



GETTING STARTED GUIDE



Cisco Unified Communications 500 Series Model UC 520 INCLUDING LICENSE AND WARRANTY

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1 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 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_inpk/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 78-5235-03C0 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).



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>

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

<http://www.cisco.com/en/US/support/index.html>

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	

2 Overview

The UC 520 is an all-in-one, simple, smart, and affordable unified communications solution designed specifically for growing businesses with 8 to 50 employees. Each configuration of the UC 520 is tied to a maximum number of supported users and includes relevant licenses for call control, voice messaging, and Cisco Unified IP Phones.

The UC 520 consists of these two platforms:

- 8- and 16-user platform
- 24-, 32- and 48-user platform

The 8- and 16-user platform includes 8 switched Power-over-Ethernet (PoE) ports, 4 foreign exchange stations (FXS) ports, 4 foreign exchange office (FXO) or 2 ISDN BRI ports for international deployments, voice messaging, automated attendant, a music-on-hold (MoH) audio port, a WAN Ethernet uplink port, an Ethernet expansion port, and a console/aux port.

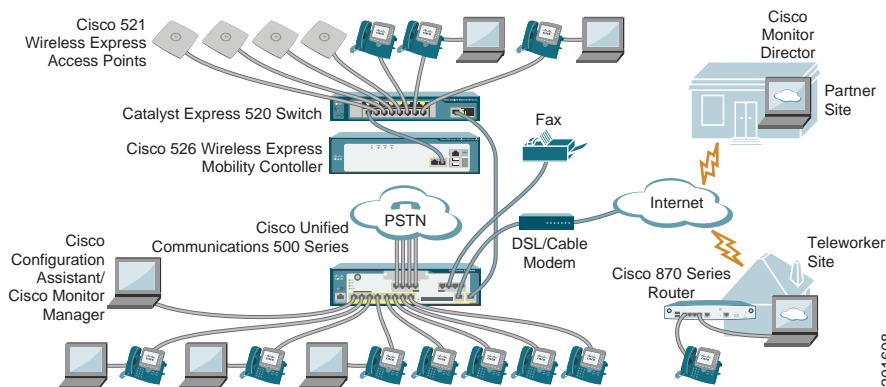
The 24- and 32-user platform includes 8 switched Power-over-Ethernet (PoE) ports, 4 foreign exchange stations (FXS) ports, 8 foreign exchange office (FXO) or 4 ISDN BRI ports.

The 48-user platform includes 8 switched Power-over-Ethernet (PoE) ports, 4 foreign exchange stations (FXS) ports, 12 foreign exchange office (FXO) or 6 ISDN BRI ports. Alternatively, the 48-user platform could include 8 switched Power-over-Ethernet (PoE) ports, 4 foreign exchange stations (FXS) ports, 4 foreign exchange office (FXO) or 2 ISDN BRI ports and one T1/E1 voice controller.

To physically expand the base configuration of 8 PoE ports to a larger number of user densities, the solution supports a Cisco Unified Communications companion switch. The specialized companion switch is part of the Cisco Catalyst Express family and supports simplified and immediately operational deployments.

Figure 1 shows the typical deployment of a Cisco Unified 500 Series in a Cisco Smart Business Communications System. The Cisco Smart Business Communications System is a unified communications solution for small businesses that provides voice, data, video, security, and wireless capabilities while integrating with existing desktop applications like calendar, e-mail, and Customer Relationship Management (CRM).

Figure 1 *Cisco Unified 500 Series: Typical Deployment*



Hardware Configuration


Table 1 summarizes the maximum configurations possible, based on built-in ports and other hardware features of the UC 520.

Table 1 *Maximum Possible Configurations*

UC 520 Series Model	Primary PSTN Enabled via Software Configuration		
	Using FXO	Using SIP Trunk	Using DID
UC520-8U-4FXO-K9 UC520W-8U-4FXO-K9 or UC520-8U-2BRI-K9 UC520W-8U-2BRI-K9	4 FXS, 8 PoE, and 4 FXO or 2 BRI	SIP trunk, 4 FXS, 8 PoE, and 4 FXO or 2 BRI	4 FXS/DID, 4 FXS, 8 PoE, and 4 FXO or 2 BRI
UC520-16U-4FXO-K9 UC520W-16U-4FXO-K9 or UC520-16U-2BRI-K9 UC520W-16U-2BRI-K9	4 FXS, 8 PoE, and 4 FXO or 2 BRI	SIP trunk, 4 FXS, 8 PoE, and 4 FXO or 2 BRI	4 FXS/DID, 4 FXS, 8 PoE, and 4 FXO or 2 BRI
UC520-24U-8FXO-K9 UC520-24U-4BRI-K9	4 FXS, 8 PoE, and 8 FXO or 4 BRI	SIP trunk, 4 FXS, 8 PoE, and 8 FXO or 4 BRI	4 FXS/DID, 8 PoE, and 8 FXO or 4 BRI
UC520-32U-8FXO-K9 UC520W-32U-4BRI-K9	4 FXS, 8 PoE, and 8 FXO or 4 BRI	SIP trunk, 4 FXS, 8 PoE, and 8 FXO or 4 BRI	4 FXS/DID, 8 PoE, and 8 FXO or 4 BRI
UC520-48U-12FXO-K9 UC520-48U-6BRI-K9	4 FXS, 8 PoE, and 12 FXO or 6 BRI	SIP trunk, 4 FXS, 8 PoE, and 12 FXO or 6 BRI	4 FXS/DID, 8 PoE, and 12 FXO or 6 BRI

Table 2 lists the labels and descriptions for the WAN, LAN, and other interfaces, along with the values for these interfaces in the preconfigured software configuration on the UC 520. All slot or ports are numbered from right to left, unless otherwise noted

Table 2 UC 520 Interfaces

Description	Label	Value in Software Configuration
Console/Aux port	CONSOLE	—
Fast Ethernet 10/100 expansion port	EXPANSION	FastEthernet0/1/8
Fast Ethernet 10/100 WAN port	WAN	FastEthernet0/0
Fast Ethernet 10/100 Power over Ethernet (PoE) ports	Power Over Ethernet, and PWR 0 LNK to PWR 7 LNK	FastEthernet0/1/0 to 0/1/7
FXS (Foreign Exchange Station) ports	FXS, and 0–3	port 0/0/0 to 0/0/3
FXO (Foreign Exchange Office) ports	FXO, and 0–3	port 0/1/0 to 0/1/3
ISDN BRI ports	B0 - B1	Numbered top to bottom, port 0/1/0 to 0/1/1
VLAN number for data network	—	Vlan1
VLAN number for voice network	—	Vlan100
Music-on-Hold (MoH) port		voice-port 0/4/0
Compact Flash slot	COMPACT FLASH	flash
(Factory Option) VIC:BRI*	VIC2-2BRI-NT/TE and 0 -1	port 0/2/0 to 0/2/1
(Factory Option) VIC: FXO*	VIC2-2FXO and 0-1 VIC2-4FXO and 0-3	port 0/2/0 to 0/2/1 or port 0/2/0 to 0/2/3
(Factory Option) VIC: FXS*	VIC3-2FXS/DID and 0-1 VIC-4FXS/DID and 0-3 VIC3-4FXS/DID and 0-3	port 0/2/0 to 0/2/1 or port 0/2/0 to 0/2/3
T1/E1	VWIC2-1MFT-T1/E1	port 0/3

* Only one optional VIC can be factory-installed in a UC 520.

Table 3 lists the labels and descriptions for the interfaces on a Cisco Catalyst Express 520, along with the values for these interfaces in the software configuration on the UC 520.

Table 3 Cisco Catalyst Express 520 Switch: Interfaces

Description	Label	Value in Software Configuration
Ethernet 10/100/1000 dual purpose port	1000BASE-X	GigabitEthernet1
Small form-factor pluggable (SFP) module slot for uplink or server connectivity.	1000BASE-FX	
Fast Ethernet 10/100 Power over Ethernet (PoE) ports	Left-to-right, 10BASE-T / 100BASE-TX and 1X-8X or 1X-24X	Left-to-right, FastEthernet1 to 8 FastEthernet1 to 24

Table 4 lists the default values for IP addresses in the preconfigured software configuration for the UC 520.

Table 4 IP Addresses and Subnet Mask

Description	IP Address in Software Configuration
Cisco Unified Communications Manager Express (Cisco Unified CME)	10.1.1.1 255.255.255.0
All IP phones to be connected	10.1.1.11 to 10.1.1.254 255.255.255.0
All data devices to be connected	192.168.10.11 to 192.168.10.254 255.255.255.0
Network on expansion port of the UC 520	192.168.10.1 255.255.255.0

Software Components


The UC 520 is shipped with a factory-installed software configuration for a basic IP telephony system. This system enables phone users to make and receive calls using the preconfigured numbers on their IP phones within minutes after connecting the UC 520 to the Ethernet and their IP phones to the platform. For informations, see the “Default Software Configuration” section on page 42.

