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Introduction

Leading the Way in Collaboration

Cisco® IP Phones empower your business with a new collaboration experience that connects you with the right people, with the right information at the right time, so you can accelerate team performance and maximize your business results.

Effective collaborative experiences among individuals and teams can help you:

• Harness the power of your busy professional staff by enabling them to collaborate confidently with customers, partners, colleagues, and suppliers.

• Maximize interaction with subject-matter experts (SMEs) by taking advantage of pervasive presence, team space escalation to calling and conferencing capabilities.

Cisco began developing voice over IP (VoIP) communications and collaboration solutions in 1997 and has provided them longer than any other vendor in the industry. According to Synergy Research, Cisco is the number one overall voice and video communications equipment vendor in the world and the leader in most unified communications categories, including conferencing and voice messaging.

Cisco leads the unified communications and collaboration market with:

• More unified communications installations: Cisco has more than 100,000 unified communications customers worldwide.

• More IP endpoints: Cisco has shipped 2.5 times more IP phones worldwide than its nearest competitor1.

• Competitive advantage: More than 95 percent of Fortune 500 companies now use Cisco Collaboration Solutions to build competitive advantage.

In today’s 24x7 global economy, your business must meet the needs of a wide range of users who can have different communications styles and preferences for how they conduct their work. Today’s workforce is more geographically dispersed, spanning different time zones, which enable collaboration beyond traditional work hours. Use of conferencing is growing exponentially. Virtual team spaces, with the ability to escalate member exchanges to calling within the space, are becoming increasingly important to efficiently and effectively collaborate. Cisco IP Phones support these advanced forms of collaboration. Yet, media reports continue to postulate that the death of the desk phone has arrived.

1 Source: Cisco Systems from Synergy Research reports for CY 2016.

> Continued
Surveys of actual users suggest this is far from the case. In fact, survey research of 505 knowledge workers published by CIO Online\(^2\) indicated that 74% of professionals prefer to make calls from a desk phone often to very often and 65% preferred to take their business calls on a desk phone.

Thus, continued desktop investment to deliver simpler, more comprehensive, integrated and ultimately, more productive collaborative experiences should continue to be a business priority.

This brochure provides you with an overview of each Cisco IP Phone model to help in making your desktop investment decisions. Determining which Cisco IP phones would be the best fit for your organization and how they can help you maximize your return on investment for your business.

The Cisco IP Phone portfolio includes an impressive range of user-friendly, full-featured VoIP and HD video phones that can meet the needs of your entire organization, including:

- The company lobby to the desk of your busiest managers
- The hospital, retail or manufacturing floor to the executive suite
- The home office
- The campus mobile worker
- A branch-office site to a corporate headquarters

\(^2\) CIO Online, “Is the Desk Phone Obsolete?” October 15, 2015.

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**The Right IP Phone Series For Your Business**

This brochure is designed to help you understand the different capabilities of the Cisco IP Phone portfolio, which include:

- Affordable, occasional-use and specialty VoIP communications:
  - Cisco Unified SIP Phone 3900 Series and Cisco Unified IP Phones 6900 Series
- General business VoIP communications:
  - Cisco IP Phone 7800 Series and Cisco Unified IP Phones 7900 Series
- Advanced HD video, VoIP and mobile communications
  - Cisco IP Phone 8800 Series
- Multiplatform Phones for third-party UC-as-a-Service Partners
- Multimedia applications for Cisco IP Phones
- Analog telephone adaptors and accessories

Whether you are new to the Cisco IP Phone portfolio, or are an existing customer having purchased Cisco phones before, Table 1 can assist you in where best to direct your future IP Phone investment.
### Which Cisco IP Phone Series Is Right For You?

#### Table 1. Which Cisco IP Phone Series Is Right For You?

<table>
<thead>
<tr>
<th>Use Case/Key Attribute</th>
<th>3900 Series</th>
<th>6900 Series</th>
<th>7800 Series</th>
<th>7900 Series</th>
<th>8800 Series</th>
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</thead>
<tbody>
<tr>
<td>Occasional Use (Common Areas)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Workers (On-Campus)</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Knowledge Workers (Remote)</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Manager/Executives/Administrative Staff/Receptionists</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>In-Campus Mobile Workers</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Conference Rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Hospitality Guest Rooms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HD Video Collaboration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bluetooth (mobile device integration, 3rd-party headsets)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>High-Resolution Color Displays</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gigabit Ethernet Switch Ports (for co-located PC)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cloud Deployable (Cisco Spark)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latest Security Enhancements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced Power Consumption (POE Class)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The remainder of this brochure addresses each IP Phone Series shown above and provides further details on the attributes and benefits of each phone model within a given series.

For a detailed specification comparison of each IP Phone model, please refer to the Collaboration Endpoint matrix that is available for download on the Cisco website.

The Cisco Collaboration Endpoint Team
Occasional-Use VoIP Communications

The Cisco Unified SIP Phone 3900 Series is an entry-level VoIP endpoint that delivers basic telephony features at a very affordable price. The 3900 Series is fully localized for use around the world and well-suited for settings with occasional needs for VoIP communications, such as:

- Lobbies
- Classrooms
- Laboratories
- Hallways

It can also be used by knowledge workers at the desk who have occasional voice communications needs.

Cisco Unified SIP Phone 3905

The single-line Cisco Unified SIP Phone 3905 is an affordable, entry-level VoIP endpoint designed to grow with your organization (Figure 1).

A monochrome display supports caller ID, call history, and phone information to enhance its user experience. The 3905 is compact, can be wall-mounted, and includes a traditional handset and a standard 12-digit dial pad. A 2-way navigation button with a select key enables users to navigate up and down menus and text that is presented on the display.

IT administrators will find the Cisco Unified SIP Phone 3905 easy and less costly to administer, install, and maintain. It comes standard with an integrated Ethernet switch to support a co-located PC at a desk. Thus, it can be an option for customers seeking to deploy it at a desk for users with light voice communications needs. The phone reduces both cabling at the desk and initial installation costs.
The Cisco Unified SIP Phone 3905 includes the following features:

- Full-duplex speakerphone for 2-way conversations
- Built-in IEEE 10/100 switch to reduce desktop clutter and installation costs for desktop deployments
- Support for 2 concurrent calls per line with a busy trigger
- Graphical monochrome 2-line display
- Message-waiting indicator (MWI) light
- Volume control rocker
- Fixed feature keys for one-touch access to redial, transfer, hold/resume, mute, and speakerphone
- Single-fold foot stand for optimal viewing and comfortable use of keys

The Cisco SIP Phone 3905 can be the ideal solution for:

- Occasional-to-light, cost-effective voice communications
- Deployments where a headset is not required
- Settings where basic telephony feature capabilities meet your needs
- Common areas like lobbies, cafeterias and conference centers where a basic level of endpoint security is sufficient given their less frequent use
Specialty-Use VoIP Communications

Cisco Unified IP Phones 6900 Series

The affordable Cisco Unified IP Phone 6900 Series delivers cost-effective VoIP communication services for specialty, occasional-use settings. It offers a very sleek, trim, and Earth-friendly, ergonomic design.

