Cisco Interface Cards for Cisco Access Routers

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Overview

This document provides an overview of Cisco interface cards used in Cisco access routers, and contains the following sections:

Introduction to Cisco Interface Cards

Cisco interface cards are classified according to the technologies they support. For example, WAN interface cards (WICs) support WAN technologies, such as Gigabit Ethernet, and voice interface cards (VICs) support voice technologies. Voice/WAN interface cards (VWICs) can support voice, data, and voice and data applications, depending on the capabilities of the router in which the VWIC is installed. High-speed WAN interface cards (HWIC) provide expanded LAN and WAN capabilities, such as Gigabit Ethernet and Ethernet switching.

Note HWICs are supported on Cisco 1800 series (modular), Cisco 2800 series, and Cisco 3800 series routers.

Cisco interface cards are available in the following two form factors to provide greater modularity and functionality for users:

- Single-wide interface cards (see Figure 1)
- Double-wide interface cards (see Figure 2)

Single-wide interface cards can be installed in interface card slots on supported Cisco access routers, in 1- or 2-slot network modules to be installed in network module slots on supported Cisco access routers, and in interface card slots on Cisco 1800 (modular) series, Cisco 2800 series, and Cisco 3800 series routers. See Figure 1 for a sample single-wide interface card.

Figure 1　　　*Sample Single-Wide Interface Card*
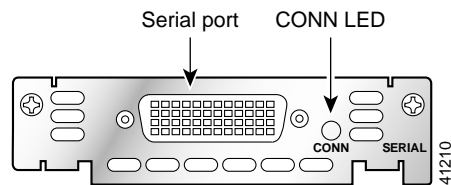
Double-wide interface cards can only be installed in interface card slots on Cisco 2800 series and Cisco 3800 series routers. See Figure 2 for a sample double-wide interface card.

Figure 2　　　*Sample Double-Wide Interface Card*
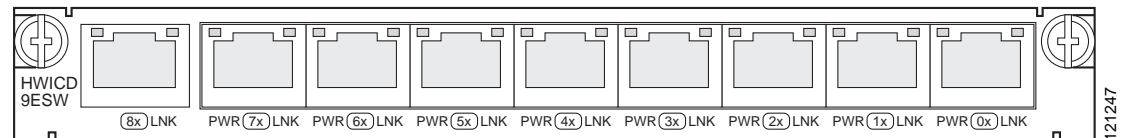
Cisco Access Routers and Cisco Interface Cards

The Cisco interface cards described in this book are supported on the following Cisco routers:

- The Cisco 1600 series, including the Cisco 1601, Cisco 1602, Cisco 1603, Cisco 1604, Cisco 1605-R routers (see Figure 3)
- The Cisco 1700 series (modular), including the Cisco 1720, Cisco 1721, Cisco 1750, Cisco 1751, and Cisco 1760 routers (see Figure 4, Figure 5, and Figure 6)
- The Cisco 1800 series (modular), including the Cisco 1841 routers (see Figure 7)
- The Cisco 2600 series, including the Cisco 2610, Cisco 2610XM, Cisco 2611, Cisco 2611XM, Cisco 2612, Cisco 2613, Cisco 2620, Cisco 2620XM, Cisco 2621, Cisco 2621XM, Cisco 2650, Cisco 2650XM, Cisco 2651, Cisco 2651XM, and Cisco 2691 routers (see Figure 8)

Note　　References to the Cisco 2600XM routers apply to the following routers: Cisco 2610XM, Cisco 2611XM, Cisco 2620XM, Cisco 2621XM, Cisco 2650XM, and Cisco 2651XM.

- The Cisco 2800 series, including the Cisco 2801, Cisco 2811, Cisco 2821, and Cisco 2851 routers (see Figure 9 and Figure 10)
- The Cisco 3600 series, including the Cisco 3620, Cisco 3631, Cisco 3640, Cisco 3640A, Cisco 3661, and Cisco 3662 routers (figure not shown)

> **Note** Cisco 3600 series routers do not have built-in interface card slots. However, interface cards are supported when installed in a 1- or 2-slot network module.

- The Cisco 3700 series, including the Cisco 3725 and Cisco 3745 routers (see Figure 11 and Figure 12)
- The Cisco 3800 series, including the Cisco 3825 and Cisco 3845 routers (see Figure 13)
- Cisco MWR 1941-DC routers (see Figure 14)
- Cisco ICS 7750 routers

For information on these Cisco routers, see the hardware documentation described in the "Related Documents" section on page 27.

> **Note** Certain Cisco interface cards are also supported on the Cisco ICS 7750. See Table 4 for more information.

Interface Card Slot Locations and Numbering on Cisco Access Routers

See Figure 3 through Figure 14 for interface card slot locations on sample Cisco access routers. Refer to the hardware documentation for your router for detailed information on slot and interface numbering.

Figure 3   *Interface Card Slot Locations on Cisco 1600 Series Routers (Cisco 1601 Router Shown)*
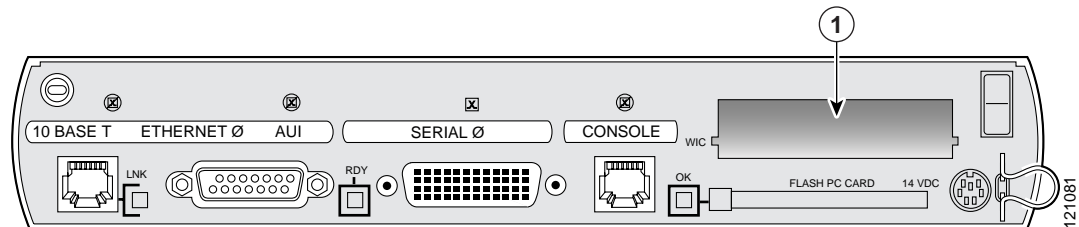
1	Interface card slot

Figure 4   *Interface Card Slot Locations on Cisco 1721 Routers*
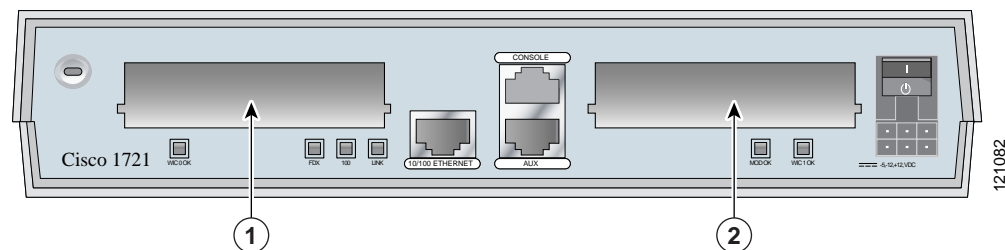
1	WIC slot 0	2	WIC slot 1

