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PHONE GUIDE

Cisco Unified IP Phone Expansion Module 7916

INCLUDING LICENSE AND WARRANTY

1 Introducing the Cisco Unified IP Phone Expansion Module 7916

The Cisco Unified IP Phone Expansion Module 7916 attaches to your Cisco Unified IP Phone 7975G, Cisco Unified IP Phone 7962G or Cisco Unified IP Phone 7965G, adding up to 24 extra line appearances or programmable buttons to your phone. Attaching a second Expansion Module to your Cisco Unified IP Phone adds a total of 48 extra line appearances or programmable buttons to your phone. See Figure 1.

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Note If you are running the SCCP protocol, you can configure a maximum of 42 lines on your phone. For example, if you configure two 24-line Cisco Unified IP Phone Expansion Modules on a Cisco Unified IP Phone 7962G or Cisco Unified IP Phone 7965G, you will have a total of 54 lines (48 lines from the modules in addition to the 6 lines on the phone). However, only the first 42 lines will be available for use.

The programmable buttons can be configured as phone line buttons, speed-dial buttons, phone service buttons or phone feature buttons.

Figure 1   *Cisco Unified IP Phone 7975G with Two Expansion Modules*

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Before You Begin

Before you begin installing your Cisco Unified IP Phone Expansion Module 7916, read each of these sections:

Package Contents

Verify that your package contents includes the following items:

- One Cisco Unified IP Phone Expansion Module 7916
- One interface cable

Footstand Kits

In addition to the package contents, you also need a Footstand Kit (separate orderable item). If you are attaching *one* Cisco Unified IP Phone Expansion Module 7916, you need the *single* Footstand Kit. If you are attaching *two* Expansion Module 7916s, you need the *double* Footstand Kit. The Footstand Kit contains:

- One support bar (single with one thumbscrew, or double with two thumbscrews)
- One footstand

Additional Equipment

You also need the following equipment.

- Small flat head screwdriver—for use during the installation
- Power supply unit—depending on how many Expansion Modules you are installing and how your Cisco Unified IP Phone is powered, you will require power supply unit(s) as follows:

Power over the Ethernet to your Cisco Unified IP Phone	With one or two Expansion Modules, you need a power supply unit (separate orderable item).
Power supply to your Cisco Unified IP Phone	With one Expansion Module, you do not need a power supply unit.
	With two Expansion Modules, you need a power supply unit (separate orderable item).

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Note Use of a non-Cisco certified power supply unit might not work and voids the Cisco Unified IP Phone Expansion Module 7916 product warranty.

Safety Information

The following safety warnings are for the Expansion Module 7916. Read these notices before you install or use the Expansion Module 7916. For translated warnings, refer to the *Regulatory Compliance and Safety Information for the Cisco Unified IP Phone 7900 Series*.

Installing and Using Your Expansion Module 7916

Read the following safety notices before installing or using your Expansion Module 7916:

Warning   **IMPORTANT SAFETY INSTRUCTIONS**

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.
SAVE THESE INSTRUCTIONS

Warning   **Read the installation instructions before you connect the system to its power source.**

Warning   **Ultimate disposal of this product should be handled according to all national laws and regulations.**

Warning   **Do not work on the system or connect or disconnect cables during periods of lightning activity.**

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 use RJ-45 connectors. Use caution when connecting cables.**

Using an External Power Supply

Read the following warnings before you use the Cisco certified external power supply with the Expansion Module 7916:

⚠️ **Caution**	Only use the specified Cisco-approved power supply on this product.

⚡ **Warning**	**This product relies on the building's installation for short-circuit (over current) protection. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15A U.S. (240 VAC, 10A international) is used on the phase conductors (all current-carrying conductors).**

⚡ **Warning**	**The device is designed to work with TN power systems.**

⚡ **Warning**	**The plug-socket combination must be accessible at all times because it serves as the main disconnecting device.**

⚡ **Warning**	**The power supply must be placed indoors.**

2 Installing the Cisco Unified IP Phone Expansion Module 7916

✎ **Note**	To ensure a successful installation of the Expansion Module 7916, make sure you have read the entire "Before You Begin" section on page 3.