For Specialty-Use Settings

Cisco Unified IP Phone 6901

The single-line Cisco Unified IP Phone 6901 (Figure 2) is an entry-level endpoint that is ideal for occasional-use, specialty settings such as:

- Lobbies
- Cafeterias
- Hallways
- Elevators
- Conference centers
- Hotel and motel guestrooms

The Cisco Unified IP Phone 6901 delivers a simple, intuitive user experience that includes:

- Fixed keys for hold, redial, and call waiting
- Message-waiting and incoming-call indication LEDs on its handset
- Two concurrent incoming calls when using the call-waiting feature
- Transfer and conference capabilities through a hook switch (users simply tap the hook switch to transfer a call)
- Easy viewing angles on desks using a folding foot stand
- Option for wall-mounting with third-party wall-mount plates
- Seven user-adjustable ringtones
General Business VoIP Communications

Figure 3. Cost-Effective, High-Quality, Secure Voice Communications

The Cisco IP Phone 7800 Series (Figure 3) delivers affordable, high-fidelity and secure Session Initiation Protocol (SIP)-based VoIP communications to help make your employees more productive in their day-to-day interactions and advance your business goals. Along with the Cisco IP Phone 8800 Series, they deliver the best audio experience Cisco has delivered in an IP Phone to date, with state-of-art technology enhancements to both speaker and microphone.

The Cisco IP Phone 7800 Series is an ideal cost-effective solution for small-to-large companies. If you have older analog and digital telephony desk phones today and wish to migrate to Cisco Unified Communications, then the 7800 Series could be your phones of choice. In addition, Cisco customers who wish to expand or update their investment in VoIP communications endpoints can also consider this series.

All models of the Cisco IP Phone 7800 Series support the latest security enhancements, including Secure Hash Algorithm 2 (SHA-2) and Transport Layer Security 1.2 for encrypting communications to help protect the intellectual property of your business. You can read more about security enhancements for the Cisco IP Phone 7800 Series in the IP Phone 7800 and IP Phone 8800 Series Security Whitepaper found here on Cisco.com: https://www.cisco.com/c/en/us/products/collaboration-endpoints/unified-ip-phone-8800-series/white-paper-listing.html

The 7800 Series also supports investment protection for your desktop endpoint investment, should you be evaluating migration from Cisco on-premises infrastructures to cloud delivery, now or in the future. Whether on-premises, with support from Cisco Business Edition (BE), Cisco Unified Communications Manager (CUCM) and Hosted Collaboration Solution (HCS) infrastructures, or cloud delivery with Cisco Spark™ which brings together calling, messaging and meeting services, the Cisco IP Phone 7800 Series can address your deployment needs. The endpoints in this series can even be redeployed, across these options, should your strategy or business needs change making them a very flexible investment choice!
Even customers with investment in select, Cisco pre-approved, third-party Unified Communications-as-a-Service platforms (UCaaS) can take advantage of the IP Phone 7800 Series as multiplatform phones that run on unique factory-loaded Session Initiation Protocol (SIP) software\(^3\)-\(^4\).

The IP Phone 7800 Series, along with the 8800 Series described later in this brochure, are the best audio-performing IP phones Cisco has ever delivered since it started making IP Phones in the late 1990’s. Wideband audio (G.722) comes standard with the multi-line models and an audio conference phone, while an optional wideband handset is available with the single-line desk phone model. The 7800 Series hardware has been enhanced for higher performance with echo cancellation, meeting European Telecommunications Standards Institute (ETSI) compliance. In addition, vibration isolation of the hardware has been applied to both speakers and microphones, resulting in a higher-quality communications experience than has been delivered before.

The 7800 Series enables you to easily and securely connect to the Cisco network even when you are remote. For example, if you were a full-time teleworker. Cisco Expressway, which resides at the edge of your network, enables you to connect remote workers without need for dedicated VPN hardware or a VPN client for the 7800 Series phone. With Cisco Expressway, it’s easier for your remote workers to get up and running quickly (i.e., “time-to-live”), while reducing your IT administration costs.

The IP Phone 7800 Series introduces 5 models to the portfolio. The models range in their support, from a single line model for users with light voice communications needs to a 16-line model for highly active users of VoIP communications. There is also an audio conference phone which supports small conference/huddle rooms up to 6 people.

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\(^3\) Contact your Cisco representative to inquire about the latest third party UCaaS providers who have certified the Cisco IP Phone 7800 Series on their platforms. As of June 2017, the providers who have certified include Asterisk, BroadSoft and Centile. Customers should note that telephony features may vary by platform vendor and are encouraged to engage your vendor of choice to determine supported features with the IP Phone 7800 Series and if these features meet your business needs.

\(^4\) Support is provided on the 7811, 7821, 7841 and 7861 models.
The IP Phone 7800 Series models offer the following user features and capabilities as standard:

- High-fidelity audio (i.e., G.722 wideband) through speaker, handset, and headset for crystal-clear audio quality and performance on most desk phone models
- 360-degree handsfree high-fidelity audio for small conference rooms (7832 model)
- Grayscale, high-resolution liquid crystal displays on most models for easy viewing at a glance
- Fixed keys for common telephony features such as conference, transfer, hold/resume, directory, and services plus 2-way navigation button on most models
- Single- and 2-position foot stands to optimize viewing angles under varied lighting conditions (desk phone model dependent)
- Programmable line/feature keys for flexibility in assigning lines or features, such as speed dials (number varies by desk phone model)
- Tricolor LEDs on programmable line keys for call-status notification at a glance on most desk phone models
- Single- and multiple-call-per-line capability, delivering more powerful and flexible call navigation and session management (desk phone models)
- Four context-sensitive programmable soft keys for more dynamic feature interaction and enhanced user experience

- Full-duplex speakerphone, increasing personal productivity when engaged in multiparty conversations
- Electronic hook switch for enhanced call management (initiate, answer, end, and mute calls) through third-party headsets by using IP Phone 7800 Series auxiliary ports (most models)
- Color options of charcoal and white available on most models

The IP Phone 7800 Series models offer the following administrative features and capabilities as standard:

- Support for “VPN-less” connectivity with Cisco Expressway
- IEEE-integrated switches to reduce costs of infrastructure to the desk by routing PC traffic through the 7800 Series endpoint on most models (speed varies by desk phone model)
- Low power consumption as IEEE Power over Ethernet (PoE) Class 1 devices on desk phone models
- Power-save option on all models that can reduce power consumption, in off hours, up to 60 percent versus the phone in idle state with Cisco EnergyWise™ technology
- Text-based third-party Extensible Markup Language (XML) applications from Cisco vendor partners
- Latest security enhancements, including Secure Hash Algorithm 2 (SHA-2) and Transport Layer Security 1.2 for encrypted communications
Optional features of the Cisco IP Phone 7800 Series include:

- **Wall-mount kit:** Kits are available for each desk phone model (orderable separately)
- **Bezel customization:** You can replace the standard black bezel with a silver bezel (all models except 7811, 7832)

**Third-party UCaaS partner offers:** The 7800 Series, with its SIP interoperability and standalone software, can be deployed on third-party, Cisco approved UCaaS solutions for customers with investments in the following call-control platforms: Asterisk, Broadsoft and Centile. Consult your Cisco representative for platform support updates or send an email to 3pcc-7800-8800@external.cisco.com.