Figure 5   *Interface Card Slot Locations on Cisco 1750 and Cisco 1751 Routers (Cisco 1751 Shown)*
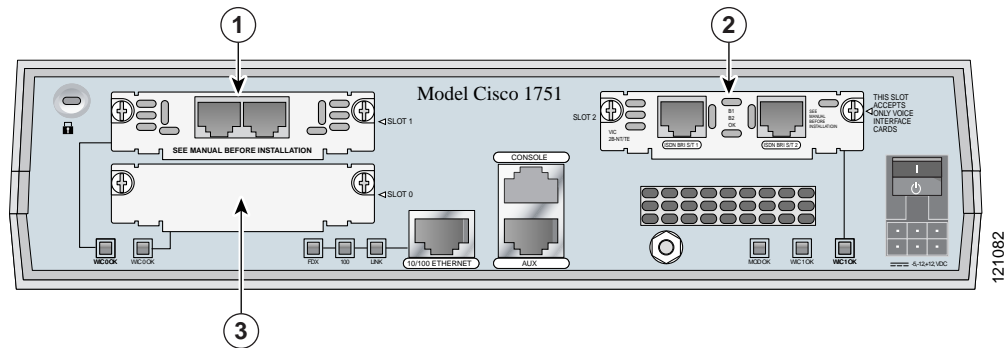
1	Interface card slot 1	**2**	VIC slot 2
3	Interface card slot 0		

Figure 6   *Interface Card Slot Locations on Cisco 1760 Routers*
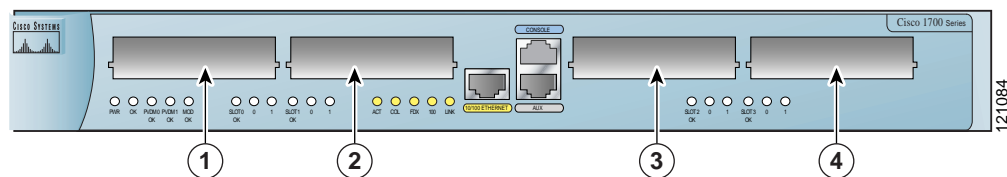
1	Interface card slot 0	**2**	Interface card slot 1
3	VIC slot 2	**4**	VIC slot 3

Figure 7   *Interface Card Slot Locations on Cisco 1800 Series (Modular) Series Routers (Cisco 1841 Router Shown)*
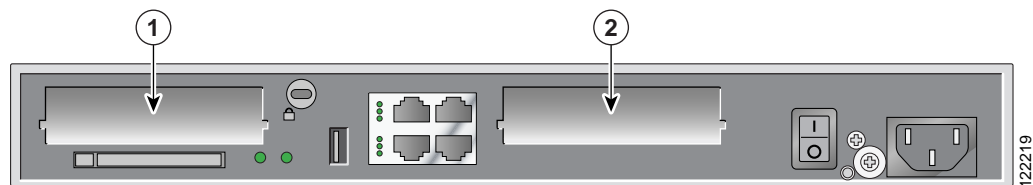
1	WIC, VWIC—data only, or HWIC slot 1	**2**	WIC, VWIC—data only, or HWIC slot 0

Figure 8   *Interface Card Slot Locations on Cisco 2600 Series Routers (Cisco 2612 Router Shown)*
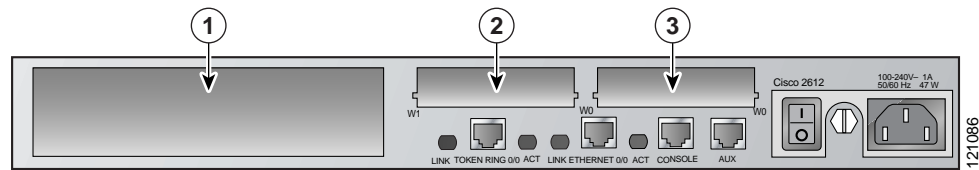
1	Network module slot	2	WIC slot 1
3	WIC slot 0		

Figure 9   *Interface Card Slot Locations on Cisco 2801 Routers*
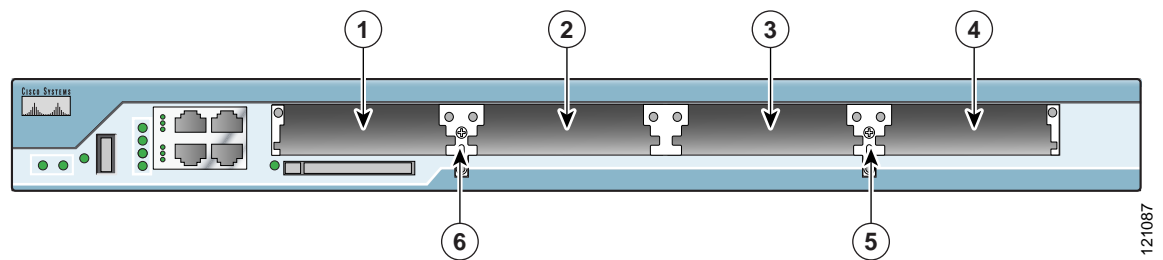
1	WIC/VIC/VWIC/HWIC slot 3	2	WIC/VIC/VWIC slot 2
3	WIC/VIC/VWIC/HWIC slot 1	4	VIC/VWIC (voice only) slot 0
5	Interface card slot divider	6	Interface card slot divider

Note   To install double-wide interface cards in Cisco 2801 routers, remove the slot divider. When the slot dividers are removed, slot 0 and slot 1 become slot 1, and slot 2 and slot 3 become slot 3.

Figure 10   Interface Card Slot Locations on Cisco 2800 Series Routers (Cisco 2851 Router Shown)
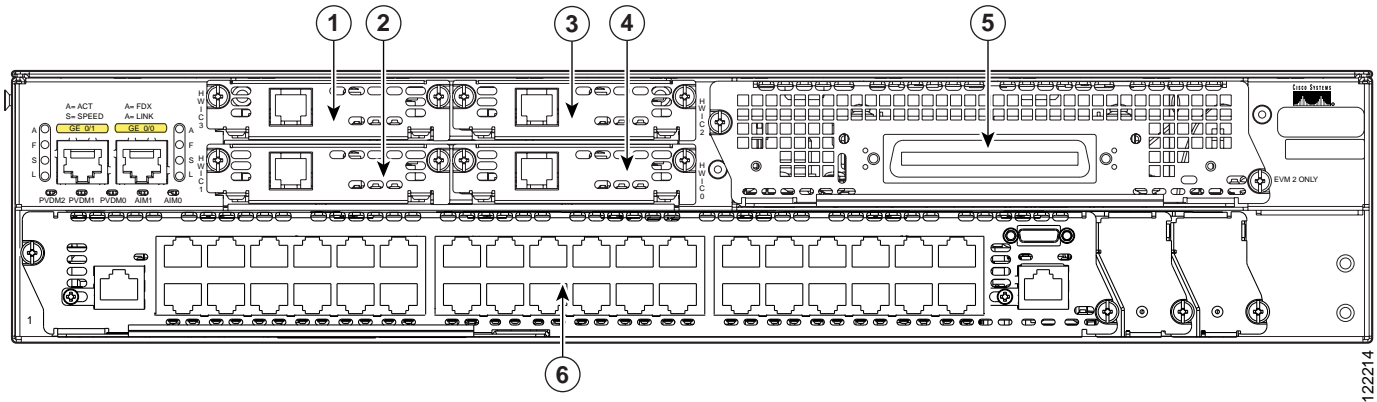
1	HWIC slot 3	2	HWIC slot 1
3	HWIC slot 2	4	HWIC slot 0
5	Extension voice module (EVM) slot	6	Network module enhanced (NME) slot

Note To install double-wide interface cards in Cisco 2811, Cisco 2821, and Cisco 2851 routers, remove the slot divider. When the slot dividers are removed, slot 0 and slot 1 become slot 1, and slot 2 and slot 3 become slot 3.