To install the Cisco Unified IP Phone Expansion Module 7916, perform the following tasks.

1. Remove the Footstand from the Cisco Unified IP Phone.
2. Connect the Support Bar to the Cisco Unified IP Phone.
3. Connect the Expansion Module 7916 to the Support Bar.
4. Connect the Interface Cable.
5. Connect the Power Supply Unit.
6. Connect the Footstand.
7. Connect a Laptop Cable Lock (optional).

Refer to the detailed instructions and corresponding illustrations that follow for each of these high-level tasks.

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Caution   To ensure a successful installation, verify with your system administrator that your phone is ready for the Cisco Unified IP Phone Expansion Module 7916 and that Cisco Unified Communications Manager is installed and configured for the Cisco Unified IP Phone Expansion Module 7916. Make sure that you have all of the parts that you need (see the "Before You Begin" section on page 3).

Remove the Footstand from the Cisco Unified IP Phone

Refer to Figure 2 and the steps that follow.

Figure 2   Removing the Footstand

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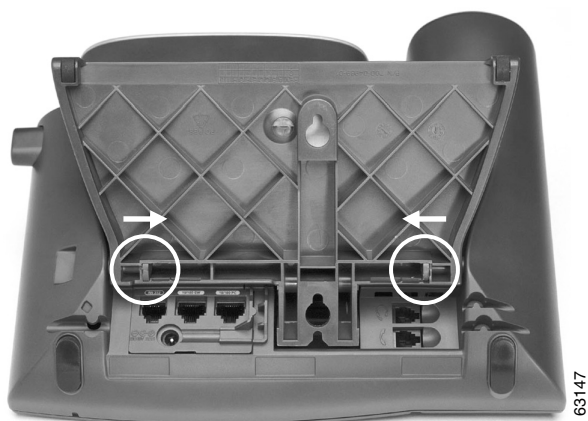
Step 1   Unplug the Cisco Unified IP Phone network and power connections.

Step 2   Unplug the handset, and unplug the headset if one is attached to the phone.

Step 3   Turn the Cisco Unified IP Phone over and lay it on a protected flat surface to prevent it from being scratched.

Step 4   Locate the two foot pins on the footstand.

Step 5   Use a flat head screwdriver to carefully push on one of the foot pins to release it. Then carefully push on the other foot pin to release it.

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>
> **Note**   You may have to lift and hold the Cisco Unified IP Phone to support it when pushing the foot pins. When pushing on the footpins, push away from your body.

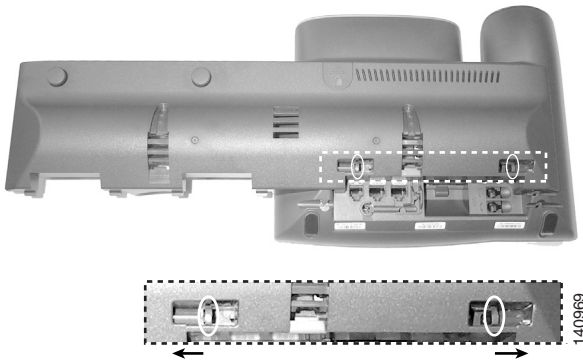**Step 6**   Lift off the footstand and store it separately.

Connect the Support Bar to the Cisco Unified IP Phone

Refer to Figure 3 and the steps that follow.

Figure 3   *Connecting the Support Bar*

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Step 1	Position the support bar on the back of the Cisco Unified IP Phone so that it fits flush with the phone.
Step 2	Locate the two connector pins.
Step 3	Use a flat head screwdriver to carefully push each of the connector pins so that the support bar is firmly fastened to the Cisco Unified IP Phone.