Table 5 summarizes the software components of the UC 520.

Table 5 UC 520 Software Components

Software Component	Description	Benefits
Cisco Unified Communications Manager Express (Cisco Unified CME)	Entry-level call processing system that provides a wide range of IP telephony features for small to medium-sized business customers and autonomous small enterprise branch offices.	All files and configurations for IP phones are stored internally on the UC 520 for a cost-effective, highly reliable, IP communications solution.
Cisco Unity Express	Provides voice mail and automated attendant services specifically designed for the small and medium-sized branch office environment.	Users can easily and conveniently manage their voice messages and greetings with intuitive telephone prompts and a straightforward web-based GUI that allows simple administration
Security	Protects against information theft, virus outbreaks, and application abuse, whether from known or unknown threats, internal or external sources.	Integrated for a robust array of security features.
Cisco IOS Firewall	Protects customer networks against network and application layer attacks, viruses, worms, and at the same time providing effective control on various application traffic flowing through the network.	Help businesses guarantee network uptime and security.

Table 5 UC 520 Software Components (continued)

Software Component		Description	Benefits
Cisco Secure VPN		Carries private data over a public network and extends remote access to users over a shared infrastructure.	Most cost-effective method to provide increased VPN throughput with minimal effect on processing.
 Note	Cisco Configuration Assistant	GUI application for managing most systemwide and phone-based features allows you to easily customize the software configuration before or while deploying a PBX or keyssystem telephony system at a customer site.	No specialized training or Cisco IOS software command-line experience required to create or customize software configuration on a Cisco Unified Series.
	Before you can use Configuration Assistant, the application must be installed on a PC or laptop to be connected to the UC 520.		

License Support

Table 6 lists the maximum number of phones and devices supported in Cisco Unified CME, based on licensing and organized by model.

Table 6 *Cisco Unified CME License Support*

UC 520 Models	Cisco Unified CME Licenses	Maximum Devices (Wired and Wireless)
UC520-8U-4FXO-K9 UC520W-8U-4FXO-K9 UC520-8U-2BRI-K9 UC520W-8U-2BRI-K9	8 + 2 for teleworkers	10 IP phones 4 analog ¹
UC520-16U-4FXO-K9 UC520W-16U-4FXO-K9 UC520-16U-2BRI-K9 UC520W-16U-2BRI-K9	16 + 2 for teleworkers	18 IP phones 4 analog ¹
UC520-24U-8FXO-K9 UC520-24U-4BRI-K9	24+4 for teleworkers	28 IP phones
UC520-32U-8FXO-K9 UC520-32U-4BRI-K9	32+4 for teleworkers	36 IP phones 4 analog ¹
UC520-48U-12FXO-K9 UC520-48U-6BRI-K9 UC520-48U-T/E/F-K9 UC520-48U-T/E/B-K9	48+4 for teleworkers	52 IP phones 4 analog ¹

¹ Number of analog station ports is increased to eight with factory-installed optional VIC.

Table 7 lists the maximum numbers of mailboxes supported on the UC 520, based on licensing and organized by model.

Table 7 Cisco Unity Express License Support

UC 520 Models	Mailboxes	General Delivery Mailboxes (GDMs)
UC520-8U-4FXO-K9 UC520W-8U-4FXO-K9 UC520-8U-2BRI-K9 UC520W-8U-2BRI-K9	12 + 2 for teleworkers	5 GDM
UC520-16U-4FXO-K9 UC520W-16U-4FXO-K9 UC520-16U-2BRI-K9 UC520W-16U-2BRI-K9	20 + 2 for teleworkers	5 GDM
UC520-24U-8FXO-K9 UC520-24U-4BRI-K9	24+4 for teleworkers	10 GDM
UC520-32U-8FXO-K9 UC520-32U-4BRI-K9	32+4 for teleworkers	10 GDM
UC520-48U-12FXO-K9 UC520-48U-6BRI-K9 UC520-48U-T/E/F-K9 UC520-48U-T/E/B-K9	48+4 for teleworkers	15 GDM

3 Equipment

This section contains information about the UC 520 hardware and includes these topics:

- [Contents](#)
- [Items Not Included](#)
- [Front Panel View](#)
- [Cisco Product Identification Tool](#)

Contents

These items ship with the product:

- Accessory kit containing:
 - Rubber feet for desktop installation
 - RJ-45 to RJ-45 Ethernet cable
 - Light blue RJ-45-to-DB9 console cable
 - Wall-mount bracket for power supply (included with 8- and 16-user models only)
 - Rack-mount brackets for chassis (included with 32- and 48-user models only)
 - *Getting Started Guide for Cisco Unified Communications 500 Series Model UC 520 for Small Business* (this guide)
 - *Cisco Smart Business Communications System Setup*
 - *Customer License Letter*
 - *Regulatory Compliance and Safety Information Roadmap*
 - *Cisco Smart Business Communications System Software and Documentation* CD-ROM

A separate rack-mount kit (Part Number: 53-2993-01) can be ordered for the 8- and 16-user models.

The kit includes the following:

- Power supply bracket
- Rack-mount brackets for chassis
- Assembly hardware (screws)
- *Installing Components for Cisco Unified Communications 500 Series for Small Business*

Items Not Included

These additional items might be required:

- Cisco Unified IP phones
- Cables for connecting phones
- Cable for connecting external audio device to the 3.5 mm MoH port
- Cables for WAN interfaces, voice interfaces, or additional LAN interfaces
- PC with Microsoft Internet Explorer 6.0 or later, for using web-based system management tools

Front Panel View

See [Figure 2](#) and [Figure 4](#) for views of the front panels of the UC 520 8- and 16-user models and [Figure 3](#) and [Figure 5](#) for the 24-, 32- and 48-user models.

Figure 2 UC 520 with FXO Ports (8- and 16-user model)

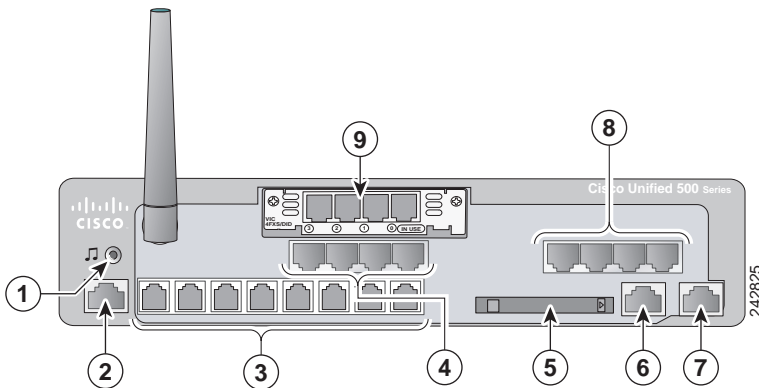
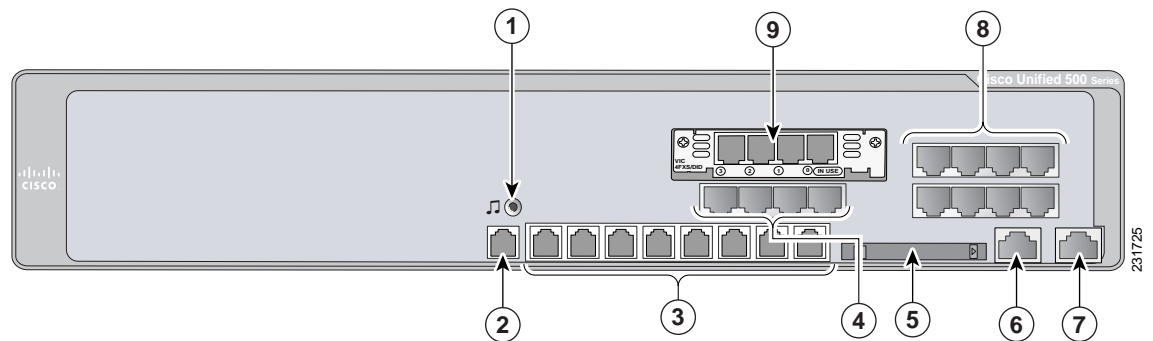