Figure 11   Interface Card Slot Locations on Cisco 3725 Routers
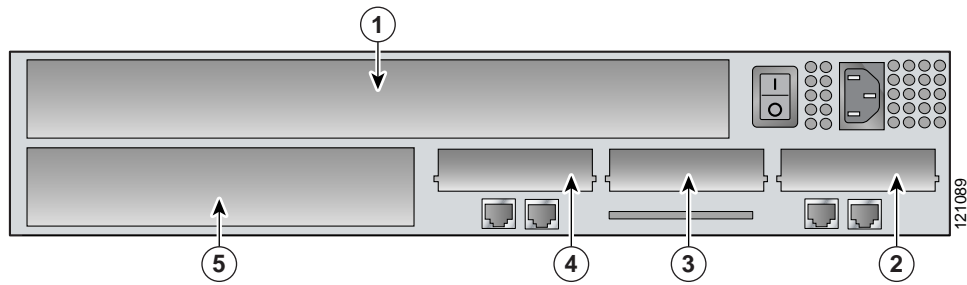
1	Network module slot (double-wide)	2	Interface card slot 0
3	Interface card slot 1	4	Interface card slot 2
5	Network module slot (single-wide)		

Figure 12   *Interface Card Slot Locations on Cisco 3745 Routers*

1	Interface card slot 2	2	Interface card slot 1
3	Interface card slot 0	4	Interface card slot
5	Network module slot (single-wide)	6	Network module slot (single-wide)
7	Network module slot (single-wide)	8	Network module slot (single-wide)

Figure 13   *Interface Card Slot Locations on Cisco 3800 Series Routers (Cisco 3825 Router Shown)*

1	Network module slot 2 (extended double-wide)	2	HWIC slot 2
3	HWIC slot 0	4	HWIC slot 3
5	HWIC slot 1	6	Network module slot 1 (extended single-wide)

Note   To install double-wide interface cards in Cisco 3800 series routers, remove the slot divider. When the slot dividers are removed, slot 0 and slot 1 become slot 1, and slot 2 and slot 3 become slot 3.

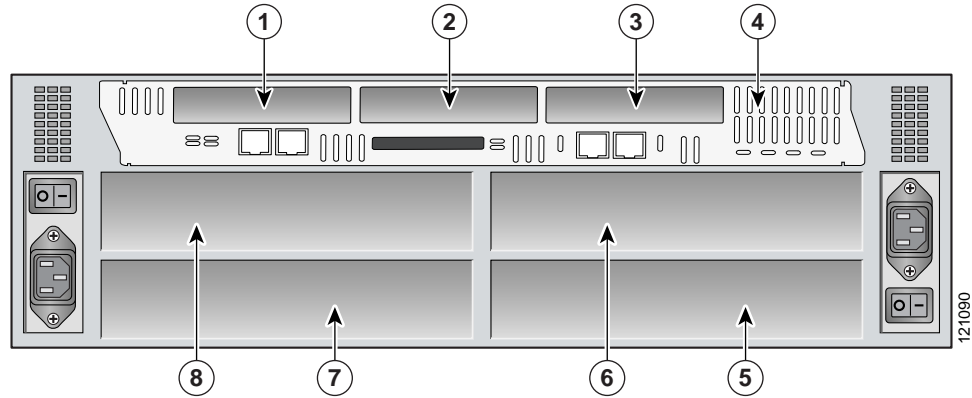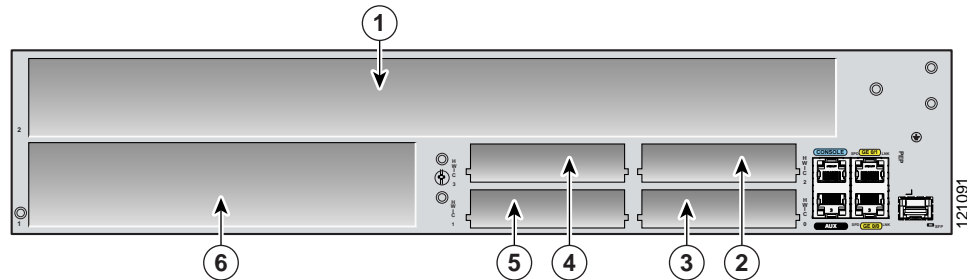*Figure 14*   *Interface Card Slot Locations on Cisco MWR 1941-DC Routers*
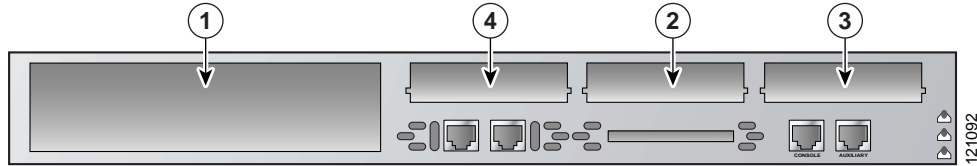
1	Network module slot	2	Interface card slot 1
3	Interface card slot 0	4	Interface card slot 2

Platform Slot Numbering and Limitations for Cisco Interface Cards

Certain platforms have restrictions on the number of total interface cards of a certain type that can be installed, and some slots do not support certain interface cards.

See Table 1 for information about the interface card slots available on Cisco access routers.

Table 1   *Interface Card Slots Available on Cisco Access Routers*

Cisco Router	Number of Slots	Slot Type	Slot Numbering	Installation Notes and Limitations
Cisco 1600 series	1	Single-wide	–	Routers do not support HWICs.
Cisco 1720 routers	2	Single-wide	Slot 0, slot 1	Routers do not support HWICs.
Cisco 1750 and Cisco 1751 routers	3	Single-wide	Slot 0 through slot 2	Slot 2 supports VICs only. Routers do not support HWICs.
Cisco 1760 routers	4	Single-wide	Slot 0 through slot 3	Slot 2 and slot 3 support VICs only. Routers do not support HWICs.
Cisco 1800 series	2	Single-wide	Slot 0, slot 1	Does not support VICs. Does not support double-wide HWICs. Supports VWICs for data applications only.
Cisco 2600 series	2	Single-wide	Slot 0, slot 1	Does not support VICs in chassis slots. Routers do not support HWICs.