**User Profiles for IP Phone 7800 Series**
Cisco IP Phone 7811

The single-line Cisco IP Phone 7811 (Figure 7) is ideal for information workers and teleworkers with light VoIP communication needs.

It delivers a high-quality narrowband audio experience as standard. A wideband handset is available as an option for customers who wish to enhance their audio experience across the range of highs to lows in audio.

The 7811 comes with an IEEE 10/100 integrated switch to support a co-located PC.

The display is 3.28-inch (8.3 cm) monochrome.

A wall-mount kit is optionally available for the 7811 to support spaces without a desk or where desk space is limited.

The 7811 is available in charcoal and comes with a single-position footstand.

Text-based Extensible Markup Language (XML) and Computer Telephony Integration (CTI) applications are supported.

The 7811 supports the latest security enhancements, including Secure Hash Algorithm 2 (SHA-2) and Transport Layer Security 1.2.
7800 Series

Figure 8. For Light-to-Moderate Voice Communications

Cisco IP Phone 7821 in Charcoal and White

Light-to-Moderate Use VoIP Communications

Cisco IP Phone 7821

The 2-line Cisco IP Phone 7821 (Figure 8) is an ideal choice for information workers and teleworkers. It is well-suited for users who have light-to-moderate VoIP communications needs.

The 7821 has a 3.5-inch (8.9 cm) graphical, grayscale, 396 x 162 pixel-based display and is backlit.

It comes standard with an IEEE 10/100 integrated switch to support the traffic from a co-located PC.

The 2-programmable line/feature keys feature tri-color LEDs that provide call status notification at a glance.

The 7821 supports the latest security enhancements, including Secure Hash Algorithm 2 (SHA-2) and Transport Layer Security 1.2

As options, a wall-mount kit is available for the 7821 for areas without desks or where desk space is limited. A replaceable silver bezel is also available for customers who wish to change out the black that comes standard with the endpoint.

The 7821 is available in charcoal and white. It comes with a 2-position footstand.
Moderate-to-Active Use VoIP Communications

Cisco IP Phone 7841

The 4-line Cisco IP Phone 7841 (Figure 9) is an ideal endpoint for moderately active voice users. It is well suited for knowledge workers, administrative staff, managers, customer care agents, and supervisors who have moderate-to-active VoIP communications needs.

The 7841 has a 3.5-inch (8.9 cm) graphical, grayscale, 396 x 162 pixel-based display and is backlit.

The 4-programmable line/feature keys feature tricolor LEDs that provide call-status notification at a glance.

The 4-programmable line/feature keys come with tricolor LEDs to see call status at a glance.

The Cisco IP Phone 7841 also comes standard with an IEEE PoE 10/100/1000 switch (Gigabit Ethernet) that supports the traffic from a collocated PC.

The 7841 supports the latest security enhancements, including Secure Hash Algorithm 2 (SHA-2) and Transport Layer Security 1.2.

As options, a wall-mount kit for the 7841 is available for areas without desks or where desk space is limited. A replaceable silver bezel is also available for customers who wish to change out the black that comes standard with the endpoint.

The 7841 is available in charcoal and white. It comes with a 2-position footstand.
Highly Active-Use VoIP Communications

Cisco IP Phone 7861

The 16-line Cisco IP Phone 7861 (Figure 10) is designed for employees with active VoIP communications needs. It is well suited for administrative staff, managers, customer care agents, and supervisors.

The 7861 has a 3.5-inch (89 mm) graphical, grayscale, 396 x 162 pixel-based display and is backlit.

The 16-programmable line/feature keys offer tricolor LEDs to provide call-status identification at a glance.

An integrated IEEE 10/100 Ethernet switch supports the traffic from a co-located PC.

The Cisco IP Phone 7861 also includes a customizable, paper-label insert that can be locally printed for one-touch access to staff you contact frequently or other communications features. A clear film strip protects the paper label from dirt, spills, etc.

The 7861 supports the latest security enhancements, including Secure Hash Algorithm 2 (SHA-2) and Transport Layer Security 1.2.

As options, a wall-mount kit for the 7861 is available for areas without desks or where desk space is limited. A replaceable silver bezel is also available for customers who wish to change out the black that comes standard with the endpoint.
## 7800 Series

<table>
<thead>
<tr>
<th>Display</th>
<th>7811</th>
<th>7821</th>
<th>7841</th>
<th>7861</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>384 x 106 pixel-based, graphical monochrome display</td>
<td>396 x 162 pixel-based, graphical monochrome display with white backlight</td>
<td>396 x 162 pixel-based, graphical monochrome display with white backlight</td>
<td>396 x 162 pixel-based graphical monochrome display with white backlight</td>
</tr>
<tr>
<td>Wideband Audio</td>
<td>Optional</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Integrated HD Video</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Programmable Line Keys</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Ethernet Switch</td>
<td>10/100</td>
<td>10/100</td>
<td>10/100/1000</td>
<td>10/100</td>
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<tr>
<td>Headset Port</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Full Duplex Speakerphone</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Wall Mountable</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Affordable VoIP for Small Conference Rooms

Cisco IP Conference Phone 7832

New to the IP Phone 7800 Series is the introduction of an audio conference phone which is ideal for your small conference/huddle rooms and private office desks. The IP Conference Phone 7832 (Figure 11) meets the needs of rooms up to 172 sq. feet (16 sq. meters) or up to 6 participants.

The 7832 features a sleek, contemporary design with delivery of powerful audio performance. It offers 360-degree hands-free VoIP communications with a microphone pickup range of 7ft (213 cm).

Users with 7800 Series phones will find the experience easy-to-use, as menus and navigation are common with the series’ desk phones. In turn, administratively it shares the same phone software as the 7800 Series desk phone models, reducing project management and user training costs for corporate IT.

The 7832 supports Cisco EnergyWise for reduced power consumption in–off work hours. It is an IEEE Power over Ethernet Class 2 endpoint.

The 7832 is deployable in the cloud with Cisco Spark and as of CYQ3 2017, will also support mid-size to large enterprises on–premises.

It is also available in support of Cisco approved UCaaS partner offers as a multiplatform phone.

* 7832 in white available CYQ3 2017.
360-degree room coverage with full duplex wideband audio speaker and microphone

3.5-inch (8.9 cm) monochrome, backlit, anti-glare 384 x 128 pixel display.

Up to 7ft (217 cm) microphone pickup.

Large mute button makes for easy accessibility from all sides of the endpoint.

Raised edges ease handling and repositioning on the desk.

IEEE 10/100 network port supports Power of Ethernet (Class 2)

Cisco EnergyWise™ for reduced power consumption in off-work hours

Two color options (charcoal and white)

To compare additional technical specifications across all IP Phone 7800 Series models, consult our online Collaboration Endpoint Matrix on Cisco.com.
General Business VoIP Communications

Cisco Unified IP Phones 7900 Series

If your business requires business-grade voice communications with access to color displays, Gigabit Ethernet and support for third-party endpoint XML-based applications, the Cisco IP Phone 7900 Series address these needs. The 7900 Series supports knowledge workers, administrative staff, managers, and executives with general business VoIP communication at the desk.

