

Cisco Unified Wireless IP Phone 7921G Version 1.0(2)

Q. What is the Cisco[®] Unified Wireless IP Phone 7921G?

- **A.** This phone is a second-generation Cisco Systems[®] wireless IP phone that now supports dual-band 802.11a/b/g radios, a speakerphone, and has a high-resolution color display. It has dedicated volume and mute buttons, and an application button that supports Push-to-talk via XML. The phone is also Cisco Compatible Extensions (CCX) Version 4.0 compliant.
- Q. Which Cisco Unified CallManager release is required for the Cisco Unified Wireless IP Phone 7921G?
- **A.** This phone requires Cisco Unified CallManager Release 4.1, 4.2, 5.0, or later, using the Skinny Client Control Protocol (SCCP).
- Q. Is the Cisco Unified Wireless IP Phone 7921G supported on Cisco Unified CallManager Express and Cisco Unified Survivable Remote Site Telephony (SRST)?
- A. Yes, it is supported on Cisco Unified CallManager Express 4.1 and Cisco Unified SRST 4.1.
- Q. Which access points are supported for use with the Cisco Unified Wireless IP Phone 7921G?
- **A.** The following access points are supported:
 - Cisco Aironet[®] 350 Series Access Point
 - · Cisco Aironet 1100 Series Access Point
 - Cisco Aironet 1130 AG Access Point
 - · Cisco Aironet 1200 Series Access Point
 - Cisco Aironet 1240 AG Access Point
 - · Cisco Aironet 1300 Series Access Point
 - Cisco Aironet 1000 Series Lightweight Access Point

Q. What are the wireless characteristics of the Cisco Unified Wireless IP Phone 7921G?

- **A.** The phone uses the IEEE 802.11a, 802.11b, and 802.11g wireless access protocols. It supports the following frequency bands and operating channels:
 - FCC:
 - o 2.412-2.462 GHz; 11 channels
 - 5.15–5.25 GHz (Information Infrastructure [UNII]-1), 5.25–5.35 GHz (UNII-2), 5.725–
 5.825 GHz (UNII-3); 12 channels
 - 5. 47–5.725 GHz; 11 channels
 - ETSI:
 - 2.412–2.472 GHz; 13 channels
 - 5.15–5.725 GHz; 19 channels
 - Japan :
 - 2.412–2.472 GHz; 13 channels Orthogonal Frequency Division Multiplexing (ODFM)

- 2.412–2.484 GHz; 14 channels Complementary Code Keying (CCK)
- 5.15–5.725 GHz; 19 channels
- World:
 - Uses 802.11d to identify band ranges and channels

Q. What is the range of a Cisco Unified Wireless IP Phone 7921G from an access point?

A. The ranges and actual throughput vary based on numerous environmental factors so individual performance may differ. Table 1 lists the ranges from measured open-site range testing.

Table 1. Throughput Ranges

802.11a	802.11b	802.11g
6 Mbps: 610 ft (186m)	1 Mbps: 1,027 ft (313m)	6 Mbps: 722 ft (220m)
9 Mbps: 610 ft (186m)	2 Mbps: 951 ft (290m)	9 Mbps: 656 ft (200m)
12 Mbps: 558 ft (170m)	5.5 Mbps: 853 ft (260m)	12 Mbps: 623 ft (190m)
18 Mbps: 541 ft (165m)	11 Mbps: 787 ft (240m)	18 Mbps: 623 ft (190m)
24 Mbps: 508 ft (155m)		24 Mbps: 623 ft (190m)
36 Mbps: 426 ft (130m)		36 Mbps: 492 ft (150m)
48 Mbps: 328 ft (100m)		48 Mbps: 410 ft (125m)
54 Mbps: 295 ft (90m)		54 Mbps: 394 ft (120m)

Q. What quality-of-service (QoS) features does the Cisco Unified Wireless IP Phone 7921G support?

A. This phone supports 802.11e -- Traffic Specification (TSPEC), Enhanced Distributed Channel Access (EDCA), and QoS Basic Service Set (QBSS).