Table 1   *Interface Card Slots Available on Cisco Access Routers (continued)*

Cisco Router	Number of Slots	Slot Type	Slot Numbering	Installation Notes and Limitations
Cisco 2801 routers	4	Single-wide	Slot 0 through slot 3	Slot 0 supports only VICs and VWICs in voice mode only. Slot 1 and slot 3 support HWICs. Slot 0 and slot 2 do not support HWICs.
	2	Double-wide	Slot 1, slot 3	Removing the slot divider changes slot numbering as follows: • Slot 0 and slot 1 become slot 1 • Slot 2 and slot 3 become slot 3 **Tip** To install double-wide interface cards, remove the slot divider (see the "Installing Double-Wide Interface Cards" section in *Installing Cisco Interface Cards in Cisco Access Routers*).
Cisco 2811, Cisco 2821, and Cisco 2851 routers	4	Single-wide	Slot 0 through slot 3	–
	2	Double-wide	Slot 1, slot 3	Removing the slot divider changes slot numbering as follows: • Slot 0 and slot 1 become slot 1 • Slot 2 and slot 3 become slot 3 **Tip** To install double-wide interface cards, remove the slot divider (see the "Installing Double-Wide Interface Cards" section in *Installing Cisco Interface Cards in Cisco Access Routers*).
Cisco 3600 series	2, 4, or 6	Single-wide	Slot 0 through slot 6	To install an interface card in a Cisco 3600 series router, use a 1- or 2-slot network module (see the "Cisco Network Modules Supporting Cisco Interface Cards" section on page 11). Cisco 3600 series routers do not have interface card slots on the chassis. Routers do not support HWICs.
Cisco 3660	2, 4, or 6	Single-wide or double-wide	Slot 0 through slot 6	To install an interface card in a Cisco 3600 series router, use a 1- or 2-slot network module (see the "Cisco Network Modules Supporting Cisco Interface Cards" section on page 11). Cisco 3600 series routers do not have interface card slots on the chassis. Routers do not support HWICs.
Cisco 3700 series	3	Single-wide	Slot 0 through slot 2	Does not support VICs in chassis slots. Routers do not support HWICs.

Table 1   Interface Card Slots Available on Cisco Access Routers (continued)

Cisco Router	Number of Slots	Slot Type	Slot Numbering	Installation Notes and Limitations
Cisco 3800 series	4	Single-wide	Slot 0 through slot 3	–
	2	Double-wide	Slot 1, slot 3	Removing the slot divider changes slot numbering as follows: • Slot 0 and slot 1 become slot 1 • Slot 2 and slot 3 become slot 3 **Tip** To install double-wide interface cards, remove the slot divider (see the "Installing Double-Wide Interface Cards" section in *Installing Cisco Interface Cards in Cisco Access Routers*).
Cisco ICS 7750	–	–	–	Routers do not support HWICs. To install interface cards in the Cisco ICS 7750, use a multiroute processor (MRP) or analog station interface 81 (ASI 81) card. **Tip** Refer to the "Processor Cards Feature Summary" chapter in the *Cisco ICS 7750 System Description* document for more information about these cards.
Cisco MWR 1941-DC routers	1	Single-wide	Slot 1 through slot 3	Routers do not support HWICs.

Cisco IOS Software Releases and Cisco Interface Cards

Cisco interface cards are often supported on multiple Cisco IOS releases. Cisco IOS release information is documented in the product data sheet and in Feature Navigator II.

To determine which Cisco IOS releases support your particular router and combination of cards and modules, go to the Software Advisor at http://tools.cisco.com/Support/Fusion/.

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.

Cisco Network Modules Supporting Cisco Interface Cards

Some Cisco network modules have interface card slots to allow installation of Cisco interface cards. These network modules have either one or two interface card slots, supporting either voice or data interface cards. See Figure 15 and Figure 16 for sample 1-slot and 2-slot network modules.

Note Some combination voice/data interface cards are supported on 1- or 2-slot network modules. However, interface card functionality is limited to either voice or data applications. See Table 1 for more information.

Figure 15   *Sample 1-Slot Network Module*
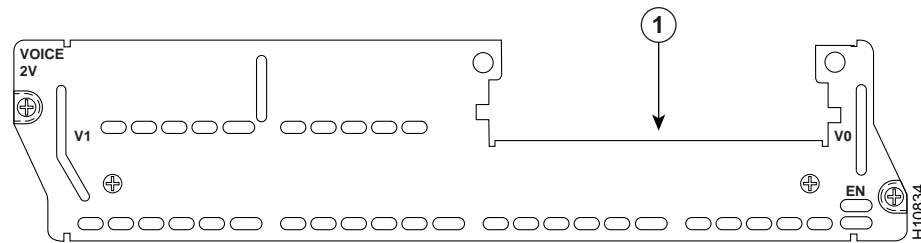
1	Interface card slot 0

Figure 16   *Sample 2-Slot Network Module*
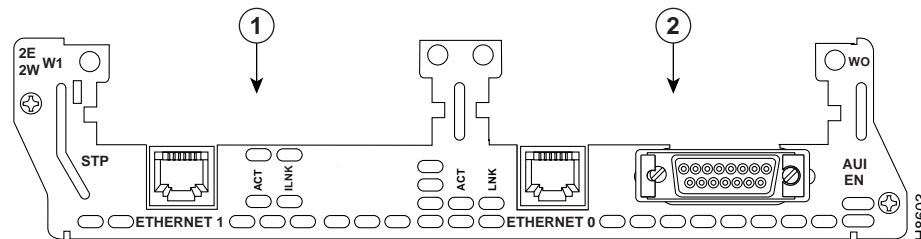
1	Interface card slot 1	2	Interface card slot 0

For information on installing interface cards onto network modules, see *Installing Cisco Interface Cards in Cisco Access Routers*.

For more information about Cisco network modules, see the *Cisco Network Modules Hardware Installation Guide*.

Cabling for Cisco Interface Cards

The cables required to connect the interface card to the network differ according to interface and connector type. See Table 2 for more information.

> ✎
> **Note** Cabling for 1- or 2-slot network modules is determined by the installed interface cards.

> ✎
> **Note** For network-end connectors and pinout specifications of the cables connecting the voice cards, refer to the *Cisco Modular Access Router Specifications*. Look under the type of interface card.