The Cisco IP Phone 7900 Series (Figure 12) deliver these capabilities and enhance productivity with support for multiple call-per-line appearance. With multiple-call-per-line appearance, you can take advantage of more sophisticated call navigation capabilities with support for multiple call sessions on a per-line basis. As a simple example, on a 2-line endpoint, you could be on an active call and navigate to pick up a second incoming call on the same line, while the first call is automatically placed on hold. You can then switch back and forth between these two call sessions as required. This capability offers your organization sophisticated and powerful communication options that are not typically available from traditional telephony or hybrid systems.

Businesses that integrate custom and ready-to-use IP endpoint applications into their IP phones can:

• Reduce operating and administration costs.
• Increase revenue.
• Improve employee productivity.
• Enhance customer satisfaction and loyalty.
• Transform business processes.
General Business Voice-focused Endpoints

Cisco IP Phone 7945G, 7965G, and 7975 Endpoints

These endpoints (Figure 13) come standard with speakerphones and handsets to support G.722 wideband audio. An expanded application suite includes support for XML text and graphical applications. All support Gigabit Ethernet- integrated switches to reduce cabling at the desktop and installation costs. The 7945, 7965, and 7975 support backlit color displays.

The Cisco IP Phone 7945G includes the following capabilities:

• Two programmable backlit line/feature keys for quick access to communications
• A 5-inch (12.7 cm), backlit, high-resolution, 320- x 240-pixel graphical color display
• Wideband audio support on headset, handset, and full-duplex speakerphone
• Integrated IEEE 10/100/1000 switch ports, which support the switching of multimedia traffic from a co-located PC
• Four-way navigation cluster plus a select key, which allow you to scroll vertically and horizontally when navigating menus and directories

The Cisco IP Phone 7965G includes the following capabilities:

• Six programmable backlit line/feature keys for quick access to communications
• A 5-inch (12.7 cm), backlit, high-resolution, 320- x 240-pixel graphical color display
• Wideband audio support for headset, handset, and full-duplex speakerphone
• Integrated IEEE 10/100/1000 switch to support switching of traffic from a co-located PC
• Four-way navigation cluster plus a select key, which allow you to scroll vertically and horizontally when navigating menus and directories
• Optional 7916 Key Expansion Module for additional programmable line/feature key support

The Cisco IP Phone 7975G builds on the features of the 7965G with:

• Eight programmable backlit line/feature keys for quick access to communications
• A 5.6-inch (14.2 cm), high-resolution, 320- x 240-pixel graphical color display with touchscreen
• Optional 7916 Key Expansion Module for additional programmable line/feature key support

Figure 13. High-Definition Audio, Rich Display Experience, High-Speed Connectivity
With optional 7916 key expansion modules (Figure 14), you can monitor and manage call status with additional buttons and an LCD screen to aid your organization in increasing responsiveness with a more personalized touch. In addition, keys on the modules can be programmed by IT to support one-click access to staff, making the calling experience far simpler for administrative staff and executives.

### Table 3. Cisco Unified IP Phone 7900 Series Key Feature Comparison (desk phones)

<table>
<thead>
<tr>
<th>Feature</th>
<th>7945G</th>
<th>7965G</th>
<th>7975G</th>
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<td>Wideband</td>
<td>Wideband</td>
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<td>Power class</td>
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<td>3</td>
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<tr>
<td>Display and pixels</td>
<td>5.0 in. (12.7 cm) color/320 x 240</td>
<td>5.0 in. (12.7 cm) color</td>
<td>5.6 in. color/320 x 240</td>
</tr>
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<td>USB port (for headsets)</td>
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<td>No</td>
</tr>
<tr>
<td>Bluetooth (for headsets)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>802.11 Wi-Fi</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Cisco® Intelligent Proximity</td>
<td>No</td>
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<td>No</td>
</tr>
<tr>
<td>Integrated switch</td>
<td>10/100/1000</td>
<td>10/100/1000</td>
<td>10/100/1000</td>
</tr>
<tr>
<td>USB charging</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>XML Applications</td>
<td>Text and Graphical</td>
<td>Text and Graphical</td>
<td>Text and Graphical</td>
</tr>
<tr>
<td>KEM support (7916)</td>
<td>No</td>
<td>Yes (2)</td>
<td>Yes (2)</td>
</tr>
</tbody>
</table>

The Cisco IP Phone 8800 Series (Figure 15) is the advanced endpoint portfolio that delivers ease of use with superior performance. With the IP Phone 8800 Series, your business can benefit from cost-effective, reliable, secure, and scalable high-definition voice over IP (VoIP) communications. On select models, you can also get:

- Affordable entry to 720p high-definition (HD) video communications to video-enable your entire organization.
- Telephony feature integration support with Cisco's Intelligent Proximity for Mobile Voice when using personal mobile devices.
- In-campus mobile communications within wireless LAN (WLAN) networks for workers in more rigorous, industrialized work settings.
- High-performance audio conferencing for small-to-large conference rooms up to 1140 square feet (106 square meters) and up to 42 participants in the room.
- Escalate Cisco Spark™ member exchanges, within Spark virtual team rooms, to Spark voice or video calls.
- Choice of two user experience modes for call handling and navigation (IT configured).

Nine models are available with the IP Phone 8800 Series that range in their support to address the needs of knowledge workers, managers, executives and customer care staff. Specialty deployments are supported for audio conference rooms and in-campus mobile workers in rigorous work environments. The 8800 Series includes desk phone models 8811, 8841, 8845, 8851, 8861, 8865. Specialty models include IP Conference Phone 8832 for executive offices and midsized-to-large conference rooms, and the 8821 and 8821-EX for in-campus mobile workers. The 8845 and 8865 support entry to 720p HD video.
With the 8800 Series and HD video (Figure 16), you can:

- Elevate and personalize communications to improve the quality and speed of decision making.
- Enhance collaboration between geographically dispersed teams and workgroups to accelerate team performance.
- Enable busy employees to meet "face-to-face" from without ever leaving their offices.
- Scale compelling integrated collaboration experiences across your organization quickly and cost-effectively.
- Collaborate with confidence – within your business and between businesses as the IP Phone 8800 Series supports the latest security enhancements for encryption.

The 8800 Series, along with the 7800 Series described earlier in this brochure, are the best audio-performing IP phones Cisco has ever delivered. Wideband (G.722) audio is supported on all models and the 8811, 8832, 8841, 8845, 8851, 8861, and 8865 desk endpoints are hardware-enhanced for higher performance on echo cancellation, meeting European Telecommunications Standards Institute (ETSI) compliance. In addition, vibration isolation of the hardware has been applied to both speakers and microphones, resulting in a higher-quality communications experience.

