



Connecting Cisco DSU/CSU High-Speed WAN Interface Cards

Revised: April 15, 2008, OL-14875-01

Overview

This document describes Cisco serial and DSU/CSU high-speed WAN interface cards (HWICs) and how to connect them to a network. It contains the following sections:

- [T1/FT1 DSU/CSU HWICs, page 1](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page 5](#)

For an overview of Cisco interface cards used for Cisco access routers, see the [Cisco Interface Cards for Cisco Access Routers](#) document.

T1/FT1 DSU/CSU HWICs

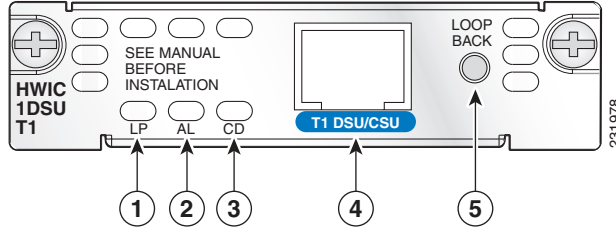
This section describes T1/FT1 data service unit/channel service unit (DSU/CSU) HWICs and how to connect them to a network. It contains the following sections:

- [T1/FT1 DSU/CSU HWIC LEDs and Loopback Button, page 1](#)
- [Supported Platforms, page 2](#)
- [Enabling Wetting Current on T1/FT1 DSU/CSU HWICs, page 3](#)
- [Prerequisites for Connecting a T1/FT1 DSU/CSU HWIC to a Network, page 3](#)
- [Connecting a T1/FT1 DSU/CSU HWIC to a Network, page 4](#)

The 1-port T1/fractionalized T1 (FT1) DSU/CSU HWIC (HWIC-1DSU-T1) includes an integrated DSU/CSU. The HWIC can be configured for either full T1 services or fractionalized T1 services.

T1/FT1 DSU/CSU HWIC LEDs and Loopback Button

[Figure 1](#) shows the T1/FT1 DSU/CSU HWIC LEDs and loopback button. [Table 1](#) describes the functions of the LEDs and loopback button.

Figure 1 HWIC-1DSU-T1 Front Panel

1	Loopback LED	4	T1 port
2	Alarm LED	5	Loopback button
3	Data carrier detect LED		

Table 1 T1/FT1 DSU/CSU HWIC LEDs and Loopback Button

Feature	Color	Description
LP LED	Yellow	Line or loopback state is detected or is manually set by the user.
	Off	Normal operation.
AL LED	Yellow	Remote and local alarm conditions.
	Off	Normal operation.
CD LED	Green	Internal DSU/CSU in the HWIC is communicating with another DSU/CSU. This LED is on during normal operation.
Loopback button ¹	—	Push this button to place the HWIC into loopback mode. The service provider can send a signal to test the connection from your site to the central office switch. Push this button again to turn off loopback mode.

1. Pushing this button places the HWIC-1DSU-T1 in **LINE** loopback mode.

Supported Platforms

The HWIC-1DSU-T1 interface card supports the following Cisco integrated services routers (ISRs):

- Cisco 1841 ISR
- Cisco 2801 ISR
- Cisco 2811 ISR
- Cisco 2821 ISR
- Cisco 2851 ISR
- Cisco 3825 ISR
- Cisco 3845 ISR

**Note**

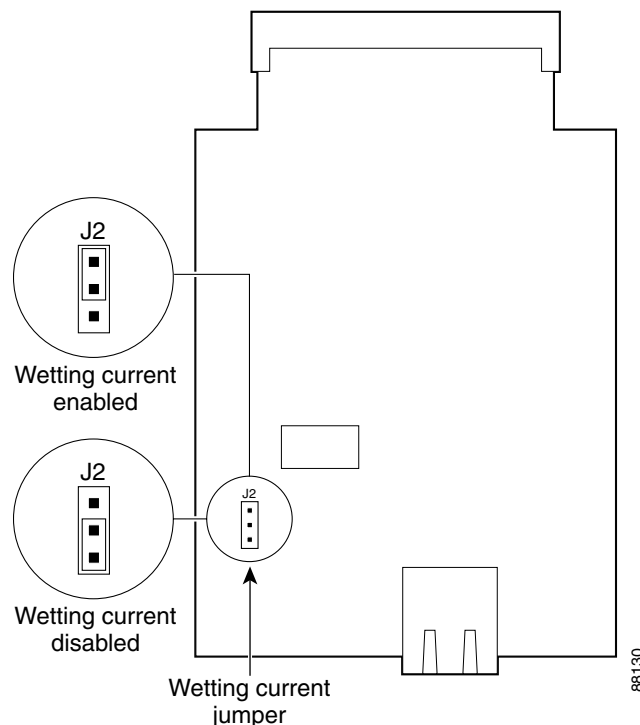
Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at <http://www.cisco.com/go/fn>. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.