Connect the Expansion Module 7916 to the Support Bar

Refer to Figure 4 and the steps that follow.

***Figure 4   Connecting the Expansion Module to the
               Support Bar***

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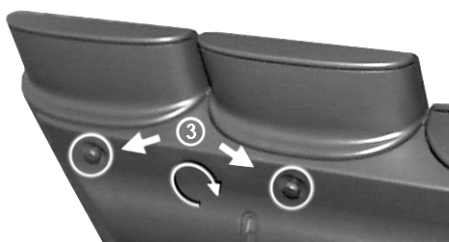
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1	Open slots on the Cisco Unified IP Phone Expansion Module 7916
2	Hooks on the support bar
3	Thumbscrews

Step 1   Position the phone so that the front of the phone is
              facing up.

Step 2   Line up the two open slots on the bottom of the
              Cisco Unified IP Phone Expansion Module 7916 with
              the two hooks on the support bar.

Step 3 Insert the hooks into the slots and then rotate the top of the Cisco Unified IP Phone Expansion Module 7916 into the support bar so that it rests flush with the bar.

Step 4 Tighten the thumbscrew on the back of the Cisco Unified IP Phone Expansion Module 7916.

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> **Note** If you are installing two Expansion Modules, repeat Steps 2, 3, and 4 for the second Expansion Module.

Connect the Interface Cable

Refer to the following table, which depicts the "in" and "out" icons on the AUX jacks, and to Figure 5 and the steps that follow.

Figure 5   "In" and "Out" Icons on the AUX Jacks

In icon	Out icon
⊕−	←⊖

Step 1 Plug one end of the interface cable into the jack labeled AUX on the Cisco Unified IP Phone.

Step 2 Plug the other end of the interface cable into the AUX jack with the "in" icon underneath on the Cisco Unified IP Phone Expansion Module 7916.

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> **Note** If you are installing a *second* Cisco Unified IP Phone Expansion Module 7916, continue with Steps **3** and **4**. Otherwise go to the "Connect the Power Supply Unit" section on page 12.

Step 3 Plug one end of the second interface cable into the AUX jack with the "out" icon underneath on the *first* Expansion Module (the one closest to the phone).

Step 4 Plug the other end of the second interface cable into the AUX jack with the "in" icon underneath on the *second* Expansion Module (the one next to the first Expansion Module).

Connect the Power Supply Unit

Refer to Figure 6 and the steps that follow.

Figure 6   Connecting the Power Supply Unit
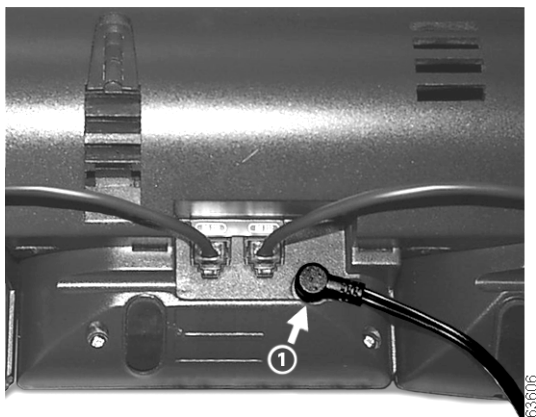
1	Power supply connector on the back of the Expansion Module

Step 1 Depending on how your Cisco Unified IP Phone is powered with one or two Expansion Modules, perform one of the following actions to connect the power supply:

- Your Cisco Unified IP Phone is powered over the Ethernet with one Expansion Module:
    - Connect the power supply unit to the AC adapter port on the Expansion Module and plug the other end into a standard electrical power outlet in the wall.
- If your Cisco Unified IP Phone is powered over the Ethernet with two Expansion Modules:
    - Connect the power supply unit to the AC adapter port on the Expansion Module closest to the Cisco Unified IP Phone and plug the other end into a standard electrical power outlet in the wall.
- If your Cisco Unified IP Phone is powered with a power supply unit with one Expansion Module:
    - Reconnect the original Cisco Unified IP Phone power supply unit to the AC adapter port on the Cisco IP Phone and plug the other end into a standard electrical power outlet in the wall.
- If your Cisco Unified IP Phone is powered with a power supply unit with two Expansion Modules:
    - Connect a second power supply unit to the AC adapter port on the Expansion Module closest to the Cisco Unified IP Phone and plug the other end into a standard electrical power outlet in the wall.