With Cisco Intelligent Proximity for Mobile Voice (Figure 17), Cisco brings the worlds of desktop and mobile closer together to support how your workforce wishes to work. The IP Phone 8845, 8851, 8861, and 8865 models support this feature. It enables import of both your contacts and call history from your mobile device to these desk phones. In addition, users have the ability to move the audio path of active voice and video calls to these desk phones to enjoy the superior acoustical properties they can deliver. You can even move the audio path of your active voice or video call back to your personal mobile device if you need to step away from your desk. Android and Apple (iOS) personal mobile devices are supported.

While not a specific feature of Cisco Intelligent Proximity, because the IP Phone 8851, 8861, and 8865 models offer USB support, you can even charge your personal mobile devices from a USB port on these phones as an added convenience when you are at your desk. The IP Phone 8851 supports smartphone charging. The IP Phones 8861 and 8865 support both smartphone and tablet fast charging.
The 8800 Series desktop models offer users the choice of two experience modes for their call handling and navigation based on their user preference. The modes are configured by IT and while they cannot be intermixed on a given phone, one mode can be exchanged for another based on a user’s comfort and needs.

Session Line Mode (SLM), which has been the standard that ships with the 8800 Series since its introduction, offers users five programmable line/feature keys to the left of the display and five session keys to the right of the display. Session keys provide visual status of each call on each line (i.e., active, on-hold). If you have Cisco IP Phone 8900 or 9900 Series today, they support SLM as well making for an easier transition to the IP Phone 8800 Series from these phones.

A new mode, called Enhanced Line Mode or ELM (Figure 18) available with Phone OS 11.5 and later software, delivers up to ten programmable line/feature keys. Thus, the five session keys to the right of the display in SLM become programmable line/feature keys in ELM. Users of 7962, 7965 and 7975 phones will find the ELM experience quite similar – making a transition to the IP Phone 8800 Series a far more seamless call handling and navigation experience when migrating.

Finally, customers seeking investment protection for their desktop endpoints, as they assess migration from on-premises to cloud delivery models for their business, now or in the future, can take advantage of the flexible delivery options supported by this latest generation portfolio. Whether on-premises, with support from Cisco Business Edition (BE), Cisco Unified Communications Manager (CUCM) and Hosted Collaboration Solution (HCS) infrastructure solutions, cloud delivery with Cisco Spark™, or a hybrid configuration, which blends calling, messaging and meeting services between the two, the Cisco IP Phone 8800 Series can meet your business needs. Most models in this series can even be redeployed across these options should your strategy or business needs change. Even customers with investment in select, Cisco approved third-party Unified Communications-as-a-Service (UCaaS) offers will be able to take advantage of the IP Phone 8800 Series as multiplatform phones.5

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5 Contact your Cisco representative to inquire about the latest third party UCaaS providers who have certified the Cisco IP Phone 8800 Series on their platforms. As of June 2017, the providers who have certified include Asterisk, BroadSoft and Centile. Note that telephony features may vary by platform vendor. You are encouraged to engage your vendor of choice to determine supported features with the IP Phone 8800 Series and if these features meet your business needs.
The 8800 Series supports secure connectivity for remote worker access to the Cisco network, such as for full-time teleworkers. Cisco Expressway, which resides at the edge of your network, enables you to connect these workers without need for dedicated VPN hardware or a VPN client for the 8800 Series phone. Cisco Expressway makes it easier for remote workers to get up and running quickly (i.e., time-to-live), while reducing the costs of administration for IT.

Common user features to the IP Phone 8811, 8841, 8845, 8851 (Figure 19), 8861 and 8865 models follow:

- 5-to-10 lines\(^6\) with two user selectable experience options for added flexibility in call management
- More intuitive, easier-to-use phones with the highest-resolution, backlit, graphical widescreen VGA, 800-x 480-pixel displays in the Cisco IP Phone portfolio (grayscale or color is model-dependent)
- Increased productivity with easier navigation of menus and call-transaction status using the 5-way navigation cluster and 4 context-sensitive soft-label keys (most models)
- Enhanced tactile feel and reduced errant dialing with rounded ergonomic fixed keys
- Fixed keys for commonly used functions including messaging, directory, services, transfer, conference, mute, headset, speakerphone, hold, and release
- Replaceable silver bezel option for the black bezel that comes standard (desk phone models only)
- Escalation of Cisco Spark™ member exchanges, within Spark virtual team rooms, to Spark voice or video calls as work requires.

IT features common to the IP Phone 8811, 8841, 8845, 8851, 8861 and 8865, unless otherwise noted, include:

- Flexible deployment options with support from Cisco communication servers, whether on-premises or in the cloud with Cisco Spark™, and third-party Cisco pre-approved Unified Communications-as-a-Service (UCaaS) call-control platforms\(^7\)
- Support for 802.3af/at PoE to reduce installation and infrastructure costs by eliminating or reducing the need for local power supplies ("power cubes")

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\(^6\) Session Mode (SLM) supports up to five configurable lines. Enhanced Line Mode (ELM) available with Phone OS 11.5 and later is a new user option and supports up to 10 configurable lines or programmable keys.

\(^7\) Contact your Cisco representative for availability timing details and supported third-party UCaaS call-control platforms. As of June 2017, supported UCaaS platforms include Asterisk, BroadSoft and Centile. Note that telephony features may vary by vendor. You are encouraged to contact your UCaaS vendor of choice to inquire about IP Phone 8800 Series features supported and that they meet your business needs.
### 8800 Series

**User Profiles for IP Phone 8800 Series**

<table>
<thead>
<tr>
<th>Profile</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infoworker</td>
<td>8811, 8841, 8845, 8851, 8861, 8865</td>
</tr>
<tr>
<td>Manager, Executive, Administrative</td>
<td>8851, 8861, 8865</td>
</tr>
<tr>
<td>Telesworker</td>
<td>8811, 8841, 8845, 8851, 8861, 8865</td>
</tr>
<tr>
<td>Deskless Worker</td>
<td>8811, 8845, 8861, 8861, 8865, 8821/EX</td>
</tr>
<tr>
<td>Customer Care</td>
<td>8841, 8845, 8861, 8865</td>
</tr>
<tr>
<td>In-Campus Mobile</td>
<td>8821, 8821-EX</td>
</tr>
<tr>
<td>Audio Conferencing</td>
<td>8832</td>
</tr>
</tbody>
</table>

### Next-Generation Video and Voice Communications
- Gigabit Ethernet-integrated switches on all desk phone models to reduce IT administration and cabling costs at the desk while efficiently and effectively processing the traffic from a co-located multimedia PC
- Integrated VPN client to help keep conversations private and support for [Cisco Expressway](https://www.cisco.com) enabling "VPN-less" client connectivity to the network for remote workers
- Reduced energy costs and carbon footprint in off-work hours with support from [Cisco EnergyWise®](https://www.cisco.com) technology
- SIP for greater interoperability and flexibility
- Optional wall-mount kit to deploy in more space-constrained environments (most models)
- Support for the latest security enhancements, such as Transport Layer Security 1.2 (TLS) and Secure Hash Algorithm-2 (SHA-2) for encrypted communications

### VoIP Communications to Boost Productivity
- Bring Desk and Mobile Experiences Closer Together
- Share Telephony Experiences between Desk and Mobile
- Add Convenience and Extend Investment

### Ruggedized In-Campus Mobility
- Bring Desk and Mobile Experiences Closer Together
- Elevate Collaboration with Entry to HD Desktop Video

### High-Performance Audio Conferencing
- Elevate Collaboration with Entry to HD Desktop Video

---

VoIP Communications to Boost Productivity

Cisco IP Phone 8811

The Cisco IP Phone 8811 (Figure 20) delivers highly secure and powerful mission-critical VoIP communications that are easy to use. The 8811 is ideal for knowledge workers and teleworkers in small to large enterprises. With its support of Cisco EnergyWise technology, the 8811 is a Class 2 PoE device so it is both cost-effective and earth-friendly.

