



Connecting Cisco T1 and E1 Network Modules to the Network

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This guide describes how to connect Cisco T1 and E1 network modules to your network. It contains the following sections:

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Cisco T1/E1 Network Module

The Cisco T1/E1 network module provides 8 ports of clear channel or channelized T1 and E1 support to Cisco 3800 series integrated services routers:

- Cisco 3825
- Cisco 3845

T1 support has integrated CSU/DSU capability.

Safety Warnings for the Cisco T1/E1 Network Module

The following safety warnings apply to installation procedures involving the Cisco T1/E1 network module. Translations of these warnings are available in the [Cisco Network Modules and Interface Cards Regulatory Compliance and Safety Information](#) document, which is available online.



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Warning

To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables. Statement 1021



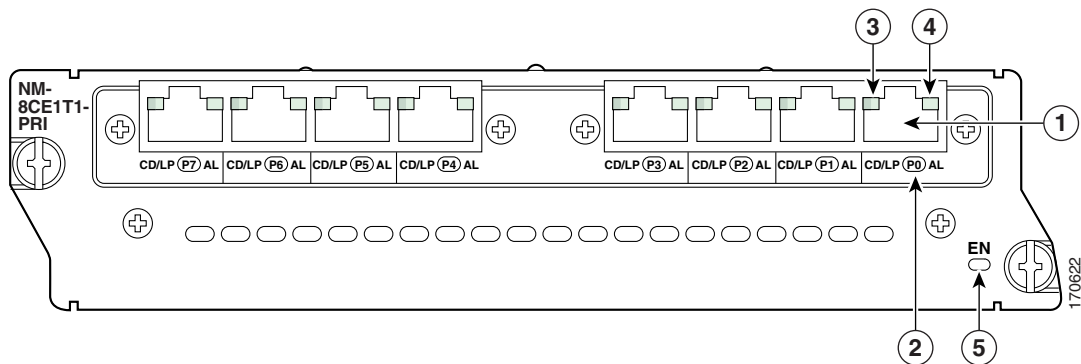
Warning

Hazardous network voltages are present in WAN ports regardless of whether power to the unit is OFF or ON. To avoid electric shock, use caution when working near WAN ports. When detaching cables, detach the end away from the unit first. Statement 1026

Cisco T1/E1 Network Module LEDs

The T1/E1 network module has 2 LEDs for each port that indicate the functionality of the T1 or E1 connection. [Figure 1](#) shows the front panel and LEDs. The LEDs are described in [Table 1](#).

Figure 1 8-Port T1/E1 Network Module Front Panel



1	RJ-48C connector	2	Port number
3	CD/LP LED (bicolor LED)	4	AL LED
5	EN LED		

CD/LP LEDs are bicolor LEDs with both green and yellow emitters.

Table 1 T1/E1 Network Module LEDs

LED	Color	Description
CD/LP	Green/Yellow	Off: No carrier detected
		Green on (CD): Carrier detected
		Yellow on (LP): Port in loopback mode

Table 1 T1/E1 Network Module LEDs

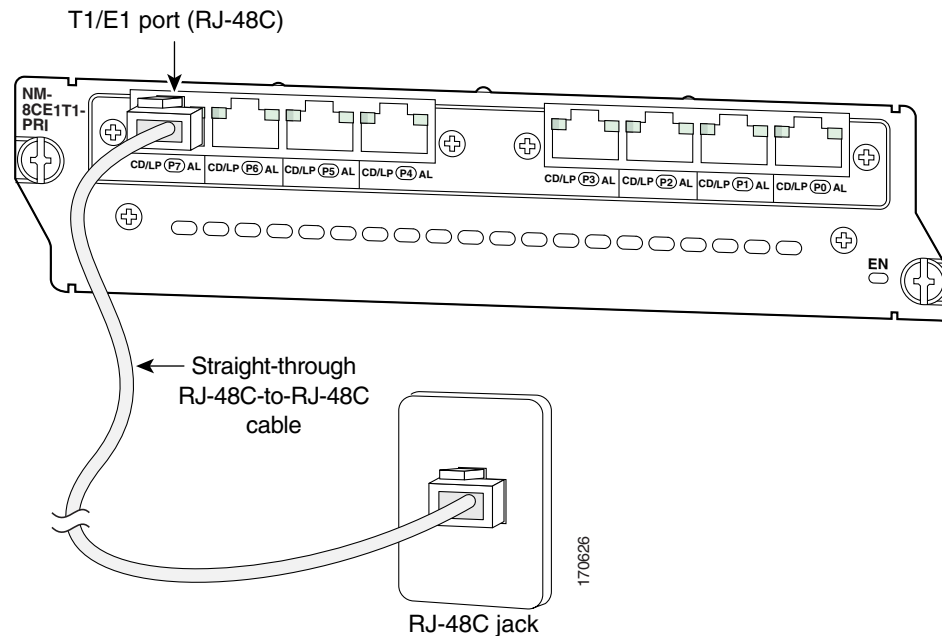
LED	Color	Description
AL	Yellow	Off: No alarms On: Port in alarm mode
EN	Green	Off: Network module does not pass self-test and is not available to the router. There is a failure with either the module or the slot. On: Network module has passed self-test and is available to the router. The network module may be removed from router when the EN LED is off.

Connecting a T1/E1 Network Module to a Network

Use straight-through RJ-48C-to-RJ-48C cables to connect T1/E1 ports to RJ-48C jacks.

To connect a T1/E1 port to the network, complete the following steps:

- Step 1** Connect one end of the cable to a T1/E1 port on the network module.
- Step 2** Connect the other end to the RJ-48C jack at your site, as shown in [Figure 2](#).

Figure 2 Connecting a T1/E1 Port to an RJ-48C Jack

Related Documents

For additional information, see the following documents and resources.

Related Topic	Document Title
Regulatory compliance and safety information	<i>Cisco Network Modules and Interface Cards Regulatory Compliance and Safety Information</i> http://www.cisco.com/en/US/docs/routers/access/interfaces/rcsi/IOHrcsi.html
Cisco IOS software website and reference documentation	<i>Cisco IOS Software</i> http://www.cisco.com/web/psa/products/index.html?c=268438303

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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