Cisco IP Phone 7800 Series

The Cisco® IP Phone 7800 Series is a cost-effective, high-fidelity voice communications portfolio designed to improve your organization's people-centric communications, while reducing your operating costs.

It combines an attractive new ergonomic design with "always-on" reliability and secure encrypted communications. The Cisco® IP Phone 7800 Series delivers advanced IP Telephony features and crystal clear wideband audio performance to deliver an easy-to-use, full-featured voice communications experience on Cisco on-premises and hosted infrastructure platforms and third party hosted call control.

The Cisco® IP Phone 7800 Series introduces four models to the Cisco IP Phone portfolio. From left-to-right (Figure 1), they are:

- Cisco IP Phone 7811 supporting one line (available in charcoal only)
- Cisco IP Phone 7821 supporting two lines (available in charcoal and white)
- Cisco IP Phone 7841 supporting four lines (available in charcoal and white)
- Cisco IP Phone 7861 supporting sixteen lines (available in charcoal and white)

Figure 1. Cisco IP Phone 7800 Series



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The line keys on each model are fully programmable. You can set up keys to support either lines, such as directory numbers, or call features like speed dialing. You can also boost productivity by handling multiple calls for each directory number, using the multi-call per-line appearance feature. Tri-color LEDs on the line keys support this feature and make the phone simpler and easy to use.

Fixed function keys on all models give you one-touch access to service, messaging, directory, hold/resume, transfer, and conference features. A full-duplex speakerphone lets you set up clear multi-party conferences for flexible, productive collaboration.

The Cisco IP Phone 7800 Series sets a new standard in usability and delivers a context-sensitive user experience. It features a high-resolution 3.5” (396x162) greyscale display with white backlighting on the IP Phone 7821, 7841 and 7861, and a 3.2” (384 x106) display without backlighting on IP Phone 7811, for easy reading. Localized language support, including right-to-left onscreen text, meets the needs of global users.

The Cisco IP Phone 7800 Series is also more energy-efficient and eco-friendly, to support your green initiatives. Each phone supports Power-over-Ethernet (PoE) Class 1 and Cisco’s EnergyWise™, and is Energy Star certified. A standard power-save option is available on the IP Phone 7821, 7841 and 7861 to reduce power consumption during off-hours, save money and maximize energy efficiency.

The IP Phone 7800 Series portfolio is ideal for any mid-sized to large enterprise company that wants to update its phone system from a traditional analog or digital-based system to an IP Communications system. It’s also an excellent choice if you’re seeking to expand your voice communications support with your current Cisco Unified Communications solution. Small businesses who have interest in the Cisco IP Phone 7800 Series, but have investment in or are considering third party hosted call control services, are also candidates for the IP Phone 7800 Series.

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Features and Benefits

Table 1 lists features and benefits of the Cisco® IP Phone 7800 Series.

Table 1. Features and Benefits

Features	Benefits
Hardware Features	
Ergonomic design	• The phone offers an easy-to-use interface and provides a traditional telephony-like user experience.
Graphical display	• White backlit, greyscale, 3.5” 396×162 pixel-based display on the IP Phone 7821, 7841 and 7861. • Non-backlit, greyscale, 3.28” 384×106 pixel-based display on the IP Phone 7811. • Provide scrollable access to calling features and text-based XML applications.
Handset	• The handset is a standard wideband-capable audio handset (connects through an RJ-9 port) for the IP Phone 7821, 7841 and 7861. • The default handset is a standard narrowband-capable audio handset (connects through an RJ-9 port) for the IP Phone 7811, and wideband on handset is available with purchase of additional wideband handset. • The handset is hearing aid-compatible (HAC) and meets Federal Communications Commission (FCC) loudness requirements for the Americans with Disabilities Act (ADA). You can achieve Section 508 loudness requirements by using industry-standard inline handset amplifiers such as Walker Equipment W-10 or CE-100 amplifiers. The dial pad is also ADA-compliant. • The narrowband handset (for the IP Phone 7811) produces a magnetic field that attracts small metallic objects such as pins and staples. To avoid possible injuries do not keep small metallic objects close to the handset.
Headset	• The analog headset jack is a standard wideband-capable RJ-9 audio port for the IP Phone 7821, 7841, and 7861.
Backlit Indicator	• The phone supports backlit indicators for the audio path keys (handset, headset and speakerphone), select key, line keys, and message waiting. • Headset key is not available on the IP Phone 7811.
Volume control	• A volume-control toggle provides easy decibel-level adjustments of the handset, monitor speaker, and ringer.
Full duplex speakerphone	• Full-duplex speakerphone allows gives you flexibility in placing and receiving calls. For added security, the audible dual tone multifrequency (DTMF) tones are masked when the speakerphone mode is used.
Bezel	• The IP Phone 7821, 7841 and 7861 include a default black bezel (replaceable), and an optional silver bezel is also available separately. • The IP Phone 7811 is available with a black bezel.
Dual-position foot stand	• The display is easy to view and the buttons and keys are easy to use. The two-position foot stand supports viewing angles of 30 degrees and 45 degrees; you can remove the foot stand for wall mounting, with mounting holes located on the base of the phone. (IP Phone 7821, 7841 and 7861) • Only 1 foot-stand position (45 degrees) is supported on the IP Phone 7811.
Wall-mountable	• The phone can be installed on a wall using optional wall-mount kit (available separately).
Electronic hook switch	• The hookswitch can be controlled electronically with a third party headset connected to the auxiliary port for the IP Phone 7821, 7841, and 7861.
Keys	• The phone has the following keys ◦ Line keys ◦ Soft-keys ◦ Two-way navigation and select keys ◦ Hold/Resume, Transfer and Conference keys ◦ Messaging, Service and Directory keys ◦ Standard key pads ◦ Volume control toggle key ◦ Speakerphone, headset and mute keys (Headset key is not available on the IP Phone 7811)
Ethernet cables	• The IP Phone 7811, 7821, 7841, and 7861 ◦ Category 3/5/5e/6 for 10-Mbps cables with 4 pairs ◦ Category 5/5e/6 for 100-Mbps cables with 4 pairs • The IP Phone 7841 ◦ Category 5/5e/6 for 1000-Mbps cables with 4 pairs