Table 2   Cabling for Cisco Interface Cards

Technology			
Connection Type	**Connector Type, Cable Color**	**Cable**	**Use with**
Analog Dialup			
300 bps to 33.6 kbps analog dialup	RJ-11, pink	RJ-11 straight-through	WIC-1AM WIC-2AM WIC-1AM-V2 WIC-2AM-V2
Cable Modem			
Cable	F	CATV coaxial	HWIC-CABLE-D-2 HWIC-CABLE-E/J-2
DSL			
ADSL	RJ-11C/CA11A, lavender	RJ-11 straight-through	WIC-1ADSL WIC-1ADSL-DG WIC-1ADSL-I-DG HWIC-1ADSL HWIC-1ADSLI
SHDSL	RJ-11C/CA11A, lavender	RJ-11 straight-through for 2-wire RJ-14 straight-through for 4-wire	WIC-1SHDSL WIC-1SHDSL-V2 WIC-1SHDSL-V3
	RJ-11	RJ-11 straight-through	HWIC-2SHDSL
	RJ-45	RJ-45 straight-through	HWIC-4SHDSL
Ethernet			
Fast Ethernet, copper	RJ-45	100BASE-T Category 5 or above UTP	WIC-4ESW HWIC-4ESW HWIC-4ESW-POE HWIC-D-9ESW HWIC-D-9ESW-POE
Fast Ethernet, copper	RJ-45	• For 10BASE-T operation, use Category 3, 4, or 5 UTP cable. • For 100BASE-TX operation, use Category 5 UTP cable.	HWIC-1FE HWIC-2FE

Table 2   Cabling for Cisco Interface Cards

Technology

Connection Type	Connector Type, Cable Color	Cable	Use with
Gigabit Ethernet, copper	RJ-45	1000BASE-T Category 5 or above UTP	HWIC-1GE-SFP (through SFP)
Gigabit Ethernet, optical Note A single fiber link should not mix 62.5- and 50-micron cable.	LC, color according to optical wavelength	Optical fiber as specified on applicable data sheet	

ISDN Connections

BRI S/T (external NT1)	RJ-48C	RJ-48C straight-through	WIC36-1B-S/T WIC-1B-S/T WIC-1B-S/T-V3 WIC-1B-S/T-LL
BRI S/T (external NT1)	RJ-45	RJ-45 Straight-through	HWIC-ADSL-B/ST HWIC-ADSLI-B/ST
BRI U (built-in NT1)	RJ-49C/CA-A11, red	RJ-11; RJ-21 if using NM-HDA, straight-through	WIC36-1B-U WIC-1B-U WIC-1B-U-V2
56/64 kbps DSU/CSU	8-pin modular, blue	RJ-48S straight-through	WIC-1DSU-56K4
T1/fractional T1 DSU/CSU	RJ-48C	RJ-48C straight-through	WIC-1DSU-T1 WIC-1DSU-T1-V2

Serial Connections

Synchronous serial	60-pin D, blue	Serial transition cable (EIA/TIA-232, EIA/TIA-449, EIA/TIA-530 DTE, V.35, X.21, NRZ/NRZI)	WIC-1T
Serial	26-pin Cisco Smart serial	Cisco Smart serial interface cable (see Table 3)	HWIC-4A/S HWIC-4T WIC-2A/S WIC-2T
	68-pin	Cisco 4-port RS-232 DCE or DTE cable assembly (two cable assemblies are required for each HWIC-8A/S-RS232)	HWIC-8A/S-RS232
		Cisco 8-port RS-232 DTE cable assembly (two cable assemblies are required for each HWIC-16A)	HWIC-8A HWIC-16A

Table 2   *Cabling for Cisco Interface Cards*

Technology

Connection Type	Connector Type, Cable Color	Cable	Use with
Voice Connections			
Digital voice, T1/E1	RJ-48C/CA81A, tan	RJ-48C straight-through	VIC-2BRI-NT/TE VIC2-2BRI-NT/TE VIC-2BRI-ST/TE VIC2-2BRI-ST/TE
Digital voice/data, T1/E1			VWIC-1MFT-E1 VWIC-1MFT-G703 VWIC-1MFT-T1 VWIC-2MFT-E1 VWIC-2MFT-E1-DI VWIC-2MFT-G703 VWIC-2MFT-T1 VWIC-2MFT-T1-DI VWIC2-1MFT-G703 VWIC2-1MFT-T1/E1 VWIC2-2MFT-G703 VWIC2-2MFT-T1/E1
Analog voice, FXS	RJ-11, gray	RJ-11 straight-through	VIC-2FXS VIC2-2FXS VIC-4FXS/DID
Analog voice, FXO	RJ-11, pink		VIC-2FXO VIC-2FXO-M1 VIC-2FXO-M2 VIC-2FXO-M3 VIC2-2FXO VIC2-4FXO
Analog voice, CAMA			VIC-2CAMA
Analog voice, DID	RJ-11		VIC-2DID
Analog voice, E&M	RJ-45, brown	RJ-45 straight-through	VIC-2E/M VIC2-2E/M

Table 3   *Cisco 12-in-1 Smart Serial Interface Cable Part Numbers*

Interface	DCE/DTE	Cisco Cable Part Number
EIA/TIA-232	Female DCE Male DTE	CAB-SS-232FC CAB-SS-232MT
EIA/TIA-449	Female DCE Male DTE	CAB-SS-449FC CAB-SS-449MT
EIA-530	Male DTE	CAB-SS-530MT
EIA-530A	Male DTE	CAB-SS-530AMT

Table 3   Cisco 12-in-1 Smart Serial Interface Cable Part Numbers

Interface	DCE/DTE	Cisco Cable Part Number
V.35	Female DCE Female DTE Male DCE Male DTE	CAB-SS-V35FC CAB-SS-V35FT CAB-SS-V35MC CAB-SS-V35MT
X.21	Female DCE Male DTE	CAB-SS-X21FC CAB-SS-X21MT

Platform Support for Cisco Interface Cards

Table 4 lists the platforms supported by each interface card. The interface cards are grouped by technology area:

- Analog Modem WAN Interface Cards
- Cable Modem High-Speed WAN Interface Cards
- DSL WAN Interface Cards
- Ethernet Switch WAN Interface Cards
- ISDN BRI WAN Interface Cards
- Serial WAN Interface Cards
- T1, E1, and G.703 Multiflex Trunk Voice and WAN Interface Cards
- Voice Interface Cards
- Wireless Interface Cards

Table 4   Platform Support for Cisco Interface Cards

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
Analog Modem WAN Interface Cards			
1-port analog modem WIC	WIC-1AM	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Analog Modem WAN Interface Cards*
2-port analog modem WIC	WIC-2AM	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Analog Modem WAN Interface Cards*