Unique to the Cisco IP Phone 8811 is a 5-inch (12.7 cm), backlit, graphical, grayscale widescreen VGA display (800 x 480 pixels).

Session Line Mode (SLM) and Enhanced Line Mode (ELM) user experiences are supported.

The 8811 supports flexible deployment options including Cisco on-premises, Cisco Spark™ for cloud and third-party Cisco pre-approved UCaaS platform offers.

The 8811 also integrates with Cisco Spark™ so that team member exchanges within Spark virtual team rooms can easily escalate to Spark voice calls when needed.

The latest security enhancements, including Secure Hash Algorithm 2 (SHA-2) and Transport Layer Security 1.2 for encryption are supported.

Both charcoal and white color options are available with this model.
Ruggedized In-Campus Mobility

Wireless IP Phone 8821 and 8821-EX

If you have workers who are mobile within a Wireless LAN (WLAN) enabled campus for much of their workday, and whose roles are more rigorous in nature requiring voice communications devices with resilient, hardened exteriors, then the Wireless IP Phones 8821 and 8821-EX (Figure 21) may be of interest to you.

These six-line, wideband audio 802.11 Voice over WLAN (VoWLAN) endpoints are the next evolution of the Wireless IP Phone 7921, 7925 and 7926 models. They are designed to deliver cost-effective, reliable, resilient VoIP communications from Cisco on-premises infrastructure solutions and are ideal for workers in the following more physically active roles:

- Nurses, doctors, technicians or other shift workers in healthcare
- Customer service and warehouse representatives in retail settings
- Operations and engineering personnel in manufacturing
- Service staff such as maids in hospitality, crew on cruise ships
- Workers on oil rigs and chemical plants (EX model suggested)

The 8821 and 8821-EX both offer the following user features:

- Support for cost-effective, comprehensive VoIP and unified communications features within 802.11a/b/g/n and ac wireless LAN networks
- Hardened exteriors that are military standard (MIL-STD 810G) compliant. These endpoints are tested for shock resistance by drop-testing them a dozen times onto concrete from a height of 6ft (183 cm) on different points of the handsets (face, top, bottom etc.)

The 8821 is currently available where country compliances have been achieved. The 8821-EX at time of this publication requires additional certification testing for combustible environments and is planned for CYQ4 2017. Please consult your Cisco representative or authorized Cisco reseller partner/distributor for further timing and availability details as these will vary by country and compliance testing they require.
8800 Series

Next-Generation Video and Voice Communications
Ruggedized In-Campus Mobility
Entry to HD Desktop Video Collaboration

VoIP Communications to Boost Productivity
High-Performance Audio Conferencing
Bring Desk and Mobile Experiences Closer Together
Add Convenience and Extend Investment

User Profiles for IP Phone 8800 Series
802.11r ("Fast Transition") for seamless handover of voice when roaming between access points

Wireless IP Phone 8821

- International Protection Standard 67 (IP67) rated for ingress of dust and water. The endpoints are sealed against dust and protected if immersed in water up to 1 meter (3.3 ft) for up to a half hour and will still function.
- Six line/programmable endpoints
- Wideband (G.722) audio with full duplex speakerphone
- High resolution 2.4 in (6 cm) 240 x 320 pixel backlit displays
- Bluetooth 3.0 for choice in third party headsets and an "untethered" experience from the handset
- Easily swappable, rechargeable batteries with talk time of up to 13 hours and standby time of 240 hours
- Dial-pad keys under glass to protect against wear
- Hermetically sealed USB 2.0 port
- Two soft key buttons to access screen-based applications, features, and functions
- Application button that supports Cisco and third-party XML applications such as Cisco Instant Connect for push-to-talk
- Secure Hash Algorithm 2 (SHA-2) and Extensible Authentication Protocol – Transport Layer Security (EAP-TLS) for enhanced security with certificate management and policies enforcement
- Simple Certificate Enrollment Protocol (SCEP) for automated management of certificates. IT no longer needs to administer each and every device to initially install or update certificates
- Common Phone OS with other 8800 Series desk phones to simplify administration and ease project management of software updates

In addition, the following features are included for IT:

- Secure Hash Algorithm 2 (SHA-2) and Extensible Authentication Protocol – Transport Layer Security (EAP-TLS) for enhanced security with certificate management and policies enforcement
- Simple Certificate Enrollment Protocol (SCEP) for automated management of certificates. IT no longer needs to administer each and every device to initially install or update certificates
- Common Phone OS with other 8800 Series desk phones to simplify administration and ease project management of software updates
The 8821-EX (Figure 23) builds upon the 8821 and delivers all its features. It is ideal for operation in settings such as oil and chemical facilities, where the handset could be operated during temporary exposure to a combustible atmosphere. Operation of the device would not ignite such an environment. It adds the following unique features:

- Industry standard yellow plastics for fast recognition/location of the handset
- Atmospheres Explosibles (ATEX) Class 1, Zone 2 certified. ATEX Zone 2 is an area in which an explosive gas atmosphere is not likely to occur in normal operation and if it does occur, is likely to happen infrequently and for short periods (less than 10 hours per year)
- CSA Class 1, Division 2, Zone 2 certified. CSA Class 1 is a location where a quantity of flammable gas or vapor sufficient to produce an explosive or ignitable mixture may be present in the air. Division 2 is a location where a hazard does not normally exist but is possible under abnormal conditions. Zone 2 is an area in which an explosive gas atmosphere does not normally exist
High-Performance Audio Conferencing

New to the 8800 Series portfolio is the Cisco IP Conference Phone 883210. The IP Conference Phone 8832 builds upon the features of the Unified IP Conference Phone 8831 with a new more contemporary ergonomic design. The Cisco IP Conference Phone 8832 (Figure 24) facilitates a more productive in-room and executive office conferencing experience. Designed specifically for use in mid-size to large conference rooms and executive offices, it delivers “as good as being there” acoustical performance with crisp highs and clear lows.

Features include:

• Superior HD audio performance: The full-duplex wideband (G.722), hands-free speaker helps improve productivity for mission-critical communications.

• Scalable room coverage: The base station supports up to 400 sq. feet (37.2 sq. meters) with up to 10 participants. Optional wired extension microphones double the room support to up to 800 sq. feet (74.3 sq. meters) with up to 26 participants. In CYQ4, “daisy-chaining” a second base station and adding optional Digital Equipment Cordless Telephony (DECT) wireless microphones enables support of up to 1140 sq. feet (106 sq. meters) with up to 42 participants.

