

Cisco 7800 Series IP Phone Datasheet



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OVERVIEW

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)

APPEARANCE

Figure 1. Cisco IP Phone 7800 Series



KEY FEATURES AND BENEFITS

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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	
Power Features		
IEEE PoE class 1	• The phone supports IEEE 802.3af PoE (Class 1); power consumption does not exceed 3.84 watts.	
Cisco power cube 3	• This power cube is used as a standard Cisco IP Phone Power Supply 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	• 8.5.1	
Communications	• 8.6.2	
Manager	• 9.1.2	
	• 10.x and later	
Cisco Business Edition	• 8.6.2	
6000	• 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	

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)
	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

PRODUCT SPECIFICATIONS OF CISCO[®] IP PHONE 7800 SERIES

	 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) Korean (Korea Republic) Norwegian (Norway) Polish (Poland) Portuguese (Brazil)

	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)	• The phone supports CDP and 802.1Q/p standards, and can be
options	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	 IP Phone 7811: 207 x 195 x 33mm (exclude foot stand)
(H×W×D)	• 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 $Cisco \circledast$ 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	• 14 to 140°F (-10 to 60°C)
temperature shock	
Humidity	Operating 10% to 90%, non-condensing
	Non-operating 10% to 95%, non-condensing
Cosmetic	Cisco cosmetic class A
Certification and	Regulatory Compliance
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

CISCO[®] IP PHONE 7800 SERIES BASIC ORDERING INFORMATION

Product Number	Description
<u>CP-7811-K9</u>	Cisco IP Phone 7811
<u>CP-7821-K9</u>	Cisco IP Phone 7821
<u>СР-7841-К9</u>	Cisco IP Phone 7841
<u>CP-7861-K9</u>	Cisco IP Phone 7861
СР-7821-W-К9=	Cisco IP Phone 7821, White
СР-7841-W-К9=	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

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

SOURCES

https://www.cisco.com/c/en/us/products/collateral/collaboration-endpoints/unified-ip-phone-7800-series/data-sheet-c78-729488.html