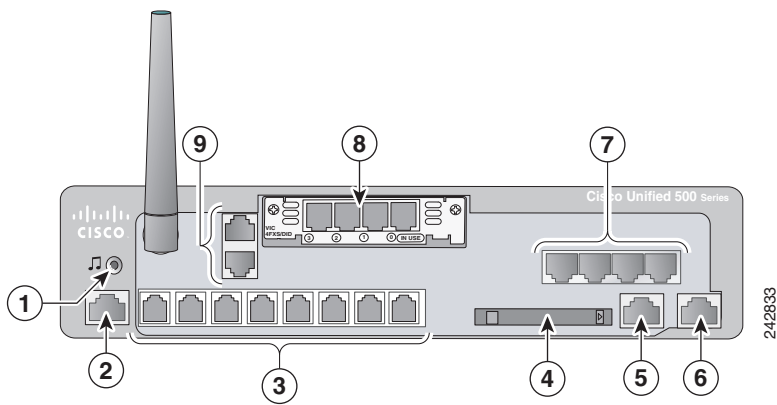
Figure 3 UC 520 with FXO Ports (24-, 32-, and 48-user model)



1	Music-on-hold (MoH) port	6	WAN port
2	Console/Aux port	7	Expansion port

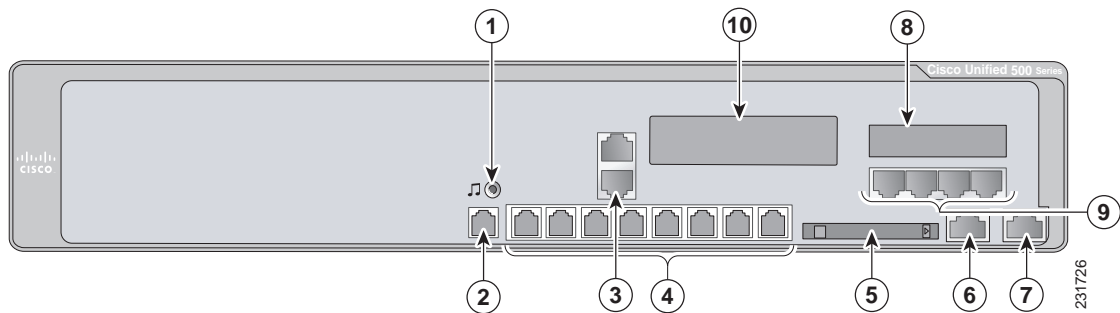
3	Power over Ethernet (PoE) ports	8	FXS ports
4	FXO ports	9	(Optional) Factory-installed VIC or T1/E1 VWIC
5	Compact Flash slot		

Figure 4 UC 520 with BRI Ports (8- and 16-user model)



1	Music-on-hold (MoH) port	6	Expansion port
2	Console/Aux port	7	FXS ports
3	Power over Ethernet (PoE) ports	8	(Optional) One factory-installed VIC or T1/E1 VWIC
4	Compact flash slot	9	BRI ports
5	WAN port		

Figure 5 UC 520 with BRI Ports (24-, 32-, and 48-user model)



1	Music-on-hold (MoH) port	6	WAN port
2	Console/Aux port	7	Expansion port
3	BRI ports	8	Fixed configuration slot for BRI or FXO (depending on your configuration)
4	Power over Ethernet (PoE) ports	9	FXS ports
5	Compact flash slot	10	Expansion or fixed configuration slot (depending on your configuration)

Cisco Product Identification Tool

The Cisco Product Identification tool provides detailed illustrations and descriptions showing where to find serial number labels on Cisco products. It includes the following features:

- A search option that allows browsing for models using a tree-structured product hierarchy
- A search field on the final results page making it easier to look up multiple products
- Clear identification of end-of-sale products in results lists

The tool streamlines the process of locating serial number labels and identifying products. Serial number information expedites the entitlement process and is important for access to support services.

Access the Cisco Product Identification tool at <http://tools.cisco.com/Support/CPI/index.do>.

4 Installing the Chassis and Power Supply

This section contains basic installation information including the following:

- [Safety Information](#)
- [Warning Definitions](#)
- [Installation Guidelines](#)
- [Desktop Installation](#)
- [Wall-Mounting \(8- and 16-user models only\)](#)
- [Rack-Mounting](#)

Safety Information

The *Regulatory Compliance and Safety Information* document for Cisco Unified 500 Series contains translations of the warnings that appear in this guide.

For safety information you must know before working on the UC 520, see the *Regulatory Compliance and Safety Information* document at Cisco.com.

Warning Definitions



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 statement to locate its translation in the translated safety warnings that accompanied this device.

Note: Save these instructions.

Note: This documentation is to be used in conjunction with the specific product installation guide that shipped with the product. Please refer to the Installation Guide, Configuration Guide, or other enclosed additional documentation for further details. Statement 1071



Warning

High leakage current – permanent earth connection essential before making Telecommunication Network Connection. Statement 343



Warning

Do not work on the system or connect or disconnect cables during periods of lightning activity. Statement 1001



Warning

Read the installation instructions before connecting the system to the power source. Statement 1004



Warning

The plug-socket combination must be accessible at all times, because it serves as the main disconnecting device. Statement 1019



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



Warning

Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and back covers are in place. Statement 1029



Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. Statement 1030



Warning

Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface. Statement 1037



Warning

Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning. Statement 1038



Warning

Ultimate disposal of this product should be handled according to all national laws and regulations. Statement 1040



Warning

This equipment must be installed and maintained by service personnel as defined by AS/NZS 3260. Incorrectly connecting this equipment to a general-purpose outlet could be hazardous. The telecommunications lines must be disconnected 1) before unplugging the main power connector or 2) while the housing is open, or both. Statement 1043



Warning

To prevent the system from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of 40 deg. Statement 1047



Warning

Voltages that present a shock hazard may exist on Power over Ethernet (PoE) circuits if interconnections are made using uninsulated exposed metal contacts, conductors, or terminals. Avoid using such interconnection methods, unless the exposed metal parts are located within a restricted access location and users and service people who are authorized within the restricted access location are made aware of the hazard. A restricted access area can be accessed only through the use of a special tool, lock and key or other means of security. Statement 1072



Warning

No user-serviceable parts inside. Do not open. Statement 1073

The following statement is applicable only in Scandinavian countries.



Warning

This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security. Statement 1017

Installation Guidelines

Before you install the UC 520, review the *Regulatory Compliance and Safety Information for Cisco Unified Communications 500 Series for Small Business* document on Cisco.com.

This platform is a self-contained unit. Do not remove or install any modules or interface cards unless otherwise directed.

When selecting an installation site, observe these guidelines:

- Cabling is away from sources of electrical noise, such as radios, power lines, and fluorescent lighting fixtures.
- Clearance to the front and back panels is such that:
 - Airflow around the platform and through the vents is unrestricted.
 - Front-panel LEDs can be easily read.
 - Access to ports is sufficient for unrestricted cabling.
- Temperature does not exceed 104°F (40°C), humidity does not exceed 85 percent, and altitude at the installation site is not greater than 10,000 feet (3049 meters).

Desktop Installation

When installing the unit and power supply on a desktop, observe the following precautions:



Caution

When installing the unit, allow unrestricted airflow for cooling. For placing the platform on a desktop, keep at least 1 in. (2.54 cm) of clear space beside the cooling inlet and exhaust vents.



Caution

Do not place any items that weigh more than 10 lb (4.5 kg) on top of the chassis and do not stack.

To install a chassis on a desktop, table, or other flat surface, place the unit upside-down on a flat surface. Attach the four rubber pads to the recessed areas on the bottom of the unit. Place the unit on a desktop.

Wall-Mounting (8- and 16-user models only)

You can mount the unit and power supply to a wall or other vertical surface.



Warning

This unit is intended to be mounted on a wall. Please read the wall mounting instructions carefully before beginning installation. Failure to use the correct hardware or to follow the correct procedures could result in a hazardous situation to people and damage to the system. Statement 248

Attaching the Chassis and Power Supply to the Wall

The unit has two keyholes on the bottom of the chassis for mounting the unit on a wall or other vertical surface. The power supply is mounted to the wall using the wall-mount bracket. To mount the chassis and power supply on a wall, perform the following steps.