• New contemporary design: The 8832 includes a new ergonomic design with integrated dialpad, backlit pixel-based color display, large mute key (for easy participant access from all angles) and rounded edges for ease of handling.

• Choice of two color options (charcoal and white).

• European Telecommunications Standards Institute (ETSI) 738 and 740 compliance for superior audio performance.

• Latest security enhancements including Transport Layer Security 1.2 (TLS) and Secure Hash Algorithm 2 (SHA-2) for encryption.

10 The Cisco IP Conference Phone 8832 is targeted to be available in CYQ3 2017 for US and Canada. Countries in EMEA are targeted for CYQ4 2017. Countries who have not compliance tested the 8832 conference phone may still be able to purchase the Cisco Unified IP Conference Phone 8831 which remains available. Contact your Cisco representative for further details.
VoIP Communications to Enhance Collaboration

Cisco IP Phone 8841

The Cisco IP Phone 8841 (Figure 25) builds upon the features of the IP Phone 8811. It delivers superior voice communications that can enhance collaboration throughout your entire organization. It is ideally suited for knowledge workers and teleworkers, whether on-premises or remote. It also supports Cisco Spark™ for cloud deployment and select, Cisco approved third-party UCaaS platform offers.

- The 8841 comes standard with a 5-inch (12.7 cm) color, backlit, graphical widescreen VGA (800 x 480 pixels) display. As a PoE Class 2 device, it is both cost-effective and earth-friendly.
Entry to HD Desktop Video Collaboration

Cisco IP Phone 8845

The Cisco IP Phone 8845 (Figure 26) builds upon the features delivered with the IP Phone 8841.

Notable additions include:

- Affordable 720p HD H.264 AVC video communications enabling all users within your organization to participate in video conversations.
- Bluetooth for user choice in third-party headsets.
- Cisco Intelligent Proximity for Mobile Voice for telephony feature integration with personal mobile devices, such as smartphones and tablets.
The Cisco IP Phone 8851 (Figure 27) also builds upon the features delivered with the IP Phone 8841. It supports Cisco Intelligent Proximity for Mobile Voice to integrate telephony features with your personal smartphone or tablet, when in range of the 8851 at the desk using Bluetooth.

The IP Phone 8851 is able to charge personal smartphones through one standard USB port adjacent to the Key Expansion Module connector on the right of the endpoint.

The 8851 is also the first model in the 8800 Series to support the new optional IP Phone 8851/8861 Key Expansion Module. It supports up to 2 modules, for an additional 56 programmable line/feature keys. Key Module support adds to your scalability and Return On Investment (ROI) beyond the number of programmable line keys supported on the 8851 phone.

A no-radio version of the 8851 is available, without Bluetooth, to support those environments where use of Bluetooth is not permitted. Consult your Cisco representative for further details.

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11 Support of Bluetooth, USB and optional Key Expansion Modules require additional power and depending on number of expansion modules, may require 802.3at PoE or local power cubes. Contact your Cisco representative for further assistance.

12 The number of programmable line/feature keys on the IP Phone 8851 is dependent on the user experience mode selected. Session Line Mode (SLM) supports up to 5 on the 8851. Enhanced Line Mode supports up to 10. The new optional IP Phone 8851/8861 supports both user experience modes.
Share Telephony Experiences between Desk and Mobile

Cisco IP Phone 8861

The Cisco IP Phone 8861 (Figure 28) delivers all of the features of the IP Phone 8851 and adds:

A second USB port on the rear of the endpoint, which can fast-charge tablets in addition to smartphones for added convenience when at the desk.

For headquarters or branch offices whose campuses are wireless LAN-enabled, the IP Phone 8861 also supports 802.11a/b/g/n/ac protocols. This adds flexibility and reduces costs of installation and administration and minimizes cabling at the desk.

The 8861 supports up to 3 of the new and optional IP Phone 8851/8861 Key Expansion Module, supporting up to 84 additional programmable line/feature keys to those that come standard with the 8861. This gives you further scalability and increases the return on your investment (ROI) in 8861 phones.

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13 The addition of an 802.11 Wi-Fi radio to Bluetooth, USB and key expansion module support requires additional power and thus, the 8861 is rated a PoE Class 4 endpoint. Please note for planning purposes.
Elevate Collaboration with Entry to HD Desktop Video

Cisco IP Phone 8865

The Cisco IP Phone 8865 (Figure 29) builds upon all of the features delivered with the IP Phone 8861.

It also adds affordable 720p HD video communications, enabling all users within your organization to connect face-to-face, even when remote, from their desktops.

The 8865 also supports up to 3 optional IP Phone 8865 Key Expansion Modules (KEM) for up to 84 additional programmable line/feature keys. The expansion module is unique to the IP Phone 8865. Aligning the angle of the module with the 8865 phone provides more pleasing aesthetics and ease of use.
Add Convenience and Extend Investment

Cisco 8800 Series Key Expansion Modules

Key Expansion Modules (KEM’s) are optional accessories that provide additional line and programmable feature keys for highly-active users such as executives, managers, administrative staff and lobby receptionists. KEM’s simplify and enhance the calling experience by making it easier for you to contact staff that you collaborate with often, using features such as "speed dials" for one-button push-to-call. They also increase your responsiveness with a more personalized touch, when receiving inbound calls and help you pick up calls for another colleague if they are busy or away from their desk.

The IP Phone 8800 Series offers three Key Expansion Modules. Available today, the IP Phone 8800 Key Expansion Module (Figure 30), offers 18 physical keys per module. A software “Page 2” key provides another 18 keys that can be configured for a total of 36 keys per module. You can have up to two modules supported off an IP Phone 8851 and up to three modules off the 8861 and 8865 phone models. The IP Phone 8800 Key Expansion Module supports Session Line Mode (SLM) only. They are ideally suited for installed base customers who have them today and wish to add another for expansion up to the limit of three (phone model dependent).

New additions to the KEM portfolio are the Cisco IP Phone 8851/8861 Key Expansion Module and the IP Phone 8865 Key Expansion Module. These are both available in CYQ3 2017. They are also optional modules but unlike the IP Phone 8800 KEM, they also support the Enhanced Line Mode (ELM) user experience.

There is a module for 8851 and 8861 phone models and one, with different articulation (i.e., angling) of its hardware, to align with the 8865 phone model as the 8865 phone supports HD video.

Both modules support 14 physical keys per module. A software "Page 2" key adds another 14 for a total of 28 line/programmable feature keys that can be configured. Up to two 8851/8861 KEM’s can be supported off the 8851 phone model. Up to three can be supported with the 8861 phone model. In turn, the 8865 KEM can support up to three modules attached to the 8865 phone.

