range>	DS0s in this group in the form: *<starting DS0 - ending DS0>.*
64	Configures the TDM group speed for 64 kbps.

test-pattern {***ones*** | ***zeros*** | ***p511*** | ***p215*** | ***p220*** | ***qrss***}

Initiates sending the specified test pattern.

ones	Generates continuous ones.
zeros	Generates continuous zeros.
p511	Generates repeating pattern of ones and zeros.
p215	Generates a pseudorandom test pattern sequence based on a 15-bit shift register.
p220	Generates a pseudorandom test pattern sequence based on a 20-bit shift register.
qrss	Quasi-random test pattern.

test-pattern clear

Clears the test pattern error count.

test-pattern insert

Inserts an error into currently active test pattern.

***** *Indicates default values.*