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Features	Benefits
Power Features	
IEEE PoE class 1	• The phone supports IEEE 802.3af PoE (Class 1); power consumption does not exceed 3.84 watts.
AC Power Adapter	• Cisco power cube 3 (CP-PWR-CUBE-3=) and Cisco power adapter 3 (CP-PWR-ADPT-3) are used as standard Cisco IP Phone Power Supplies for non-PoE deployments.
Cisco power injector	• The IP Phone 7811, 7821 and 7861 are compatible with Cisco Unified IP Phone Power Injector (CP-PWR-INJ), and 7841 is compatible with Cisco Aironet Power Injector (AIR-PWRINJ5=).
Call-Control Support	
Cisco Unified Communications Manager	• 8.5.1 • 8.6.2 • 9.1.2 • 10.x and later
Cisco Business Edition 6000	• 8.6.2 • 9.1.2 • 10.x and later
Cisco Hosted Collaboration Solution	• 8.6.2 and later (using supported UCM versions above)
Cisco Unified Survivable Remote Site Telephony	• 8.x and later

Licensing

The Cisco IP Phone 7811 and 7821 require a Basic User Connect License (UCL) in order to connect to Cisco Unified Communications Manager. The Cisco IP Phone 7841 and 7861 require an Enhanced User Connect License (UCL) in order to connect to Cisco Unified Communications Manager.

Product Specifications

Table 2 lists the features and specifications of The Cisco® IP Phone 7800 Series.

Table 2. Features and Specifications

Features	Specifications
Signaling protocol support	• Session Initiation Protocol (SIP)
Codec support	• G.711a/μ, G.722, G.729a, iLBC
Key call features support	• + Dialing (E.164) • Abbreviated dial • Adjustable ringing and volume levels • Adjustable display contrast • Agent greeting • Auto-answer • Auto-detection of headset (Not available on the IP Phone 7811) • Busy Lamp Field (BLF) (Not available on the IP Phone 7811) • Call back • Call forward • Call history • Call park • Call Pickup • Call timer • Call waiting • Caller ID • cBarge • Corporate directory • Conference • Cross Cluster Extension Mobility (EMCC)

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Features	Specifications
	• Dial from the list • Direct transfer • Do not disturb • Extension Mobility (EM) • Forced access codes and client matter codes • Group call pickup • Hold/resume • Immediate divert • Intercom (Not available on the IP Phone 7811) • Join (Not available on the IP Phone 7811) • Message-waiting indicator • Meet me conference • Mobility • Music on hold • Mute • Network profiles (automatic) • On- and off-network distinctive ringing • Personal directory • Privacy • Private Line Automated Ringdown (PLAR) • Redial • Ring tone per line appearance • Shared line • Silent monitoring and recording • Speed dial • Time and date display • Transfer • Voicemail • Whisper coaching
Language support	• Arabic (Arabic Area) • Bulgarian (Bulgaria) • Catalan (Spain) • Chinese (China) • Chinese (Hong Kong) • Chinese (Taiwan) • Croatian (Croatia) • Czech (Czech Republic) • Danish (Denmark) • Dutch (Netherlands) • English (United Kingdom) • Estonian (Estonia) • French (France) • Finnish (Finland) • German (Germany) • Greek (Greece) • Hebrew (Israel) • Hungarian (Hungary) • Italian (Italy) • Japanese (Japan) • Latvian (Latvia) • Lithuanian (Lithuania) • Korean (Korea Republic) • Norwegian (Norway) • Polish (Poland) • Portuguese (Portugal) • Portuguese (Brazil)