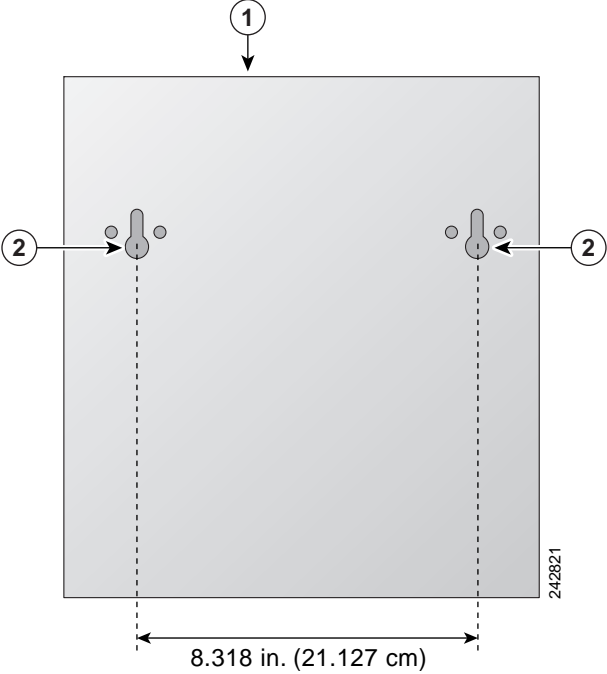


Tip

When choosing a location for wall-mounting the router, consider cable limitations and wall structure.

Step 1 [Figure 6](#) shows the bottom of the unit and the locations of the wall-mount holes.

Figure 6 *Wall-Mount Holes on the Bottom of the UC 520*

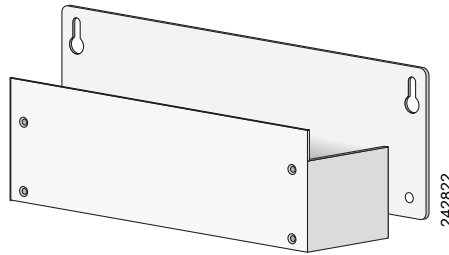


1	Front panel	2	Mounting-screw holes
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- Step 2** Align the mounting-screw holes with a wall stud, or use wall anchors.
- a. For attaching to a wall stud, use two #10 wood screws (round- or pan-head) with #10 washers, or two #10 washer-head screws. The screws must be long enough to penetrate at least 3/4 inch (20 mm) into supporting wood or into a metal wall stud.
 - b. For hollow-wall mounting, wall must be at least 1/2 inch (12.7 mm) thick. Use two wall anchors with washers. Wall anchors and washers must be a size suitable for the wall to which they are mounted.
- Step 3** Position the chassis on the wall.
- a. Orient the front and back of the chassis vertically.
 - b. The unit must be oriented with the front panel (TNV connection side) facing up and the connection to the power cord facing down.

Step 4 **Figure 7** shows the wall-mount bracket for the power supply and the mounting-screw holes on the back of the bracket. Align the mounting-screw holes with a wall stud, or use wall anchors.

Figure 7 *Wall-Mount Bracket for Power Supply*



- a. For attaching to a wall stud, use two #10 wood screws (round- or pan-head) with #10 washers, or two #10 washer-head screws. The screws must be long enough to penetrate at least 3/4 inch (20 mm) into supporting wood or into a metal wall stud.
- b. For hollow-wall mounting, wall must be at least 1/2 inch (12.7 mm) thick. Use two wall anchors with washers. Wall anchors and washers must be a size suitable for the wall to which they are mounted.

Step 5 Position the power supply in the bracket.

- a. Orient the front and back of the power supply vertically.
- b. Position the end nearest the power cable at the top.

Rack-Mounting



Note

You can only install the unit installed 19-inch racks. It can only be front mounted.

Attach Brackets for Rack-Mounting

To attach the brackets to the unit, follow these following steps.

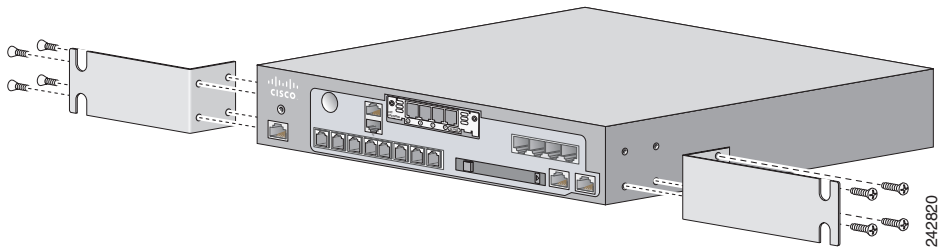


Caution

Do not overtorque the screws. The recommended torque is 6 to 8 in-lb (0.7 to 0.9 N-m).

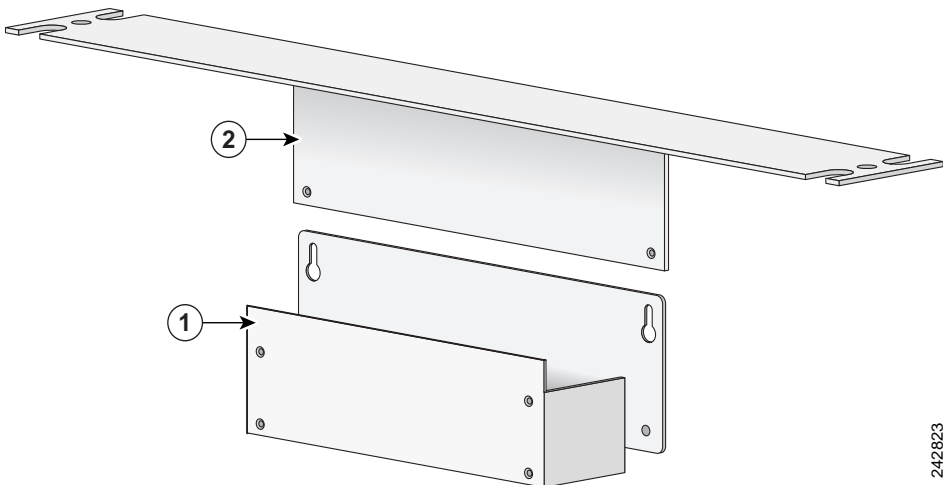
Step 1 Attach the mounting brackets to the sides of the chassis as shown in [Figure 8](#), using the screws provided. Use four screws on each side. Use a number 2 Phillips screwdriver to install the bracket screws.

Figure 8 Attaching Rack-Mount Brackets to the UC 520



Step 2 [Figure 9](#) shows the brackets in the rack-mount kit for the power supply. (This step applies to the 8- and 16-user models only.)

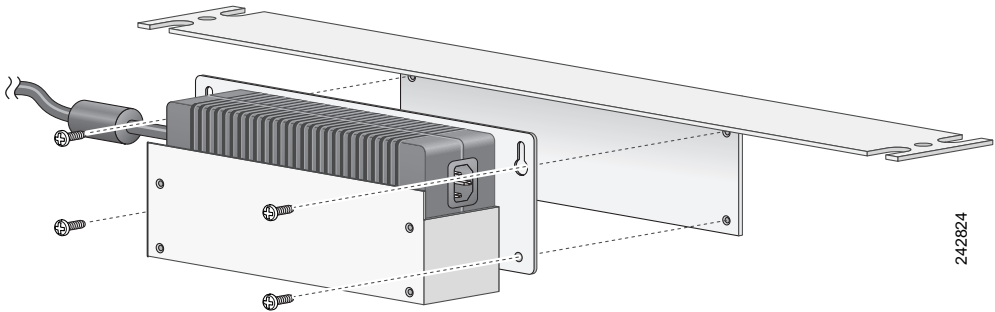
Figure 9 Brackets for Rack-Mounting Power Supply



1	Wall-mount bracket	2	Rack-mount bracket
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- Step 3** Position the power supply in the wall-mount bracket. (This step applies only to the 8- and 16-user models.)
- Orient the front and back of the power supply vertically.
 - Position the end nearest the power cable at the top.
- Step 4** Assemble the brackets for rack-mounting the power supply as shown in [Figure 10](#), using the four screws provided. Use a number 2 Phillips screwdriver to install the bracket screws.

Figure 10 Assembling Rack-Mount Kit for the Power Supply



Installing the UC 520 and Power Supply in a Rack

To mount the chassis and power supply in a 19-inch rack, follow these steps:



Warning

To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:

- This unit should be mounted at the bottom of the rack if it is the only unit in the rack.
- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
- If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack. Statement 1006



Caution

Chassis installation must allow unrestricted airflow for chassis cooling.

**Note**

Be sure to leave space above and below each unit in a rack to allow for cooling air circulation.

**Tip**

If you are deploying a single integrated wireless access point, connect the antenna to the front panel before you mount the unit on a wall. It is difficult to attach an antenna after the platform is mounted to a wall.

-
- Step 1** Use two screws for each side (supplied with the rack) to attach the unit to the rack-mount brackets, then attach power supply with rack-mount bracket to a 19" rack.
- Step 2** Start the lower pair of screws first, resting the brackets on the lower screws while you insert the upper pair of screws.
-

**Tip**

The screw slots in the brackets are spaced to line up with every second pair of screw holes in the rack. When the correct screw holes are used, the small threaded holes in the brackets line up with unused screw holes in the rack. If the small holes do not line up with the rack holes, you must raise or lower the brackets to the next rack hole.