Table 4   *Platform Support for Cisco Interface Cards (continued)*

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
1-port analog modem WIC, version 2	WIC-1AM-V2	Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3700 series Cisco 3800 series	*Analog Modem WAN Interface Cards*
2-port analog modem WIC, version 2	WIC-2AM-V2	Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3700 series Cisco 3800 series	*Analog Modem WAN Interface Cards*
Cable Modem High-Speed WAN Interface Cards			
Cable modem HWIC, United States version	HWIC-CABLE-D-2	Cisco 1800 series (modular) Cisco 2691 Cisco 2800 series Cisco 3700 series Cisco 3800 series	*Cisco Cable Modem High-Speed WAN Interface Cards*
Cable modem HWIC, Europe and Japan version	HWIC-CABLE-E/J-2	Cisco 1800 series (modular) Cisco 2691 Cisco 2800 series Cisco 3700 series Cisco 3800 series	*Cisco Cable Modem High-Speed WAN Interface Cards*
Channel Service Unit/Data Service Unit (CSU/DSU) WAN Interface Cards			
1-port T1/fractional T1 DSU/CSU WIC	WIC-1DSU-T1	Cisco 1600 series Cisco 1721 Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series Cisco ICS 7750	*DSU/CSU WAN Interface Cards*
1-port T1/fractional T1 DSU/CSU WIC, version 2	WIC-1DSU-T1-V2	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series[1] Cisco 2800 series Cisco 3631 routers Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*DSU/CSU WAN Interface Cards*

Table 4　　*Platform Support for Cisco Interface Cards (continued)*

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
1-port 4-wire 56/64 kbps CSU/DSU WIC	WIC-1DSU-56K4	Cisco 1600 series Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*DSU/CSU WAN Interface Cards*
DSL WAN Interface Cards			
1-port ADSL-over-POTS WIC	WIC-1ADSL	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*DSL Interface Cards*
1-port ADSL-over-POTS with dying gasp WIC	WIC-1ADSL-DG	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3700 series Cisco 3800 series	*DSL Interface Cards*
1-port ADSL-over-ISDN with dying gasp WIC	WIC-1ADSL-I-DG	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3700 series Cisco 3800 series	*DSL Interface Cards*
1-port ADSL-over-POTS with dying gasp HWIC	HWIC-1ADSL	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*DSL Interface Cards*
1-port ADSL-over-ISDN with dying gasp HWIC	HWIC-1ADSLI	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*DSL Interface Cards*
1-port ADSL-over-POTS with dying gasp HWIC with backup ISDN port	HWIC-1ADSL-B/ST	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*DSL Interface Cards*

Table 4   *Platform Support for Cisco Interface Cards (continued)*

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
1-port ADSL-over-ISDN with dying gasp HWIC with backup ISDN port	HWIC-1ADSLI-B/ST	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*DSL Interface Cards*
1-port G.SHDSL WIC (two-wire only)	WIC-1SHDSL	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*DSL Interface Cards*
1-port G.SHDSL WIC (two- and four-wire), version 2	WIC-1SHDSL-V2	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 2800 series[2] Cisco 3700 series Cisco 3800 series	*DSL Interface Cards*
1-port G.SHDSL WIC (two- and four-wire), version 3	WIC-1SHDSL-V3	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1841 Cisco 2600XM series Cisco 2691 Cisco 2800 series[2] Cisco 3700 series Cisco 3800 series	*DSL Interface Cards*
2-port G.SHDSL WIC	HWIC-2SHDSL	Cisco 1841 router Cisco 2800 series Cisco 3800 series	*DSL Interface Cards*
4-port G.SHDSL WIC	HWIC-4SHDSL	Cisco 1841 router Cisco 2800 series Cisco 3800 series	*DSL Interface Cards*
Ethernet Switch WAN Interface Cards			
4-port 10/100BASE-T Ethernet switch WIC	WIC-4ESW	Cisco 1721 Cisco 1751 Cisco 1760	*10/100BASE-T Ethernet Switch High-Speed Interface Cards*
4-port 10/100BASE-T Ethernet switch HWIC	HWIC-4ESW	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*10/100BASE-T Ethernet Switch High-Speed Interface Cards*
4-port Ethernet switch HWIC with inline power	HWIC-4ESW-POE	Cisco 2800 series Cisco 3800 series	*10/100BASE-T Ethernet Switch High-Speed Interface Cards*
9-port 10/100BASE-T Ethernet switch HWIC	HWIC-D-9ESW	Cisco 2800 series Cisco 3800 series	*10/100BASE-T Ethernet Switch High-Speed Interface Cards*

Table 4   Platform Support for Cisco Interface Cards (continued)

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
9-port Ethernet switch HWIC with inline power	HWIC-D-9ESW-POE	Cisco 2800 series Cisco 3800 series	*10/100BASE-T Ethernet Switch High-Speed Interface Cards*
1-port Ethernet LAN WIC	WIC-1ENET	Cisco 1721 Cisco 1751 Cisco 1760	*LAN Interface Cards*
1-port Fast Ethernet HWIC	HWIC-1FE	Cisco 1841 router Cisco 2800 series Cisco 3800 series	*Fast Ethernet High-Speed WAN Interface Cards to a Network*
2-port Fast Ethernet HWIC	HWIC-2FE	Cisco 3800 series	*Fast Ethernet High-Speed WAN Interface Cards to a Network*
1-port Gigabit Ethernet HWIC	HWIC-1GE-SFP	Cisco 2800 series[2] Cisco 3800 series	*Gigabit Ethernet High-Speed Interface Cards*
ISDN BRI WAN Interface Cards			
1-port ISDN BRI WIC with integrated NT1—U interface	WIC-1B-U	Cisco 1600 series[3] Cisco 1721 Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series Cisco ICS 7750	*ISDN WAN Interface Cards*
1-port ISDN BRI WIC with integrated NT1—U interface, version 2	WIC-1B-U-V2	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3800 series	*ISDN WAN Interface Cards*
1-port ISDN BRI WIC with S/T interface	WIC-1B-S/T	Cisco 1600 series[3] Cisco 1721 Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series Cisco ICS 7750	*ISDN WAN Interface Cards*
1-port ISDN BRI WIC with S/T interface, version 3	WIC-1B-S/T-V3	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3800 series	*ISDN WAN Interface Cards*

Table 4   *Platform Support for Cisco Interface Cards (continued)*

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
1-port ISDN BRI leased line WIC	WIC-1B-S/T-LL	Cisco 1600 series[4]	*ISDN WAN Interface Cards*
Serial WAN Interface Cards			
1-port serial WIC	WIC-1T	Cisco 1600 series Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Serial Interface Cards*
2-port serial WIC	WIC-2T	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Serial Interface Cards*
2-port asynchronous/ synchronous serial WIC	WIC-2A/S	Cisco 1721 Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750 Cisco MWR 1941-DC	*Serial Interface Cards*
4-port multiprotocol serial HWIC	HWIC-4T	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*Serial Interface Cards*
4-port multiprotocol low speed asynchronous/ synchronous serial HWIC	HWIC-4A/S	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*Serial Interface Cards*
8-port RS-232 asynchronous/ synchronous serial HWIC	HWIC-8A-RS232	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*Serial Interface Cards*
8-port asynchronous serial HWIC	HWIC-8A	Cisco 1800 series (modular) Cisco 2800 series Cisco 3800 series	*Serial Interface Cards*

Table 4   Platform Support for Cisco Interface Cards (continued)

