Cisco IP Phone 8800 Key Expansion Module

Quickly adapt to market changes. Increase productivity. Improve competitive advantage through speed and innovation. And deliver a rich-media experience across any workspace securely and with the best possible quality. Cisco® Unified Communications Solutions enable the collaboration that makes this possible (Figure 1).

Figure 1.   Cisco IP Phone 8800 Key Expansion Module

Product Overview

Call coverage is critical for administrative assistants and others who must monitor and manage the status of calls. It requires the ability to instantly determine the status of numerous lines beyond those of the Cisco IP Phone 8851, 8861, and 8865 models.

Note: The Cisco IP Phone 8851 models include the standard 8851 model and the 8851NR model, which is the nonradio 8851 model designed for military and other customers who need a key expansion module (KEM) but cannot place phones with Bluetooth or other radios on their premises. All attributes of the 8851 and 8851NR are identical except that the 8851 has no Bluetooth radio on its board.

The Cisco IP Phone 8800 Key Expansion Module extends the capabilities of Cisco IP Phone 8851, 8861, and 8865 models with additional buttons and a color LCD display. This key expansion module adds 18 physical keys with access to 18 additional keys, using the page keys, for a total of 36 additional keys. You can connect up to three 8800 KEMs to the IP Phone 8861 and 8865, and up to two 8800 KEMs to the IP Phone 8851.

The 8800 KEM comes with a foot stand and all necessary hardware to connect it directly to the base device in the traditional side-by-side fashion.

Features and Benefits

The large LCD display of the Cisco IP Phone 8800 Key Expansion Module allows for quick and easy identification of associated buttons. Using the settings menu of the IP Phone 8851, 8861, and 8865 models, you can adjust the brightness of the individual KEM LCD according to your preference.

The primary function of the 8800 KEM is to provide additional keys for directory numbers, speed dial, or programmable feature keys to the IP Phone 8851, 8861, and 8865 models. These keys are illuminated, and when configured as directory numbers or shared-line keys they allow for easy identification of line status. The 8800 KEM is an ideal call-coverage tool. It provides features that are similar, but not intended to be directly comparable to those of traditional direct station selection/busy lamp field (DSS/BLF) modules; therefore, it is neither an operator nor an attendant console.

The two illuminated page buttons below the Cisco IP Phone 8800 KEM display allow you to shift between the first and second page of 18 buttons, providing access to all 36 keys.

Table 1 describes the features and benefits in more detail.

Table 1.   Features and Benefits

Feature	Benefits
Illuminated Buttons	
Off (dark)	Line available
Green, steady	Line in use
Red, steady	Line in use by shared line
Amber, flashing	Line ringing
Illuminated Page Buttons	
Off (dark)	Page not in focus
Green, steady	Page in focus
Amber, flashing	Page not in focus, with one or more alerting or on-hold calls present on page
Hardware and Power-Saving Features	
Graphical display	The 4.3-inch graphical (TFT) color display provides 16-bit color depth and 480 x 272 effective pixel resolution, with backlight. The display also supports localization requiring double-byte Unicode encoding for fonts.
Articulation	You can articulate the display to match the same angle as the Cisco IP Phone 8851, 8861, and 8865 that it is connected to.
Directory-number and feature buttons	The module has 18 physical buttons (36 using page keys).
Page buttons	Use the two page buttons to access each page of 18 buttons and provide phone status.
Sleep or inactivity mode	When Cisco IP Phone 8851, 8861, and 8865 models are in power-saving sleep or inactivity mode, the Cisco IP Phone 8800 KEM is also in sleep or inactivity mode. Pressing any button on the key expansion module causes the display to awaken. The system administrator configures the inactivity period.

Product Specifications

Table 2 describes the hardware product specifications of the Cisco IP Phone 8800 Key Expansion Module.

