Understanding 2−Port Serial WAN Interface Card (WIC−2T)

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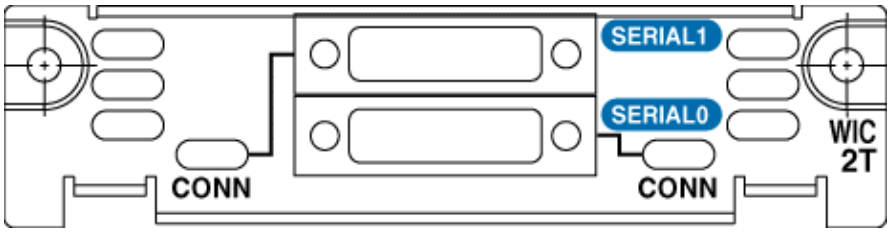
Introduction

The dual−serial port WAN interface cards (WICs) for the Cisco 2600 and 1700 series feature Cisco`s new, compact, high−density Smart Serial connector to support a wide variety of electrical interfaces when used with the appropriate transition cable. Two cables are required to support the two ports on the WIC. Each port on a WIC is a different physical interface and can support different protocols such as Point−to−Point protocol (PPP) or Frame Relay and Data Terminal Equipment/Data Communications Equipment (DTE/DCE).



Before You Begin

Conventions

For more information on document conventions, see the Cisco Technical Tips Conventions.

Prerequisites

There are no specific prerequisites for this document.

Components Used

This document is not restricted to specific software and hardware versions.

Product Numbers

WIC−2T	2 Port Serial WAN Interface Card

Features

The WIC−2T provides two serial ports using the Smart Serial connector.

- Asynchronous support with a maximum speed (per port) of 115.2 Kbps, minimum 600 bps. If you need to run at speeds lower than 600 bps, use the AUX port instead.
- Synchronous support with a maximum speed of 8 Mbps per port.
    - ♦ Supports one port at 8 Mbps when used in NM−1FE1R2W, NM−1FE2W, NM−2FE2W, or NM−2W, or Cisco 2600 chassis WIC slots. All other WIC ports on that network module or Cisco 2600 chassis must not be used.
    - ♦ Supports two ports at 4 Mbps each when used in NM−1FE1R2W, NM−1FE2W, NM−2FE2W, or NM−2W, or Cisco 2600 chassis WIC slots. All other WIC ports on that network module or Cisco 2600 chassis must not be used.
    - ♦ Supports 8 Mbps on all ports simultaneously on 2691, 3725, and 3745. No restrictions. Maximum six ports at 8 Mbps each.

Note: The X.21 interface protocol is not recommended for clock rates beyond 4 MHz. For clock rates beyond 4 MHz, V.35 interface is recommended.

Cables

The WIC−2T serial ports require Smart Serial cables. The following table lists the part number for the cables that can be used with the WIC−2T card.

Cable Type	Product Number	Length	Male/Female
V.35 DTE	CAB−SS−V35MT(=)	10 feet / 3 meters	Male
V.35 DCE	CAB−SS−V35FC(=)	10 feet / 3 meters	Female
RS−232 DTE	CAB−SS−232MT(=)	10 feet / 3 meters	Male
RS−232 DCE	CAB−SS−232FC(=)	10 feet / 3 meters	Female
RS−449 DTE	CAB−SS−449MT(=)	10 feet / 3 meters	Male
RS−449 DCE	CAB−SS−449FC(=)	10 feet / 3 meters	Female
X.21 DTE	CAB−SS−X21MT(=)	10 feet / 3 meters	Male
X.21 DCE	CAB−SS−X21FC(=)	10 feet / 3 meters	Female
	CAB−SS−530MT(=)		Male

EIA−530 DTE		10 feet / 3 meters	
EIA−530A DTE	CAB−SS−530AMT(=)	10 feet / 3 meters	Male

Platform Support

Platform	Cisco 1600	Cisco 1700	Cisco 2600		Cisco 2600XM		Cisco 3620, 3640, 3660	
Carrier Module	Not Required	Not Required	on−board	NM−2W	on−board	NM−2W	NM−1E2W, NM−1E1R2W, NM−2E2W	NM−1FE2W, NM−1FE1R2W, NM−2FE2W, NM−2W
Cisco IOS® Support	Not supported	All Cisco IOS versions	All Cisco IOS versions	Cisco IOS versions 12.0(7)XK, 12.1(1)T, 12.2, 12.2T	All Cisco IOS versions	Cisco IOS versions 12.2(8)T1	Not supported	Cisco IOS versions 12.0(7)XK, 12.1(1)T, 12.2, 12.2T

The Cisco 1600 Series is not capable of supporting the WIC−2T due to lack of Serial Communications Controllers.

The NM−1E2W, NM−1E1R2W, and NM−2E2W Network Modules do not have enough performance power to support the WIC−2T due to hardware limitations.

Known Problems

The **show version** command shows WIC−2T as "low−speed". This is a display only (cosmetic) problem.

Hardware Failures

The WIC−2T and WIC−2A/S can be damaged by excessive electrostatic discharge. You can minimize this electrostatic discharge in several ways.

- Use shielded cable end−to−end.
- Use a data surge protector that protects against surges over +/− 18v.
- Use an optical isolator (best protection).

Sample Configuration

This is a sample configuration for the WIC−2T interface card.

Note: There are no **framing**, **clocking** or **linecode** parameters or commands being used here. This is because this card does not have an integrated channel service unit/data service unit (CSU/DSU). You need to use an external CSU/DSU.

Configuration
`maui−soho−02(config)#interface Serial 2/0`

```
maui-soho-02(config-if)#ip add 10.0.0.1 255.255.255.0
maui-soho-02(config-if)#encapsulation ppp
maui-soho-02(config-if)#no shutdown
```

Refer to Configuring Serial Interfaces for more information on configuring the WIC−2T card.

Related Information

- **One− and 2−Port Serial WAN Interface Cards**
- **Overview of Cisco Network Modules**
- **Technical Support & Documentation − Cisco Systems**

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