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
16-port asynchronous serial HWIC	HWIC-16A	Cisco 2800 series Cisco 3800 series	*Serial Interface Cards*
T1, E1, and G.703 Multiflex Trunk Voice and WAN Interface Cards			
1-port T1 RJ-48 multiflex trunk VWIC	VWIC-1MFT-T1	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port T1 RJ-48 multiflex trunk VWIC	VWIC-2MFT-T1	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port T1 RJ-48 multiflex trunk VWIC with drop-and-insert capability	VWIC-1MFT-T1-DI	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
1-port E1 RJ-48 multiflex trunk VWIC	VWIC-1MFT-E1	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*

Table 4   *Platform Support for Cisco Interface Cards (continued)*

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
2-port E1 RJ-48 multiflex trunk VWIC	VWIC-2MFT-E1	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
1-port T1/E1 RJ-48 multiflex trunk VWIC with hardware echo cancellation, version 2	VWIC2-1MFT-T1/E1	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
2-port T1/E1 RJ-48 multiflex trunk VWIC with hardware echo cancellation, version 2	VWIC2-2MFT-T1/E1	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
2-port E1 RJ-48 multiflex trunk VWIC with drop-and-insert capability	VWIC-2MFT-E1-DI	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
1-port G.703 RJ-48 multiflex trunk VWIC	VWIC-1MFT-G703	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*

Table 4   Platform Support for Cisco Interface Cards (continued)

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
2-port G.703 RJ-48 multiflex trunk VWIC	VWIC-2MFT-G703	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
1-port G.703 RJ-48 multiflex trunk VWIC with hardware echo cancellation, version 2	VWIC2-1MFT-G703	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
2-port G.703 RJ-48 multiflex trunk VWIC with hardware echo cancellation, version 2	VWIC2-2MFT-G703	Cisco 1721[5] Cisco 1751 Cisco 1760 Cisco 1800 series (modular) Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
2-port T1/fractional T1 multiflex trunk VWIC with drop-and-insert capability and integrated CSU/DSU	VWIC-2MFT-T1-DIR	Cisco MWR 1941-DC	*VWIC-2MFT-T1-DIR, VWIC-2MFT-E1-DIR Installation Instructions*
2-port E1/fractional E1 multiflex trunk VWIC with drop-and-insert capability and integrated DSU	VWIC-2MFT-E1-DIR	Cisco MWR 1941-DC	*VWIC-2MFT-T1-DIR, VWIC-2MFT-E1-DIR Installation Instructions*
2-port T1/E1 radio access network optimization VWIC	VWIC-2T1/E1-RAN	Cisco MWR 1941-DC	*Cisco 2-port T1/E1-RAN Installation Instructions*
Voice Interface Cards			
2-port Direct Inward Dial (DID) VIC	VIC-2DID	Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 2800 series Cisco 3600 series Cisco ICS 7750	*Voice Interface Cards*
1-port digital VIC for Japan	VIC-1J1	Cisco 2800 series[2]	*Voice Interface Cards*

Table 4   Platform Support for Cisco Interface Cards (continued)

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
4-port FXS or DID VIC	VIC-4FXS/DID	Cisco 1751 Cisco 1760 Cisco 2600XM series Cisco 2691 Cisco 2800 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port FXS VIC	VIC-2FXS[6]	Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port FXS VIC, version 2	VIC2-2FXS[6]	Cisco 1751 Cisco 1760 Cisco 2600XM series Cisco 2800 series Cisco 3640 routers Cisco 3660 routers Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
2-port FXO VIC for Europe	VIC-2FXO-EU[6]	Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series	*Voice Interface Cards*
2-port FXO VIC for the United States	VIC-2FXO-M1[6]	Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series Cisco ICS 7750	*Voice Interface Cards*
2-port FXO VIC for Europe	VIC-2FXO-M2[6]	Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series Cisco ICS 7750	*Voice Interface Cards*
2-port FXO VIC for Australia	VIC-2FXO-M3[6]	Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series Cisco ICS 7750	*Voice Interface Cards*

Table 4　　　*Platform Support for Cisco Interface Cards (continued)*

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
2-port FXO VIC	VIC-2FXO[6]	Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port FXO (universal) VIC, version 2	VIC2-2FXO[6]	Cisco 1751 Cisco 1760 Cisco 2600XM series Cisco 2800 series Cisco 3640 routers Cisco 3660 routers Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
4-port FXO VIC for the United States	VIC-4FXO-M1	Cisco ICS 7750	*Voice Interface Cards*
4-port FXO (universal) VIC, version 2	VIC2-4FXO[6]	Cisco 1751 Cisco 1760 Cisco 2600XM series Cisco 2800 series Cisco 3640 routers Cisco 3660 routers Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port E&M VIC	VIC-2E/M[6]	Cisco 1751 Cisco 1760 Cisco 2600 series Cisco 2800 series[2] Cisco 3600 series Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port E&M VIC, version 2	VIC2-2E/M[6]	Cisco 1751 Cisco 1760 Cisco 2600XM series Cisco 2800 series Cisco 3640 routers Cisco 3660 routers Cisco 3700 series Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port ISDN BRI S/T (NT and TE) VIC	VIC-2BRI-NT/TE	Cisco ICS 7750	*Voice Interface Cards*

Table 4   Platform Support for Cisco Interface Cards (continued)

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
2-port ISDN BRI S/T (NT and TE) VIC, version 2	VIC2-2BRI-NT/TE	Cisco 1751 Cisco 1760 Cisco 2600XM series Cisco 2800 series Cisco 3660 routers Cisco 3800 series Cisco ICS 7750	*Voice Interface Cards*
2-port ISDN BRI S/T TE VIC	VIC-2BRI-S/T-TE[6]	Cisco 2600 series Cisco 3600 series Cisco 3700 series	*Voice Interface Cards*
2-port ISDN BRI S/T TE VIC, version 2	VIC2-2BRI-S/T-TE[6]	Cisco 3640 routers Cisco 3660 routers Cisco 3700 series Cisco 3800 series	*Voice Interface Cards*
2-port CAMA VIC	VIC-2CAMA[6]	Cisco 2600 series Cisco 3600 series	*Voice Interface Cards*
Wireless Interface Cards			
Access point HWIC for North America	HWIC-AP-G-A	Cisco 1841 Cisco 2801 Cisco 2811 Cisco 2821 Cisco 2851 Cisco 3825 Cisco 3845	*Access Point High-Speed WAN Interface Cards*
Access point HWIC for Europe	HWIC-AP-G-E	Cisco 1841 Cisco 2801 Cisco 2811 Cisco 2821 Cisco 2851 Cisco 3825 Cisco 3845	*Access Point High-Speed WAN Interface Cards*
Access point HWIC for Japan	HWIC-AP-G-J	Cisco 1841 Cisco 2801 Cisco 2811 Cisco 2821 Cisco 2851 Cisco 3825 Cisco 3845	*Access Point High-Speed WAN Interface Cards*