Table 2.   Product Specifications

Feature	Specifications
Physical dimensions (H x W x D)	9.02 x 5.15 x 1.58 in. (229.14 x 130.78 x 40.2 mm)
Weight	1.08 lb (489g)
Power	48 VDC, 117 mA maximum
Operating temperature	32 to 104°F (0 to 40°C)
Relative humidity	10 to 95%
Storage temperature	12 to 140°F (-10 to 60°C)
Approvals and compliance	http://www.cisco.com/en/US/docs/voice_ip_comm/cuipph/all_models/regulatory_compliance/english/install/guide/iphrcsi3.html

System Requirements

Table 3 lists the system requirements for the 8800 KEM.

Table 3.   System Requirements

Phone Firmware/Call Control Server	Release
Cisco IP Phone 8800 firmware	10.2(2) and later
Call-control compatibility	Cisco Unified Communications Manager Version 8.5(1) and later; and Cisco Unified Survivable Remote Site Telephony (SRST) 8.0 (with Cisco IOS® Software Release 15.1(1)T) and later

Power Requirements

The Cisco IP Phone 8800 Key Expansion Module doesn't have its own local power supply; it gets power from the attached phones. For more power-supply details, please refer to Table 4.

Table 4.   Power-Supply Compatibility Table

Configuration	802.3af Power over Ethernet (PoE)	802.3at PoE	Cisco IP Phone Power Cube 4
8851 + KEM x 1	Yes	Yes	Yes
8851 + KEM x 2	No	No, (Exception - See Note Below)[***]	Yes
8861 + KEM x 1	No	Yes	Yes
8861 + KEM x 2	No	Yes[*]	Yes
8861 + KEM x 3	No	Yes[*]	Yes
8865 + KEM x 1	No	Yes	Yes
8865 + KEM x 2	No	Yes[**]	Yes
8865 + KEM x 3	No	Yes[**]	Yes

[*] **Note:** The fast-charging feature on the back USB does not work when **more than one** KEM is attached to a Cisco IP Phone 8861 using 802.3at PoE.

[**] **Note:** The fast-charging feature on the back USB doesn't work when **more than one** KEM is attached to a Cisco IP Phone 8861 unless Cisco Universal PoE (UPoE) is used.

[***] **Note**: 8851 with KEM x 2 will work on 802.3at PoE only with v08 or later hardware. You can find the phone version information on the lower back of the phone located within the TAN and PID label. Version information is also located on the individual phone packaging.

Ordering Information

To place an order, visit the Cisco Ordering Home Page and refer to Tables 5 and 6.

Table 5.   Ordering Information

Product Name	Part Number
Cisco IP Phone 8800 Key Expansion Module	CP-BEKEM=
Cisco Unified IP Phone Power Cube 4	CP-PWR-CUBE-4=
Cisco Unified IP Phone Power Country Cord	CP-PWR-CORD-xx=
Cisco IP Phone 8800 Wall Mount Kit for Single KEM[*]	CP-8800-BEKEM-WMK=

[*] **Note:** The Cisco IP Phone Wall-Mount Kit for a single KEM is a nonlocking wall-mount kit that supports the 8851 and 8861 audio phones only. This wall-mount kit does not support the 8865 video phone and a KEM because of the difference in the rear housing on the 8865.

Table 6.   Ordering Information - AC Country Power Cords

Country Cord	Part Number
Asia Pacific	CP-PWR-CORD-AP=
Argentina	CP-PWR-CORD-AR=
Australia	CP-PWR-CORD-AU=
European Community	CP-PWR-CORD-CE=
China	CP-PWR-CORD-CN=
Japan	CP-PWR-CORD-JP=
North America	CP-PWR-CORD-NA=
Switzerland	CP-PWR-CORD-SW=
United Kingdom	CP-PWR-CORD-UK=

Warranty

Cisco Unified IP Phones are covered by a Cisco standard 1-year replacement warranty.

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For More Information

For more information about the Cisco IP Phone 8800 Key Expansion Module, please visit http://www.cisco.com/go/ipphones/8800, or contact your local Cisco account representative.

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