Step 2 Reconnect the Cisco Unified IP Phone handset and network connection.

Connect the Footstand

Step 1 Locate the three hooks on the footstand.

Step 2 Position the hooks so that they align with the open slots on the support bar.

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> **Note** There are four positions in each of the three sets of open slots on the support bar. This lets you choose the angle of the footstand.

Step 3 Insert the footstand hooks into the support bar and push in slightly to make the connection.
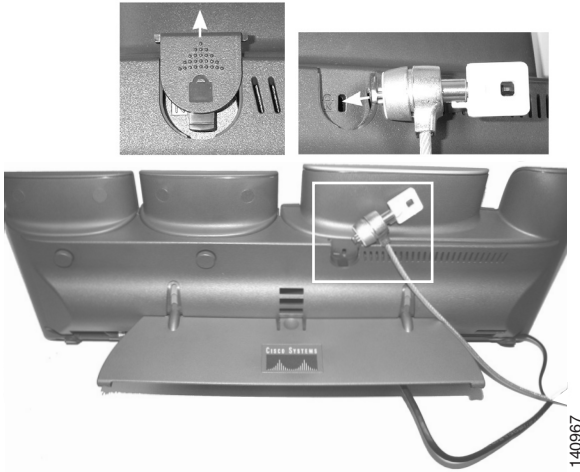
Connect a Laptop Cable Lock (optional)

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> **Note** Supported only on phones that have a security slot on the back of the phone. Contact your system administrator for more information.

Refer to Figure 7 and the steps that follow.

Figure 7   Connecting a Laptop Cable Lock

Step 1	Detach the cable lock door from the support bar.
Step 2	Secure the security cable to a desktop.
Step 3	Insert the laptop cable lock into the security slot on the back of the phone, lock it, and remove the key.

Start Up Sequence

After the Cisco Unified IP Phone Expansion Module 7916 is installed, upon startup the buttons all show a steady amber light. The Cisco logo, load name, segment name, and download percentage are displayed. After the firmware is installed, the LCD screen refreshes and the buttons all go off and any line appearances are displayed in the LCD screen. You can then start using the Expansion Module.

3 Features of the Cisco Unified IP Phone Expansion Module 7916

The Cisco Unified IP Phone Expansion Module 7916 includes the following features.

1	**Phone screen**—Displays the phone number, speed dial number (or name or other text label), phone service, phone feature or Privacy assigned to each button. Icons indicating line status appear similar to, and function the same as, those on the Cisco Unified IP Phone to which it is attached.

2	**Lighted Buttons**—12 buttons. Each button corresponds to one line (just like on the Cisco Unified IP Phone). The lights beneath each button indicate the state of the corresponding line as follows: • Line available: light off • Line in use by you: steady green light • Line in use by someone else: steady red light • Line ringing: flashing amber light • You have a call on hold: flashing green light • Someone else has a call on hold: flashing green light • Call transfer: steady green light
3	**Shift Buttons**—2 buttons. Each button corresponds to one page of 12 line keys. Page one is labeled with the number 1 and page two is labeled with the number 2. The lights beneath each button indicate the state of the page as follows: • Page is active: steady green light • Page is inactive: light off • A call is ringing on an inactive page: flashing amber light

4   Using the Cisco Unified IP Phone Expansion Module 7916

The Expansion Module 7916 functions as a line appearance or programmable button module, allowing you to keep track of calls in progress, calls on hold, and calls requiring transfer, or to access phone services. Most call functions, such as answering a call, placing a call on hold, transferring a call, and so on, are performed from the Cisco Unified IP Phone.