Table 4   *Platform Support for Cisco Interface Cards (continued)*

Product Description	Cisco Product ID	Supported on Cisco Routers	See Document
GSM 3G Wireless WAN HWIC	HWIC-3G-GSM	Cisco 1841 Cisco 2801 Cisco 2811 Cisco 2821 Cisco 2851 Cisco 3825 Cisco 3845	*3G Wireless WAN Interface Cards to a Network*
CDMA 3G Wireless WAN HWIC	HWIC-3G-CDMA	Cisco 1841 Cisco 2801 Cisco 2811 Cisco 2821 Cisco 2851 Cisco 3825 Cisco 3845	*3G Wireless WAN Interface Cards to a Network*

1. Supported on Cisco 2600XM and Cisco 2691 routers only.
2. Not supported on Cisco 2801 routers.
3. Not supported on Cisco 1603 and Cisco 1604 routers.
4. Supported on Cisco 1603 and Cisco 1604 routers only.
5. Cisco 1721 router supports these cards in data mode only.
6. In Cisco 1751 and Cisco 1760 routers, can be directly installed into a router interface slot. For other routers, cannot be installed directly into Cisco router interface card slots. Install in a voice network module (NM-1V or NM-2V).

Related Documents

Cisco product documentation is available online at www.cisco.com (also known as Cisco.com), and is accessible through multiple navigation paths.

To access the documents and tools described in this section, 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.

Timesaver   To access Cisco product documentation as it appeared on Cisco Connection Online (CCO), click on the Technical Documentation link in the right-hand Quick Links column on the Cisco.com homepage.

To print a document in its original page format, access the online document, and click the PDF icon.

Tip   Some authors provide a full-length "book" PDF, usually located above or below the links to the book chapter files on the main book index page. Use this book-length PDF to generate printed copies of the entire book.

Hardware Documentation

Cisco hardware documentation for Cisco access routers provides the following three categories of information:

- Hardware installation—Basic to advanced hardware installation procedures

- Hardware reference information and specifications—Dimensions, operating environment, cable pinouts

- Regulatory compliance and safety information—Safety warnings translated into multiple languages and statements of compliance with regulatory requirements from various countries around the world

Installation Documents

To find chassis installation instructions for any Cisco router, access the documents located at **Products and Solutions > Routers and Routing Systems >** *Router series you are using* **> Technical Documentation > Installation Guides**.

To find installation instructions for Cisco network modules, access the *Cisco Network Modules Hardware Installation Guide* located at **Products and Solutions > Interfaces and Modules > Network Modules > Technical Documentation > Module Installation Guides**.

To find installation instructions for Cisco interface cards, access the *Cisco Interface Cards Hardware Installation Guide* located at **Products and Solutions > Interfaces and Modules > All Interfaces and Modules > Cisco Interface Cards > Technical Documentation > Module Installation Guides**.

To find installation instructions for Cisco small form-factor pluggable modules (SFPs), access the documents located at **Products and Solutions > Interfaces and Modules > Cisco SFPs > Technical Documentation > Installation Guides**.

To find installation instructions for Cisco coarse wavelength-division multiplexing (CWDM) SFPs, access the documents located at **Products and Solutions > Interfaces and Modules > Cisco CWDM GBIC/SFP > Technical Documentation > Module Installation Guides**.

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Note Installation instructions for the Cisco CWDM Passive Optical System are also located in this index.

Reference Documents

To find cabling specifications for Cisco modular access routers, access the *Cisco Modular Access Router Cable Specifications* located at **Products and Solutions > Routers and Routing Systems > 2600 Series > Technical Documentation > Technical References.**

Regulatory Compliance and Safety Information Documents

To find regulatory compliance and safety information for a Cisco router, access the documents located at **Products and Solutions > Routers and Routing Systems >** *Router series you are using* **> P**roduct **Literature > Regulatory Approvals and Compliance.**

To find regulatory compliance and safety information for Cisco network modules and Cisco interface cards used on Cisco access routers, access the documents located at **Products and Solutions > Interfaces and Modules > Product Literature > Regulatory Approvals and Compliance.**

Cisco IOS Software Documentation

Cisco IOS software documentation provides the following categories of information:

- Software configuration—Basic to advanced software configuration procedures, sample configurations
- Software references—Command references, system message guides
- Software release information—Supported products, caveats
- Software release tools—Cisco Feature Navigator II, Cisco IOS Upgrade Planner, software downloads, security notices and advisories

Cisco IOS Software Configuration Documents

To find initial configuration instructions specific to the Cisco router you are using, access the documents located at **Products and Solutions > Routers >** *Router series you are using* > **Technical Documentation > Configuration Guides.**

To find configuration examples specific to the Cisco router you are using, access the documents located at **Products and Solutions > Routers >** *Router series you are using* > **Technical Documentation > Configuration Examples.**

To find advanced configuration instructions for a specific feature, access the documents located at **Products and Solutions > Cisco IOS Software >** *Cisco IOS release you are using* > **Cisco IOS Software Releases > Technical Documentation > Feature Guides.**

Cisco IOS Software Reference Documents

To find command reference information for the Cisco IOS software release you are using, access the documents located at **Products and Solutions > Cisco IOS Software >** *Cisco IOS release you are using* > **Cisco IOS Software Releases > Technical Documentation > Command References.**

Timesaver You can also use the online Command Lookup tool, located at **Technical Support > Tools & Utilities > Configuration Tools**.

To find system message information for the Cisco IOS software release you are using, access the documents located at **Products and Solutions > Cisco IOS Software >** *Cisco IOS release you are using* > **Cisco IOS Software Releases > Technical Documentation > System Message Guides.**

Cisco IOS Software Release Documents and Tools

To find Cisco IOS software release information for the Cisco IOS software release you are using, access the documents located at **Products and Solutions > Cisco IOS Software >** *Cisco IOS release you are using* > **Cisco IOS Software Releases > Technical Documentation > Release Notes.**

To view Cisco IOS software features by release, or to compare two different Cisco IOS releases, access Cisco Feature Navigator II, located at **Products and Solutions > Cisco IOS Software > General Information.**

To download Cisco IOS software, or to locate license agreements and warranty information for a Cisco IOS software release, access the Software Center, located at **Technical Support > Downloads.**

To plan for a Cisco IOS upgrade, access the Cisco IOS Upgrade Planner, located at **Technical Support > Downloads > Cisco IOS Upgrade Planner.**

To view Cisco IOS security advisories that might apply to your product, access the *Cisco Product Security Advisories and Notices* website located at http://www.cisco.com/en/US/products/products_security_advisories_listing.html.

Timesaver   You can also sign up to receive e-mail alerts using the Product Alert Tool, located at **Technical Support > Tools and Utilities > Configuration Tools >.**

Where to Go Next

For interface card installation information, go to *Installing Cisco Interface Cards in Cisco Access Routers*

For regulatory compliance and safety information, see the *Cisco Network Modules and Interface Cards Regulatory Compliance and Safety Information* document.

For hardware information about specific interface cards, use Table 4 on page 15 to locate the appropriate chapter.

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