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Features	Specifications
	• Romanian (Romania) • Russian (Russian Federation) • Spanish (Columbia) • Spanish (Spain) • Slovak (Slovakia) • Swedish (Sweden) • Serbian (Republic of Serbia) • Serbian (Republic of Montenegro) • Slovenian (Slovenia) • Thai (Thailand) • Turkish (Turkey)
Multiple ring tones	• The phone supports user-adjustable ring tones.
Directories	• The phone identifies incoming messages and categorizes them for users on the screen. This makes it fast and easy to return calls using direct dial-back capability. The corporate directory integrates with the Lightweight Directory Access Protocol (LDAP) standard directory.
Quality-of-service (QoS) options	• The phone supports CDP and 802.1Q/p standards, and can be configured with an 801.1Q VLAN header containing the VLAN ID overrides configured by the Admin VLAN ID.
Security	• Certificates • Image authentication • Device authentication • File authentication • Signaling authentication • Media encryption using Secure Real-Time Transfer Protocol (SRTP) using AES-128 • Signaling encryption using Transport Layer Security (TLS) Protocol using AES-128 or AES-256 • Encrypted configuration files • 802.1X authentication • Cryptography
Configuration options	• The user can configure IP address assignment statically or through the DHCP client.
Physical dimensions (H×W×D)	• IP Phone 7811: 207 x 195 x 33mm (exclude foot stand) • IP Phone 7821: 207 x 206 x 28mm (exclude foot stand) • IP Phone 7841: 207 x 206 x 28mm (exclude foot stand) • IP Phone 7861: 207 x 265 x 28mm (exclude foot stand)
Weight	• IP Phone 7811: 806g • IP Phone 7821: 867g • IP Phone 7841: 868g • IP Phone 7861: 1053g
Display	• IP Phone 7821, 7841, 7861: 3.5” 396×162 pixels • IP Phone 7811: 3.28” 384×106 pixels
Ethernet switch	• The phone has a 10/100BASE-T (The Cisco® IP Phone 7811, 7821 & 7861) or a10/100/1000BASE-T (The Cisco® IP Phone 7841) Ethernet connection through two RJ-45 ports, one for the LAN connection and the other for a downstream Ethernet device connection like a PC.
Phone casing composition	• Polycarbonate acrylonitrile butadiene styrene (ABS) textured plastic.
Power requirements	• The phone is an interoperable IEEE 802.3af PoE (Class 1 device); 48 VDC is required; it can be supplied locally at the desktop using an optional AC-to-DC power supply (CP-PWR-CUBE-3=). Use of the power supply also requires the use of one of the corresponding AC country cords.
Operational temperature	• 32 to 104°F (0 to 40°C)
Nonoperational temperature shock	• 14 to 140°F (-10 to 60°C)
Humidity	• Operating 10% to 90%, non-condensing • Non-operating 10% to 95%, non-condensing
Cosmetic	• Cisco cosmetic class A

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Features	Specifications
Certification and compliance	• Regulatory Compliance ◦ CE Markings per directives 2004/108/EC and 2006/95/EC • Safety ◦ UL 60950 Second Edition ◦ CAN/CSA-C22.2 No. 60950 Second Edition ◦ EN 60950 Second Edition (including A11 & A12) ◦ IEC 60950 Second Edition (including A11 & A12) ◦ AS/NZS 60950 ◦ GB4943 • EMC - Emissions ◦ 47CFR Part 15 (CFR 47) Class B ◦ AS/NZS CISPR22 Class B ◦ CISPR22: 2005 w/Amendment 1: 2005 Class B ◦ EN55022: 2006 w/Amendment 1: 2007 Class B ◦ ICES003 Class B ◦ VCCI Class B ◦ EN61000-3-2 ◦ EN61000-3-3 ◦ KN22 Class B • EMC - Immunity ◦ EN55024 ◦ CISPR24 ◦ EN60601-1-2 ◦ KN24 ◦ Armadillo Light • Telecom ◦ FCC Part 68 HAC ◦ CS-03-HAC ◦ AS/ACIF S004 ◦ AS/ACIF S040 ◦ NZ PTC 220 ◦ Industry Standards: TIA 810 and TIA 920 ◦ Industry Standards: IEEE 802.3 Ethernet, IEEE 802.3af and 802.3at

Product Specifications

Table 3 gives ordering information for the phone and its accessories.