> **Note** If the Expansion Module 7916 buttons are configured as phone features, they can be performed from the Expansion Module.

Refer to the phone guide for your Cisco Unified IP Phone for instructions about using your phone.

The following is a typical scenario when using the Cisco Unified IP Phone and Cisco Unified IP Phone Expansion Module 7916 combination.

You receive a call for your Director at extension 12345. You look at your Cisco Unified IP Phone Expansion Module 7916 and see that your Director has a call in progress with another party and also has another call on hold. Looking down the Cisco Unified IP Phone Expansion Module 7916 screen, you note that another manager in your group has just completed a call and could possibly assist the incoming caller. You consult briefly with the incoming caller and then transfer the call to the manager.

Keeping Your Call Information Private

If Privacy is programmed for one of your buttons, you can keep your call information private from users who share your lines. If you see a button labeled "Privacy," then this feature has been enabled for you by your system administrator. You toggle privacy on and off by pressing the Privacy button when receiving an incoming call. In addition, with Privacy enabled, other shared lines are blocked from joining your calls.

Refer to the phone guide for your Cisco Unified IP Phone for more information.

Configuring the Buttons on Your Cisco Unified IP Phone Expansion Module 7916

Similar to your Cisco Unified IP Phone, you can configure speed dial numbers or program buttons to access phone services on the Cisco Unified IP Phone Expansion Module 7916. Before you can do this, ask your system administrator for the following information to access your Cisco Unified Communications Manager User Options web page:

- The URL
- Your user name and password

After you have this information, you can configure your speed dial numbers or program buttons to access phone services. Phone services can include, for example, weather, stock quotes, or corporate calendars and directories.

Refer to the phone guide for your Cisco Unified IP Phone for more information.

Adjusting the Brightness

Similar to your Cisco Unified IP Phone, you can adjust the brightness on the Cisco Unified IP Phone Expansion Module 7916. Refer to the phone guide for your Cisco Unified IP Phone for more information.

5 Troubleshooting the Cisco Unified IP Phone Expansion Module 7916

The following table might help you if you are having difficulty using your Cisco Unified IP Phone Expansion Module 7916.

Problem	Solution
No display on the Cisco Unified IP Phone Expansion Module 7916.	• Verify that all of the cable connections are correct. • Verify that you have power to the Cisco Unified IP Phone Expansion Module 7916(s).
Buttons on the first Cisco Unified IP Phone Expansion Module 7916 are all amber.	• Verify that the interface cable between your Cisco Unified IP Phone and your Cisco Unified IP Phone Expansion Module 7916 is connected. • Verify with your system administrator that your Cisco Unified IP Phone Expansion Module 7916 is defined in Cisco Unified Communications Manager.

Problem	Solution
Buttons on the second Cisco Unified IP Phone Expansion Module 7916 are all amber.	Verify with your system administrator that your Cisco Unified IP Phone Expansion Module 7916 is defined in Cisco Unified Communications Manager.
Buttons are off, and the Cisco logo is frozen in the display area.	Verify with your system administrator that your Cisco Unified IP Phone Expansion Module 7916 is defined as a Cisco Unified IP Phone Expansion Module 7916 in Cisco Unified Communications Manager.
The page shift button does not display the second page.	Verify with your system administrator that your Cisco Unified IP Phone Expansion Module 7916 is configured as a 24-line module instead of a 12-line module. in Cisco Unified Communications Manager.

If you are experiencing other difficulties, contact your system administrator.

6 Technical Specifications for the Cisco Unified IP Phone Expansion Module 7916

This section provides the physical and operating environment specifications for the Cisco Unified IP Phone Expansion Module 7916, as well as the regulatory compliance information.