5 Grounding the Chassis

**Warning**

This equipment must be grounded. Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available. Statement 1024

You must connect the chassis to a reliable earth ground; the ground wire must be installed in accordance with local electrical safety standards.

- For NEC-compliant grounding, use size 14 AWG (2 mm) or larger copper wire and an appropriate user-supplied ring terminal with an inner diameter of 1/4 inch (5 to 7 mm).

**Note**

The UC 520 is not NEBS-compliant.



Warning

This equipment needs to be grounded. Use a green and yellow 14 AWG ground wire to connect the host to earth ground during normal use. Statement 190

To connect the chassis to a reliable earth ground, perform the following steps.

- Step 1** Strip one end of the ground wire to the length required for the ground lug or terminal.
 - For the ground lug, approximately 0.75 in. (20 mm)
 - For user-provided ring terminal, as required
- Step 2** Crimp the ground wire to the ground lug or ring terminal, using a crimp tool of the appropriate size.
- Step 3** Attach the ground lug or ring terminal to the chassis as shown in [Figure 11](#) and [Figure 12](#). Tighten the screws to a torque of 8-10 in-lb (0.9-1.1 N-m).

Figure 11 Attaching the Ground to Chassis (8- and 16-User Model)

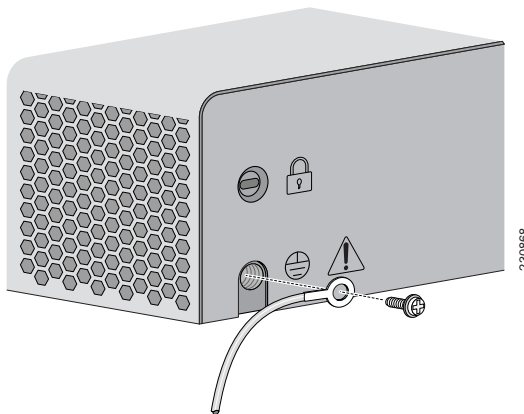
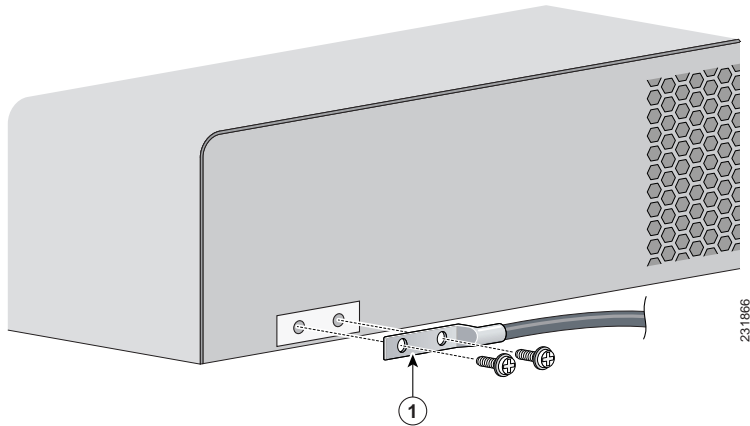


Figure 12 *Attaching the Ground to Chassis (24-, 32-, and 48-User Model)*



1	Grounding lug
---	---------------

Step 4 Connect the other end of the ground wire to a known reliable earth ground point. If there is any doubt as to the reliability of the ground point, contact a licensed electrician for assistance.

6 Connecting the Power


Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. Statement 1030


Warning

The ISDN connection is regarded as a source of voltage that should be inaccessible to user contact. Do not attempt to tamper with or open any public telephone operator (PTO)-provided equipment or connection hardware. Any hardwired connection (other than by a nonremovable, connect-one-time-only plug) must be made only by PTO staff or suitably trained engineers. Statement 23



Warning

Do not work on the system or connect or disconnect cables during periods of lightning activity. Statement 1001

To connect the power supply to the UC 520, follow these steps:

Step 1 Connect the AC power cord to the the power supply.

Step 2 Connect the power interface cable to the power connector port on the back of the unit.

7 Powering Up the System

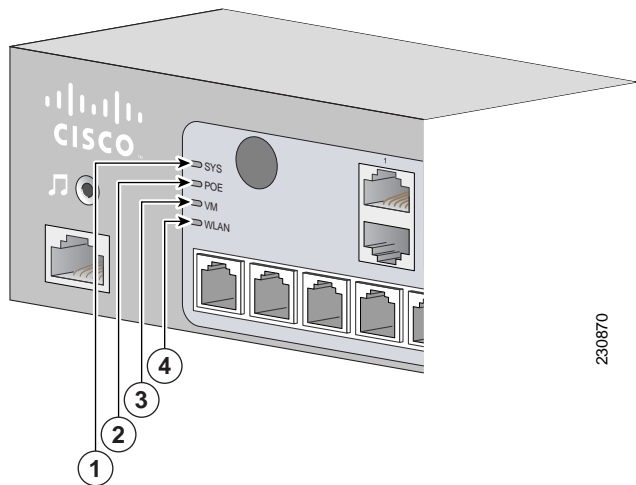
To power up the UC 520, follow these steps:

Step 1 Verify that the AC power cord is connected to the power supply.

Step 2 There is no external Power On/Off switch on the power supply. To power up the power supply and the UC 520, connect the power cord plug to a grounded AC outlet.

Step 3 Verify the LED indicators on the front panel of the unit. See [Figure 13](#).

Figure 13 UC 520 LEDs



1	SYS	Solid green	Online
2	POE	Solid green	Connected
3	VM	Solid green	Online
4	WLAN	Blinking green	Connected

8 Creating the Initial Software Configuration

To use the Cisco Configuration Assistant to create and save the initial software configuration, follow these steps:

Step 1 If necessary, install Configuration Assistant on a PC to be used to manage the configuration of the UC 520. For information, see the *Getting Started with Cisco Configuration Assistant* document at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with your product.

- Step 2** Launch Configuration Assistant. For information, see the *Getting Started with Cisco Configuration Assistant* document at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with your product.
- Step 3** Using an RJ-45-to-RJ-45 Ethernet cable, connect the Ethernet port of the PC on which the Cisco Configuration Assistant is installed to a PoE port on the front panel of the UC 520.
- Step 4** Use the Configuration Assistant to perform the following tasks. For more information, see online help.
- Connect to a New Community.
 - Accept the default values to create the initial configuration.



Note If you are installing a single-site key system configuration, change the Voice System Type setting from PBX to Key System Configuration.

- Save the configuration.

- Step 5** Confirm that the UC 520 appears in the Topology View.
-

What to Do Next

These tasks can be performed in any order:

- To install a Cisco Catalyst Express 520 switch, see the “[Installing a Cisco Catalyst Express 520 for a UC 520](#)” section on page 32.
- To connect the UC 520 to a WAN, PSTN, or ISDN or to connect devices such as wireless access options, phones, and PCs, see the “[Connecting the Interfaces and Devices](#)” section on page 39.
- To add and configure locales and languages other than US English on the UC 520 and for voice mail prompts, see the “[Configuring Localization](#)” section on page 46.
- To modify the software configuration to personalize the UC 520 with site-specific values for basic and advanced telephony features, see the “[Modifying the Software Configuration](#)” section on page 42

9 Installing a Cisco Catalyst Express 520 for a UC 520

Before you install the switch, review the information in the *Release Notes for the Catalyst Express 520 Switches* on Cisco.com.

Before you power on or install the switch, review the safety information in the “[Warning Definitions](#)” section on page 32 and the “[Installation Guidelines](#)” section on page 36.

The warnings in this chapter are translated into different languages in the *Regulatory Compliance and Safety Information for the Catalyst Express 520 Switches* document on Cisco.com.

This section contains basic installation information including the following:

- [Warning Definitions](#)
- [Installation Guidelines](#)
- [Desktop Installation](#)
- [Connecting the Switch to the UC 520](#)
- [Adding a Switch to a Community](#)

Warning Definitions

These warnings are translated into different languages in the *Regulatory Compliance and Safety Information for the Catalyst Express 520 Switches* document that ships with the switch. Review these warnings before you power on or install the switch.



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 statement to locate its translation in the translated safety warnings that accompanied this device.

Note: Save these instructions.