Table 3. Ordering Information

Product Number	Description
CP-7811-K9=	• Cisco IP Phone 7811
CP-7821-K9=	• Cisco IP Phone 7821
CP-7841-K9=	• Cisco IP Phone 7841
CP-7861-K9=	• Cisco IP Phone 7861
CP-7821-W-K9=	• Cisco IP Phone 7821, White
CP-7841-W-K9=	• Cisco IP Phone 7841, White
CP-7861-W-K9=	• Cisco IP Phone 7861, White
CP-DX-HS-NB=	• Spare Narrowband Handset for Cisco IP Phone 7811
CP-DX-HS=	• Spare Wideband Handset for Cisco IP Phone 7800 Series
CP-DX-W-HS=	• Spare White Wideband Handset for Cisco IP Phone 7800 Series
CP-7800-HS-CORD=	• Spare Handset Cord for Cisco IP Phone 7800 Series
CP-DX-W-CORD=	• Spare White Handset Cord for Cisco IP Phone 7800 Series

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Product Number	Description
CP-7800-HS-HOOK=	• Spare Handset Hook for Cisco IP Phone 7800 Series, 20 Pieces
CP-7811-WMK=	• Spare Wallmount Kit for Cisco IP Phone 7811
CP-7800-WMK=	• Spare Wallmount Kit for Cisco IP Phone 7800 Series
CP-7861-WMK=	• Spare Wallmount Kit for Cisco IP Phone 7861
CP-7811-FS=	• Spare Foot stand for Cisco IP Phone 7811
CP-7800-FS=	• Spare Foot stand for Cisco IP Phone 7800 Series
CP-7861-FS=	• Spare Foot stand for Cisco IP Phone 7861
CP-7821-B-BEZEL=	• Spare Black Bezel for Cisco IP Phone 7821
CP-7821-S-BEZEL=	• Spare Silver Bezel for Cisco IP Phone 7821
CP-7841-B-BEZEL=	• Spare Black Bezel for Cisco IP Phone 7841
CP-7841-S-BEZEL=	• Spare Silver Bezel for Cisco IP Phone 7841
CP-7861-B-BEZEL=	• Spare Black Bezel for Cisco IP Phone 7861
CP-7861-S-BEZEL=	• Spare Silver Bezel for Cisco IP Phone 7861
CP-PWR-CUBE-3	• Cisco Power Cube 3
CP-PWR-CORD-AP=	• Power Cord Asia Pacific
CP-PWR-CORD-AR=	• Power Cord Argentina
CP-PWR-CORD-AU=	• Power Cord Australia
CP-PWR-CORD-BZ=	• Power cord for Brazil
CP-PWR-CORD-CE=	• Power Cord European
CP-PWR-CORD-CN=	• Power Cord China
CP-PWR-CORD-JP=	• Power Cord Japan
CP-PWR-CORD-NA=	• Power Cord North America
CP-PWR-CORD-SW=	• Power Cord Switzerland
CP-PWR-CORD-UK=	• Power Cord United Kingdom
CP-PWR-ADPT-3-AR=	• Cisco Power Adapter 3 with Argentina Clip
CP-PWR-ADPT-3-AU=	• Cisco Power Adapter 3 with Australia Clip
CP-PWR-ADPT-3-BZ=	• Cisco Power Adapter 3 with Brazil Clip
CP-PWR-ADPT-3-CN=	• Cisco Power Adapter 3 with China Clip
CP-PWR-ADPT-3-EU=	• Cisco Power Adapter 3 with European Clip
CP-PWR-ADPT-3-IN=	• Cisco Power Adapter 3 with India Clip
CP-PWR-ADPT-3-KR=	• Cisco Power Adapter 3 with Korea Clip
CP-PWR-ADPT-3-NA=	• Cisco Power Adapter 3 with North America Clip
CP-PWR-ADPT-3-UK=	• Cisco Power Adapter 3 with United Kingdom Clip

Warranty

The Cisco® IP Phone 7800 Series are covered by a Cisco standard 1-year replacement warranty.

Cisco Unified Communications Services

Cisco and our certified partners can help you set up a secure, dependable Cisco Unified Communications solution, meeting aggressive deployment schedules and accelerating business advantage. Cisco's portfolio of services is based on proven methodologies for unifying voice, video, data, and mobile applications on fixed and mobile networks.

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More Information

For additional details on the Cisco® IP Phone 7800 Series, go to https://www.cisco.com/go/ipphones/7800.

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