Physical and Operating Environment Specifications

Specification	Value or Range
Operating Temperature	32 to 104°F (0 to 40°C)
Operating relative humidity	10 to 95% (noncondensing)
Storage temperature	14 to 140°F (-10 to 60°C)
Height	203 mm, 8.0 in.
Width	121 mm, 4.75 in.
Depth	51 mm, 2.0 in.
Weight	366 g, 0.82 lb.
Power	48 VDC, 40mA max

Cable Specifications

The following are the cable specifications for the cables used with the Cisco Unified IP Phone Expansion Module 7916:

- 2 RJ-11 jacks with 6-pin connectors for the interface cable connections

- 48-V power connector. The diameter of the center pin in the Expansion Module power jack (Switchcraft 712A) is 0.1 in. (2.5 mm). The center pin is positive (+) voltage. The miniature power plug required to mate with the power jack on the Expansion Module is a Switchcraft 760 or equivalent.

7 Where to Find More Information

The following sections provide sources for obtaining additional documentation from Cisco Systems.

Related Documentation

The following documents provide additional information.

- Administration guide for your Cisco Unified IP Phone—Provides instructions for the system administrator about configuring the Cisco Unified IP Phone Expansion Module 7916 in Cisco Unified Communications Manager.

  http://www.cisco.com/en/US/products/hw/phones/ps379/prod_maintenance_guides_list.html

- Phone guide for your Cisco Unified IP Phone—Provides instructions for using the Cisco Unified IP Phone.

  http://www.cisco.com/en/US/products/hw/phones/ps379/products_user_guide_list.html

- Cisco Unified Communications Manager documentation—Provides instructions for using the Cisco Unified Communications Manager Administration application to configure Cisco Unified IP Phones and services.

  http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html

8 Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

9 Cisco One-Year Limited Hardware Warranty Terms

There are special terms applicable to your hardware warranty and various services that you can use during the warranty period. Your formal Warranty Statement, including the warranties and license agreements applicable to Cisco software, is available on Cisco.com. Follow these steps to access and download the *Cisco Information Packet* and your warranty and license agreements from Cisco.com.

1. Launch your browser, and go to this URL:

   http://www.cisco.com/univercd/cc/td/doc/es_inpck/cetrans. htm

   The Warranties and License Agreements page appears.

2. To read the *Cisco Information Packet*, follow these steps:

   a. Click the **Information Packet Number** field, and make sure that the part number 78-5235-03A0 is highlighted.

   b. Select the language in which you would like to read the document.

   c. Click **Go**.

      The Cisco Limited Warranty and Software License page from the Information Packet appears.

   d. Read the document online, or click the **PDF** icon to download and print the document in Adobe Portable Document Format (PDF).

      > ✎
      > **Note** You must have Adobe Acrobat Reader to view and print PDF files. You can download the reader from Adobe's website: http://www.adobe.com

3. To read translated and localized warranty information about your product, follow these steps:

   a. Enter this part number in the Warranty Document Number field:

      78-10747-01C0

b. Select the language in which you would like to view the document.

c. Click **Go**.

The Cisco warranty page appears.

d. Read the document online, or click the **PDF** icon to download and print the document in Adobe Portable Document Format (PDF).

You can also contact the Cisco service and support website for assistance:

http://www.cisco.com/public/Support_root.shtml.

Duration of Hardware Warranty

One (1) Year

Replacement, Repair, or Refund Policy for Hardware

Cisco or its service center will use commercially reasonable efforts to ship a replacement part within ten (10) working days after receipt of a Return Materials Authorization (RMA) request. Actual delivery times can vary, depending on the customer location.

Cisco reserves the right to refund the purchase price as its exclusive warranty remedy.

To Receive a Return Materials Authorization (RMA) Number

Contact the company from whom you purchased the product. If you purchased the product directly from Cisco, contact your Cisco Sales and Service Representative.

Complete the information below, and keep it for reference.

Company product purchased from	
Company telephone number	
Product model number	
Product serial number	
Maintenance contract number	

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