Note: This documentation is to be used in conjunction with the specific product installation guide that shipped with the product. Please refer to the Installation Guide, Configuration Guide, or other enclosed additional documentation for further details. Statement 1071



Warning

This equipment is intended to be grounded. Ensure that the host is connected to earth ground during normal use. Statement 39



Warning

To prevent the switch from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of 113°F (45°C). To prevent airflow restriction, allow at least 3 inches (7.6 cm) of clearance around the ventilation openings. Statement 17B



Warning

Before working on equipment that is connected to power lines, remove jewelry (including rings, necklaces, and watches). Metal objects will heat up when connected to power and ground and can cause serious burns or weld the metal object to the terminals. Statement 43



Warning

Do not stack the chassis on any other equipment. If the chassis falls, it can cause severe bodily injury and equipment damage. Statement 48



Warning

Ethernet cables must be shielded when used in a central office environment.
Statement 171



Warning

Do not work on the system or connect or disconnect cables during periods of lightning activity. Statement 1001



Warning

Read the installation instructions before connecting the system to the power source. Statement 1004



Warning

Class 1 laser product. Statement 1008



Warning

The plug-socket combination must be accessible at all times, because it serves as the main disconnecting device. Statement 1019



Warning

This equipment must be grounded. Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available. Statement 1024



Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment. Statement 1030



Warning

Ultimate disposal of this product should be handled according to all national laws and regulations. Statement 1040



Warning

For connections outside the building where the equipment is installed, the following ports must be connected through an approved network termination unit with integral circuit protection: 10/100/1000 Ethernet. Statement 1044



Warning

When installing or replacing the unit, the ground connection must always be made first and disconnected last. Statement 1046



Warning

Voltages that present a shock hazard may exist on Power over Ethernet (PoE) circuits if interconnections are made using uninsulated exposed metal contacts, conductors, or terminals. Avoid using such interconnection methods, unless the exposed metal parts are located within a restricted access location and users and service people who are authorized within the restricted access location are made aware of the hazard. A restricted access area can be accessed only through the use of a special tool, lock and key or other means of security. Statement 1072



Warning

No user-serviceable parts inside. Do not open. Statement 1073



Warning

Installation of the equipment must comply with local and national electrical codes. Statement 1074

The following statement is applicable only in Scandinavian countries.



Warning

This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security. Statement 1017

Installation Guidelines

When deciding where to place the Cisco Catalyst Express 520 switch, observe these requirements:

- Altitude at the installation site is not greater than 10,000 feet (3,049 meters).
- Humidity around the switch does not exceed 85 percent.
- Temperature around the unit does not exceed 113°F (45°C).



Note

If the switch is installed in a closed environment or in a multirack assembly, the temperature around it might be greater than normal room temperature.

- The heat sinks and the bottom of the Cisco Catalyst Express 520 switch might be hot to the touch if the switch is operating at its maximum temperature 113°F (45°C) and is in an environment that exceeds normal room temperature (such as a closet, a cabinet, or a closed or multirack assembly).
- Do not place any items on the top of the switch.
- Airflow around the switch and through the vents is unrestricted.



Note

We strongly recommend that you allow at least 3 in. (7.6 cm) of clearance around the ventilation openings to prevent airflow restriction and overheating.

- Do not stack switches or place switches side-by-side unless they are separated on all sides by at least 3 inches (7.6 cm) of clearance from each other.
- Clearance at front and back panels is such that
 - Airflow around the switch and through the vents is unrestricted.
 - Front-panel LEDs can be easily read.

- Access to ports is sufficient for unrestricted cabling.
- AC power cord can reach from the AC power outlet to the connector on the switch back panel.
- Cabling is away from sources of electrical noise, such as radios, power lines, and fluorescent lighting fixtures.
- Cabling is safely away from other devices that might damage the cables.

Desktop Installation

When installing a Cisco Catalyst Express 520 on a desktop, table, or shelf, observe the following precautions:



Warning

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



Caution

To prevent damage to the chassis, never attempt to lift or tilt the chassis by the plastic panel on the front. Always hold the chassis by the metal body.



Caution

Your installation must allow unrestricted airflow for cooling. For placing the unit on a desktop, keep at least 1 inch (2.54 cm) of clear space beside the cooling inlet and exhaust vents.



Caution

Do not place any items that weigh more than 10 lb (4.5 kg) on top of the switch.

To install the switch on a desktop, table, or shelf, perform the following steps:

-
- Step 1** Locate the adhesive strip with the rubber feet in the accessory kit.
- Step 2** Place the unit upside-down on a flat surface. Attach the four rubber pads to the recessed areas on the bottom of the unit. Turn the unit right-side up and place the unit on a flat surface near an AC power source.

We strongly recommend that you attach the rubber feet to help prevent airflow restriction and overheating.

- Step 3** There is no external power On/Off switch on this switch. To power on the switch, connect one end of the AC power cord that ships with the switch to the AC power connector on the switch, and connect the other end of the power cord to a grounded AC power outlet.
- Step 4** When the switch powers on, it automatically begins the POST, a series of tests that verifies that the switch functions properly. If the SYSTEM LED does not blink green and then turn to solid green, or if it turns amber, contact your Cisco representative or reseller.
- Step 5** After the Cisco Catalyst Express 520 switch successfully completes POST, disconnect the power cord from the AC outlet and connect the switch to the UC 520.
-

For detailed instructions on using the Cisco Catalyst Express 520 switch, see the *User Guide for the Catalyst Express 520 Switches* at:

http://www.cisco.com/en/US/products/ps7238/tsd_products_support_series_home.html

Connecting the Switch to the UC 520

To connect the switch to a UC 520, follow these steps:

-
- Step 1** Connect one end of a straight-through, twisted four-pair Category 5 cable with RJ-45 connectors to the 1000BASE-FX port on the front panel of the UC 520.
- Step 2** Connect the other end of the cable to the Expansion port on the front panel of the UC 520.
- Step 3** Connect the power cord for the switch to a grounded AC power outlet. When the switch powers on, it automatically begins the POST, a series of tests that verifies that the switch functions properly. Wait until the 1000BASE-X port on the switch is solid green. The solid green port LED indicates a successful connection between the two devices. If the LED is not solid green:
- Make sure that the cable is not faulty. If it is, replace it with a tested good cable.
 - Make sure the UC 520 is powered up.
-

Adding a Switch to a Community

In order to alter the initial configuration of the switch, you must add the switch to a community in Cisco Configuration Assistant. To add the switch to the community for the UC 520, follow these steps:

Prerequisites

- Pentium III-based IBM PC or compatible computer with 512 MB DRAM (1 GB DRAM recommended), minimum screen resolution of 1024x768, and Windows XP (Service Pack 1 or later) or Windows 2000 (Service Pack 3 or later) installed.

-
- Step 1** If necessary, install Configuration Assistant on a PC you will use to manage the configuration of the UC 520. For installation information, see the *Getting Started with Cisco Configuration Assistant* document at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with the product.
- Step 2** If necessary, use an RJ45-to-RJ45 Ethernet cable to connect the Ethernet port of the PC on which the Configuration Assistant is installed to a PoE port on the front panel of the UC 520 to which this switch is connected.
- Step 3** Launch Configuration Assistant. For information, see the *Getting Started with Cisco Configuration Assistant* document at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with the product.
- Step 4** Use Configuration Assistant to perform the following tasks. For information, see online help.
- a. Verify that the switch you just installed appears on the Topology View page.
 - b. Add the Cisco Catalyst Express 520 switch to the Community for the UC 520. For more information, see the online help.
-

10 Connecting the Interfaces and Devices

This section contains the following topics:

- [Connect the Interfaces, page 40](#)
- [Connect the Devices, page 40](#)



Note These steps are typically performed while deploying the UC 520 at your customer's site.

Connect the Interfaces

To connect a UC 520 to a WAN, PSTN, and ISDN, perform these steps in any order:

-
- Step 1** For connecting to a cable or DSL modem: Connect an RJ-45 cable to the WLAN port on the front panel of the UC 520. Connect the other end of the cable to the cable or DSL modem.
 - Step 2** For connecting to an ISDN line: Connect an RJ-45 cable to one of the BRI or T1/E1 PRI ports on the front panel of the UC 520 and connect the other end of the cable to a PC or hub or to a ISDN wall jack.
 - Step 3** For connecting to a PSTN: Connect an RJ-11 cable to one of the FXO ports on the front panel of the UC 520 and connect the other end of the cable to a PSTN line or a station interface on a PBX.
-

Connect the Devices

To connect wireless access points, Cisco Unified IP phones, and other devices to a UC 520 or a Cisco Catalyst Express 520 switch, follow these steps in any order:

-
- Step 1** Install and connect Cisco Unified IP phones to the PoE ports on the front panel of the UC 520 and if installed, to PoE ports on front of the switch.