These new modules are ideally suited for customers who have investment today or are familiar with the Cisco IP Phone 7900 Series as the Enhanced Line Mode user experience support makes for a more migration when using these new KEM’s with the 8851,8861 and 8865 phone models. These modules offer more characters per line label to reduce guessing of calling line ID with inbound callers (i.e., is "Daniel" actually Daniel or is it Danielle calling?).
Table 4. Cisco IP Phone 8800 Series At-a-Glance Features (desk phone models)

<table>
<thead>
<tr>
<th>Feature</th>
<th>8811</th>
<th>8841</th>
<th>8845</th>
<th>8851</th>
<th>8861</th>
<th>8865</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>5“ high-resolution (800 x 480) greyscale display</td>
<td>5“ high-resolution (800 x 480) WVGA color display</td>
<td>5“ high-resolution (800 x 480) WVGA color display</td>
<td>5“ high-resolution (800 x 490) WVGA color display</td>
<td>5“ high-resolution (800 x 480) WVGA color display</td>
<td>5“ high-resolution (800 x 480) WVGA color display</td>
</tr>
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<td>Wideband Audio</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>HD Video (720p)</td>
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<td>Programmable Line Keys</td>
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<td>5-10</td>
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<td>Integrated Bluetooth</td>
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<td>Intelligent Proximity</td>
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<td>Key Expansion Module Support</td>
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<td>4</td>
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<td>✓</td>
<td>✓</td>
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Multimedia Applications for Your Business

Cisco works with Cisco Developer Network (CDN) partners to enhance the customer value of Cisco IP Phones by expanding the portfolio of endpoint applications made available to you. The result is more advanced capabilities with dynamic, intelligent application content that can help you meet the needs of your business both today and tomorrow.

Cisco has a robust ecosystem of third-party IP endpoint application developers. These technology partners give you access to a new world of value-added Extensible Markup Language (XML) applications for your endpoints. This rich array of applications takes advantage of the latest technologies to maximize your Cisco IP endpoint investment.

They can also make your company more competitive by helping you:

- Improve customer satisfaction
- Enhance business continuity
- Reduce administration costs
- Transform business processes

14 Consult the written datasheet for your Cisco IP Phone model(s) of interest to determine if XML applications are supported.
XML Applications

XML provides a standard language that developers can use to share information between different kinds of IP endpoints, different applications, and different organizations without needing to pass through many layers of conversion.

Endpoint applications can provide significant savings. For example, one financial services organization saves about $50 million a year by taking advantage of a workplace management application. The application empowers workers to locate and reserve workspaces through the IP endpoint whenever and wherever they need to work. It also allows the company to measure usage of every workspace in the organization. This capability has made it possible to eliminate more than 4000 workstations nationwide.

XML Applications

Overhead Paging
On-Demand and Continuous Call Recording
Directory Search
Employee Time Card
Multimedia Broadcasts
Wireless IP Push-to-Talk And More
Analog Telephone Adaptor & Accessories

Figure 31. Protect Your Analog Device Investment

Three Hardware Models

Third-party Headsets

Turn Traditional Telephones into IP Endpoints

The cost-effective, standards-based Cisco ATA190 Series Analog Telephone Adaptors (Figure 31) protect your existing analog telephone investment while delivering true VoIP terminations. Simply connect traditional analog devices to the Cisco ATA190 Series Analog Telephone Adaptors and a traditional telephone becomes an IP endpoint. You can use the Cisco ATA190 Series Analog Telephone Adaptors in both businesses and residences worldwide, where they:

• Deliver clear, natural-sounding voice quality
• Support 2 voice ports, each with its own independent telephone number
• Provide a single RJ-45 10/100 BASE-T Ethernet port (ATA 191) and two RJ-45 10/100 BASE-T Ethernet ports with router function (ATA 192)
• Can use existing Ethernet LANs in addition to broadband pipes such as DSL, fixed wireless, and cable modem deployments
• Offer a dedicated PRT button for serviceability improvement

When telephones are connected to the Cisco ATA 190 Series Analog Telephone Adapters, companies can take advantage of many cost-saving, productivity-building IP telephony applications, including:

• User configuration
• Full-duplex capability
• Central provisioning for ease of administration
• SIP services such as dynamic IP address assignment, VLAN configuration, user authentication, etc.
• Fax support so you can send faxes cost effectively over the IP network
• SSH access for remote debugging
• IPv4/IPv6 dual stack for IPv6 migration

The Cisco ATA 190 Series Analog Telephone Adaptors enable secure media and signaling support through Secure Real-Time Transfer Protocol/Transport Layer Security 1.2 (SRTP/TLS) over SIP. The adaptor is also firmware-upgradable.
Three Hardware Models

These three models in the ATA 190 family turn traditional telephone devices into IP Phones:

- ATA 191: 2-port Analog Telephone Adapter for on-premises
- ATA 191 MPP: 2-port multiplatform Analog Telephone Adapter for 3PCC market
- ATA 192 MPP: 2-port multiplatform Analog Telephone Adapter with router for 3PCC market

Third-party Headsets

Cisco partners with industry leading headset providers to offer your choice of headsets that support Cisco IP phones. Consult the links below to our partner websites for your provider of choice to determine the latest headset options available to you and those headsets supported on your Cisco IP phone(s) of choice.

- http://www.jabra.com
- http://www.plantronics.com
- http://en-us.sennheiser.com/headsets
Optimize Your Organization’s Collaboration

Communicate and collaborate with our comprehensive portfolio of industry leading endpoint solutions. Cisco has an IP Phone for your every organizational need. From the lobby to the executive suite. From the start-up to the well-established enterprise. For every deployment model including on-premises, cloud or a hybrid configuration of the two. Cisco even supports select, third-party, approved UCaaS provider offers who have certified Cisco 7800 and 8800 Series phones on their platforms as multiplatform phones.

The diverse Cisco portfolio includes:

- Solutions to meet your corporate objectives while remaining within your budget
- Single- and multiline endpoints, supporting a range of communication needs from low-to-moderate to the most active environments
- A range of endpoints from basic to fully featured, enabling your organization to take advantage of robust Cisco collaboration capabilities
- Support for HD video collaboration, on selected models, to reduce your travel costs and accelerate the speed of decision making in your organization
- Telephony feature integration with personal mobile devices on select Cisco next-generation phone models that support Cisco Intelligent Proximity for Mobile Voice
- Cost-effective, in-campus mobile collaboration for the worker on the go whose roles require more hardened devices to support their voice communications needs
- Scalable, affordable audio conferencing, from the small conference/huddle room to the large conference rooms, that is easy-to-use and manage

Cisco IP Phones can help your business obtain the productivity-building capabilities of next-generation communications and collaboration, and deliver an exceptional communications experience throughout your organization.

We hope that this brochure has helped you identify which Cisco IP Phones are right for your business. If you have questions about any of our endpoint solutions, please contact your local Cisco representative or authorized Cisco reseller.
For more information about any of the products discussed in this brochure, please visit the following websites:

- Cisco SIP Phone 3900 Series
  https://www.cisco.com/go/ipphones/3900

- Cisco IP Phones 6900 Series
  https://www.cisco.com/go/ipphones/6900

- Cisco IP Phone 7800 Series
  https://www.cisco.com/go/ipphone/7800

- Cisco IP Phones 7900 Series
  https://www.cisco.com/go/ipphones/7900

- Cisco IP Phones 8800 Series
  https://www.cisco.com/go/ipphones/8800

- Cisco ATA 190 Analog Telephone Adaptor