Enabling Wetting Current on T1/FT1 DSU/CSU HWICs

The HWIC-1DSU-T1 interface card supports wetting current. Wetting current is a small amount of electrical current (60 to 140 milliamps) sent from the central office to the card to prevent corrosion of electrical contacts in the card's network connection.

Wetting current may be enabled or disabled by the user. It is controlled by a jumper on connector J2 on the card. [Figure 2](#) shows the J2 connector and the jumper.

Figure 2 Jumper Settings for Controlling Wetting Current on the HWIC-1DSU-T1 Card



The feature is enabled by connecting pins 1 and 2 of the J2 connector with a jumper. It is disabled either by removing the jumper or by connecting pins 2 and 3 of the J2 connector.

The card is shipped with the pins 2 and 3 connected, which disables the wetting current.

Prerequisites for Connecting a T1/FT1 DSU/CSU HWIC to a Network

Before connecting an HWIC to the network, ensure that the HWIC is installed in the router, the equipment is properly grounded, and you have the proper cables for connecting the HWIC to the network. This section describes the preparation necessary for connecting a T1/FT1 DSU/CSU HWIC to the network.

Grounding

Ensure that the equipment you are working with is properly grounded. For instructions on grounding your HWIC, see the [Installing Cisco Interface Cards in Cisco Access Routers](#) document.

Cables

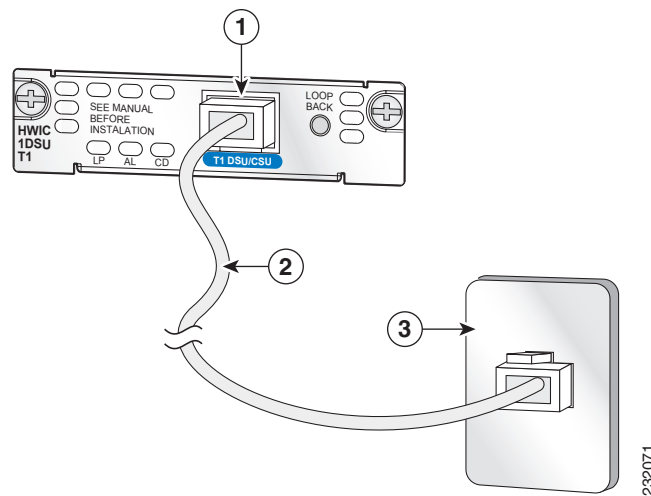
Use a straight-through RJ-48C-to-RJ-48C cable to connect a T1/FT1 DSU/CSU HWIC to a network.

Connecting a T1/FT1 DSU/CSU HWIC to a Network

To connect a T1/FT1 DSU/CSU HWIC to a network, follow these steps:

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- Step 1** Confirm that the router is turned off.
 - Step 2** Connect one end of the straight-through RJ-48C-to-RJ-48C cable to the RJ-48C port on the T1/FT1 DSU/CSU HWIC.
 - Step 3** Connect the other end of the cable to the T1 wall jack, as shown in [Figure 3](#).

Figure 3 Connecting the T1/FT1 DSU/CSU HWIC to a T1 Wall Jack



1	T1 port (RJ-48C)	3	T1 (RJ-48C) wall jack
2	Straight-through RJ-48C-to-RJ-48C cable		

- Step 4** Turn on power to the router.
- Step 5** Check that the CD LED comes on, which means that the internal DSU/CSU is communicating with the DSU/CSU at the T1 service provider's central office.
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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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