Note

The PoE ports on the UC 520 provide up to 15.4 W of power to connected Cisco prestandard and IEEE 802.3af-compliant powered devices, with a maximum of 80W total on the eight PoE ports.

The PoE ports on the Catalyst Express 520 provide up to 15.4 W of power to connected Cisco prestandard and IEEE 802.3af-compliant powered devices if the switch detects that there is no power on the circuit. On a per-port basis, you can control whether the PoE port automatically provides power when a powered device is connected by using the Configuration Assistant. By default, the setting is Auto.

The back panel of the Cisco Unified IP phone might have more than one RJ-45 connector. Use the LAN-to-phone connector to connect the phone to the UC 520. See the *Unified IP Phones 7900 Series Install and Upgrade Guide* for your IP phone at http://www.cisco.com/en/US/products/hw/phones/ps379/prod_installation_guides_list.html.

- Step 2** For connecting to a fax: Connect an RJ-11 cable to one of the FXS ports on the front panel of the UC 520. Connect the other end of the cable to a fax unit.

- Step 3** For analog lines only: Connect an RJ-11 cable to one of the FXS ports on the front panel of the UC 520. Connect the other end of the cable to an analog telephone service device such as a keyset or PBX.
- Step 4** Wireless access to the system can be provided as follows:
- a. (Requires factory-installed wireless option on the UC 520) To deploy a single integrated wireless access point, connect the antenna to the wireless port on the front panel of the UC 520.
 - b. To deploy up to three wireless access points in standalone mode, connect each Cisco AP521 to an available PoE port on the front panel of the switch.
 - c. To deploy advanced wireless options such as the Cisco Mobility Express Solution in Controller Mode, use the Cisco Configuration Assistant to configure the wireless controller. Then connect the wireless controller to an available PoE port on the front panel of the switch. For installation information, see the following URL:
http://www.cisco.com/en/US/products/ps7320/tsd_products_support_series_home.html.
- Step 5** Use Configuration Assistant to perform the following tasks. For more information, see online help.
- a. Verify that the Topology View page includes the newly-installed hardware device.
 - b. Configure the options in the Secure Wireless window in Configuration Assistant as required.
 - c. Configure and assign user accounts to connected Cisco Unified IP phones in Configuration Assistant as required.
-

11 Verifying the Communications

To verify communications, follow these steps”

-
- Step 1** Test the local phone operation. Make calls between phones that are connected to the UC 520.
- Step 2** Test the Internet links by accessing <http://www.cisco.com> from a PC that is connected to the UC 520.
- Step 3** Test the PSTN by placing a call from a Cisco Unified IP phone that is connected to the UC 520 to a number in the local calling area.
- Step 4** Test the PSTN by using a cell phone to place a call to a Cisco Unified IP phone.
- Step 5** Test the AA and voice mail by using a cell phone to place a call to an unattended Cisco Unified IP phone.
- a. Listen for the AA greeting.
 - b. Press the extension number for the target phone and listen for the voice-mail greeting.

- c. Leave a test message.
- d. Go to the phone that you called. Verify that the [Message] indicator is lit.
- e. Press the [Message] button on a phone and retrieve the voice-mail message.

Step 6 If appropriate, repeat the previous steps using devices connected to the Cisco Catalyst Express 520.

12 Modifying the Software Configuration

This section contains the following topics:

- [Information About the Software Configuration](#)
- [Default Software Configuration](#)
- [System Management Tools](#)
- [Localization Support](#)
- [Configuring Localization](#)
- [Installing Cisco Configuration Assistant](#)
- [Logging Into Cisco Unified CME and Cisco Unity Express GUI](#)
- [Logging Into Cisco Unified CME Phone User Page](#)

Information About the Software Configuration

This section contains the following topics:

- [Default Software Configuration](#)
- [System Management Tools](#)
- [Localization Support](#)

Default Software Configuration

The default software configuration on the UC 520 includes these preconfigured parameters:

- Network and device parameters
- Internet connection (DHCP)
- Voice system features
- Firewall and NAT

Table 8 lists the default values for the extension numbers.

Table 8 ***Extension Numbers in Default Configuration***

Description	Default Value in Software Configuration
Length of directory numbers	3
Pool of extension numbers to be created for analog ports (FXS)	301 to 304
First number in pool of extension numbers to be created. Starting with this directory number, remaining numbers are automatically configured in a contiguous manner.	201

Before deploying the system at the customer site, use the Cisco Configuration Assistant to create and save the initial configuration by accepting the default values. To stage a single-site key system configuration, change the Voice System Type setting from PBX (default) to Key System Configuration.

After deploying the system, use the Configuration Assistant to personalize the initial software configuration, as required:

- Change the default username and password for all devices.
- Change the default hostname for each device.
- Set the system time zone and time display for the UC 520.
- Designate the system message which appears on Cisco Unified IP phone screens. For example, change the system message to the customer business name.
- Set the number of digits for each Cisco phone extension.
- Configure Cisco phone features and intercom.
- Configure extensions or build a comma-separated values (.csv) file with names and extension numbers to import into the Configuration Assistant.
- Configure network settings for voice.

For more information about Configuration Assistant, see the online help.

System Management Tools

Table 9 lists the tools that you can use to modify the software configuration on a UC 520 before or while deploying the system or for performing routine, ongoing system maintenance.

Table 9 **System Management Tools**

Management Tool	Description	Related Information/Tasks/Procedures
Cisco Configuration Assistant, page 44	Primary configuration application for installing and managing the UC 520. Allows for administration of voice, networking, and security features.	See the <i>Getting Started with Cisco Configuration Assistant</i> at http://www.cisco.com/go/configassist or on the CD-ROM that shipped with the product. For information about using this tool, see online help.
GUI for Cisco Unified CME and Cisco Unity Express, page 45	Web-based application customer administrators to make routine additions and changes associated with employee turnover, such as adding or changing phones and voice mailboxes and managing automated attendant scripts.	Logging Into Cisco Unified CME and Cisco Unity Express GUI, page 49 For information about using this tool, see online help.
Cisco Unified CME Phone User Page, page 45	Web-based application for phone users to program a small set of features on their phones.	Logging Into Cisco Unified CME Phone User Page, page 49 For information about using this tool, see online help.

Cisco Configuration Assistant

The Cisco Configuration Assistant is installed on a PC or laptop that is connected to the Cisco Unified Series by direct connection to a PoE port on the front panel of the platform, by connection to the LAN, or via VPN client.

Use the Configuration Assistant when staging a UC 520 to create and save the initial software configuration or to customize the software configuration for deploying these configurations at a customer site:

- Single-site key system—Change the Voice System Type setting from PBX (default) to Key System Configuration.
- Internet Service Provider requires a WAN configuration other than DHCP—Change the Internet Connection settings.

- SIP trunk—Change the Internet Connection settings. All required information to be entered is provided by the SIP Trunk Service Provider.
- Single integrated access point and multi-site wireless support—Configure Secure Wireless settings.

The Cisco Configuration Assistant can be used to personalize software configuration with site-specific values for the following parameters before or while deploying the system at your customer's site:

- Basic network configuration including NTP configuration, Trivial File Transfer Protocol (TFTP), and DHCP options
- Basic telephony features including user names, extension numbers, IP phone types and MAC addresses, PSTN parameters, basic voicemail, and dial peers for 911 and 9+ calls
- Advanced telephony features including paging, intercom, call park, hunt group, and calling line identification (caller ID) blocking

Before you can use the Configuration Assistant, the application must be installed on a PC or laptop to be connected to the UC 520. For more information, see the *Getting Started with Cisco Configuration Assistant* at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with the product.

Cisco Unified CME Phone User Page

The Cisco Unified CME phone user page enables phone users to program a small set of features on their own phones, such as changing speed dial buttons, and to search the Cisco Unified CME directory. Each user must have a unique user name and password that is created by the office administrator.

For information about launching the Cisco Unified CME phone user page, see the “[Logging Into Cisco Unified CME Phone User Page](#)” section on page 49.

GUI for Cisco Unified CME and Cisco Unity Express

The Cisco Unified CME and Cisco Unity Express web-based GUI application enables office administrators to add and change phones, phone user accounts, and voicemail boxes, and to manage automatic attendant (AA) scripts.

For information about logging into this application, see the “[Logging Into Cisco Unified CME and Cisco Unity Express GUI](#)” section on page 49.

Localization Support

A brand new, out-of-the-box, UC 520 is preloaded at the factory with U.S. English. Cisco Unified CME provides internal localization support for different languages and countries. User locales specify the language to use for text displays; network locales specify country-specific tones and cadences. Cisco Unity Express supports other languages for voice-mail prompts.



Note Certain versions of voice mail can support only one language on the system at a time.

For a list of restrictions and supported languages, see the appropriate Cisco Unified Series Matrix at http://www.cisco.com/en/US/products/ps7293/prod_installation_guides_list.html.

Before customizing the software configuration for localization, locale files for Cisco Unified CME and a language pack for Cisco Unity Express must be downloaded from Cisco.com. For information about downloading localization files from Cisco.com, see the [Configuring Localization, page 46](#).

Configuring Localization

This section contains the following tasks:

- [Download Locale Files for Cisco Unified CME from Cisco.com](#)
- [Downloading Language for Voice-Mail Prompts from Cisco.com](#)

Download Locale Files for Cisco Unified CME from Cisco.com

Before using the Cisco Configuration Assistant to configure localization support for Cisco Unified CME on a UC 520, you must download user and network-locale files from Cisco.com.



Note For a list of supported languages, see the appropriate Cisco Unified 500 Series Matrix at http://www.cisco.com/en/US/products/ps7293/prod_installation_guides_list.html.

Prerequisites

- The Cisco Configuration Assistant must be installed on a PC or laptop to be connected to the UC 520. For information, see the *Getting Started with Cisco Configuration Assistant* at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with the product.

-
- Step 1** Go to the Download Software site at <http://www.cisco.com/cgi-bin/tablebuild.pl/CME-Locale>. You must have an account on Cisco.com to access the Software Center. 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.
- Step 2** Select the TAR file for the locale you want to install. Each TAR file contains locale files for a specific language and country and uses the following naming convention:
- CME-locale-*language_country*-CMEversion

For example, CME-locale-de_DE-4.0.1-1.0 is German for Germany for Cisco Unified CME 4.0(1).

- Step 3** Download the TAR file to the PC on which Configuration Assistant is installed. Each file contains all the firmware required for all phone types supported by that version of Cisco Unified CME.
 - Step 4** Copy the files to the \Program Files\Cisco Configuration Assistant\appdata\phoneload folder on the PC or laptop on which Configuration Assistant is installed.
 - Step 5** Launch Configuration Assistant. For information, see the *Getting Started with Cisco Configuration Assistant* document at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with the product.
 - Step 6** Using a RJ-45 to RJ-45 Ethernet cable, connect the Ethernet port of the PC on which the Cisco Configuration Assistant is installed to a PoE port on the front panel of the unit.
 - Step 7** Use Configuration Assistant to upload files from the PC to flash memory of the UC 520 and to configure localization support for Cisco Unified CME. For information, see online help.
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Downloading Language for Voice-Mail Prompts from Cisco.com

Before using the Cisco Configuration Assistant to configure localization support for Cisco Unity Express on a UC 520, you must download a language pack from Cisco.com.

Prerequisites

- Cisco Configuration Assistant must be installed on a PC or laptop to be connected to the UC 520. For information, see the *Getting Started with Cisco Configuration Assistant* at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with the product.
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- Step 1** Go to the Download Software site at http://www.cisco.com/en/US/products/ps7293/tsd_products_support_series_home.html. You must have an account on Cisco.com to access the Software Center. 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.
- Step 2** Select the language that you want to install. Each language pack contains files for a specific language and country and uses the following naming convention:
`cue-vm-language_country-lang-pack.version.prt1`
For example, cue-vm-de_DE-lang-pack.2.3.2.prt1 is German for Germany for Cisco Unity Express 2.3.2.

- Step 3** Download the language pack to the \Program Files\Cisco Configuration Assistant\appdata\phoneload folder on the PC or laptop on which the Cisco Configuration Assistant is installed. Each pack contains all language data and prompt files associated with the associated version of Cisco Unity Express with Voice Mail feature application.
- Step 4** Launch Configuration Assistant. For information, see the *Getting Started with Cisco Configuration Assistant* document at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with product.
- Step 5** Using a RJ-45 to RJ-45 Ethernet cable, connect the Ethernet port of the PC on which the Cisco Configuration Assistant is installed to a PoE port on the front panel of the unit.
- Step 6** Use Configuration Assistant to configure a voice mail language. For information, see online help.
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Installing Cisco Configuration Assistant

To install Cisco Configuration Assistant on a PC to be used to customize the software configuration on a UC 520, follow these tasks:

Prerequisites

- Pentium III-based IBM PC or compatible computer with 512 MB DRAM (1 GB DRAM recommended) on which to install the Configuration Assistant is connected to the UC 520 over the LAN or is connected to a PoE port on front of the unit. Additional PC-related requirements include:
 - Minimum screen resolution of 1024 x 768.
 - Windows XP (Service Pack 1 or later) or Windows 2000 (Service Pack 3 or later).
 - You must be a member of Administrators group under User Account settings for this PC.
- To download this application from Cisco.com, you must be able to access Cisco.com and you must have a valid Cisco.com account. You can also install this application from the CD-ROM that shipped with the product.



Note To install Configuration Assistant on a PC, see the *Getting Started with Cisco Configuration Assistant* document at <http://www.cisco.com/go/configassist> or on the CD-ROM that shipped with the product.

Logging Into Cisco Unified CME and Cisco Unity Express GUI

To log into this tool as an Administrator for adding or changing phones or voice mailboxes, creating individual phone user accounts, and managing AA scripts, follow these steps.

Prerequisites

- PC running Microsoft Windows Microsoft Internet Explorer 6.0 or a later version.
- The Ethernet port of the PC is connected to a PoE port on the front panel of the UC 520 or the Cisco Catalyst Express 520 switch, or to the switch port on the back of a Cisco Unified IP phone that is connected to a PoE port on the platform or switch and is active, using an RJ-45 to RJ-45 Ethernet cable.

Step 1 To log into Cisco Unified CME, enter the following URL in the browser window, where *ipaddr* is the IP address of your UC 520. Default IP address: 10.1.1.1.

`http://ipaddr/ccme.html`

To access CUE, enter the following URL in the browser window, where *ipaddr* is the IP address of CUE. Default IP address is: 10.1.10.1

`http://ipaddr`

Step 2 When the Authentication window appears, enter the Administrator username and password. Default Administrator username: cisco. Default Administrator password: cisco. The home window appears. For information, see online help.

Logging Into Cisco Unified CME Phone User Page

To log into the phone user page for configuring certain features on your own IP phone, such as speed dial and call forward, perform the following steps.

Prerequisites

- You have a PC running Microsoft Windows with Microsoft Internet Explorer 6.0 or a later version.
- The Ethernet port of the PC is connected to a PoE port on the front panel of the UC 520 or the Cisco Catalyst Express 520 switch, or to the switch port on the back of a Cisco Unified IP phone that is connected to a PoE port on the platform or switch and is active, using an RJ-45 to RJ-45 Ethernet cable.

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- Step 1** Enter the following URL in the browser window, where *ipaddr* is the IP address of your UC 520. The default IP address is: 10.1.1.1.
- `http://ipaddr/ccme.html`
- Step 2** When the login screen appears, enter your username and password. User names and passwords for individual phone users are defined by the office administrator using the Cisco Unified CME and Cisco Unity Express GUI. The home window appears. For information, see online help.
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13 Related Documentation

This section provides additional information the UC 520.

Documentation	Document Title
Cisco Smart Business Communications System	<i>Cisco Smart Business Communications System Setup</i> shipped with product or on CD-ROM shipped with product Product information on Cisco.com at http://www.cisco.com/go/sbcs .
Cisco Configuration Assistant	<i>Getting Started with Cisco Configuration Assistant</i> at http://www.cisco.com/go/configassist or on CD-ROM shipped with product
Cisco Catalyst Express 520 switch	<i>Getting Started Guide for Cisco Catalyst Express 520</i> shipped with product or on CD-ROM shipped with product. <i>User Guide for Cisco Catalyst Express 520</i> at http://www.cisco.com/univercd/cc/td/doc/product/lan/catex520/index.htm or on CD-ROM shipped with product. <i>Release Notes for Cisco Catalyst Express 520</i> at http://www.cisco.com/univercd/cc/td/doc/product/lan/catex520/index.htm or on CD-ROM shipped with product.

Documentation	Document Title
Cisco Unity Express administrative and user documentation	<p>Cisco Unified Communications 500 Series for Small Business supports Cisco Unity Express Version 2.3.4 and higher releases.</p> <p><i>Cisco Unity Express Documentation, By Version</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/unity_exp/roadmap/cuedocs.html</p>
User documentation for Cisco Unified IP Phones	<p>Quick Reference Cards and User Guides at http://www.cisco.com/en/US/docs/voice_ip_comm/cucme/ip_phones/roadmap/cucme_phone_roadmap.html</p>



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