Q. Which wireless security features can be implemented with the Cisco Unified Wireless IP Phone 7921G?

- **A.** This phone supports a comprehensive list of wireless security features as follows:
 - · Authentication:
 - Cisco Wireless Security Suite IEEE 802.1x
 - · Lightweight Extensible Authentication Protocol (LEAP) Authentication
 - Extensible Authentication Protocol Flexible Authentication via Secure Tunneling (EAP-FAST)
 - 802.11i (802.1x Authentication + TKIP Encryption, 802.1x Authentication + AES Encryption)
 - Cisco Centralized Key Management (CCKM)
 - Encryption:
 - 40- and 128-bit static Wired Equivalent Privacy (WEP)
 - Temporal Key Integrity Protocol (TKIP) and Message Integrity Check (MIC)
 - Advanced Encryption Standard (AES)

- **Q.** Is a Cisco Unified CallManager or Cisco Unified CallManager Express user license required?
- **A.** Yes. A Cisco Unified CallManager or Cisco Unified CallManager Express user license is required.
- Q. Which codecs are supported by the Cisco Unified Wireless IP Phone 7921G?
- A. The G.711a, G.711u, G.729a, and G.729ab audio compression codecs are supported.
- Q. How long is the battery life on the Cisco Unified Wireless IP Phone 7921G?
- **A.** Two types of batteries are available for this phone. The standard lithium-ion (Li-ion) battery provides up to 10 hours of talk time OR 80 hours of standby. The extended Li-ion battery provides up to 12 hours of talk time OR 100 hours of standby. The actual battery life varies based on environmental factors and the display timeout option selected.
- Q. How does the Cisco Unified Wireless IP Phone 7921G optimize battery life?
- **A.** This phone uses two power save modes—Unscheduled Automatic Power Save Delivery (U-APSD) and Power Save Poll (PS-Poll)—to optimize battery life.
- Q. Does the Cisco Unified Wireless IP Phone 7921G have a speakerphone?
- A. Yes.
- Q. Which languages are supported by the Cisco Unified Wireless IP Phone 7921G?
- **A.** The following languages are supported initially: Catalan, Danish, Dutch, English, Finnish, French, German, Italian, Japanese, Norwegian, Portuguese, Spanish, and Swedish.
- Q. Will the Cisco Unified Wireless IP Phone 7921G support additional languages in the future?
- **A.** Yes, this phone will support additional languages in the next maintenance release.
- Q. How many lines can be configured on the Cisco Unified Wireless IP Phone 7921G?
- **A.** This phone can have up to six line appearances. These can be divided between extensions or speed dials much like the Cisco Unified IP Phone 7961G.
- Q. What standard calling features are supported on the Cisco Unified Wireless IP Phone 7921G?
- A. The following features are supported (feature support depends on the Cisco Unified CallManager version):
 - · Abbreviated dialing
 - Auto answer
 - Barge
 - · Call back
 - Call forward
 - · Call history lists
 - Call park
 - Call pickup
 - · Call waiting
 - Caller ID
 - cBarge
 - Corporate directory

- Conference
- Direct transfer
- · Fast dial service
- · Group call pickup
- Hold
- Immediate divert
- Join
- Malicious caller ID
- · Message waiting indicator
- · Meet-me conference
- Multi level precedence and preemption (MLPP)
- · Music on hold
- Mute
- Network profiles (automatic)
- OPickUp
- · Personal directory
- Privacy
- Redial
- Service URL
- Shared line
- Transfer

Q. What accessories will be available for the Cisco Unified Wireless IP Phone 7921G?

- A. Available accessories include a standard Li-ion battery, extended Li-ion battery, holster carry case, leather carry case, USB cable, desktop charger with speakerphone, multi-charger, shoulder strap for leather carry case, and lock set for phone and desktop charger. There are also third-party carry cases available for the Cisco Unified Wireless IP Phone 7921G: zCover (http://www.zcover.com) makes a silicon carry case and System Wear (http://www.systemwear.com) makes a thermoformed heavy-duty polymer carry case. Both the zCover and System Wear carry cases can improve the durability of the phone.
- Q. What types of headsets are supported on the Cisco Unified Wireless IP Phone 7921G?
- **A.** This phone has a 2.5-mm (four-conductor tri-band) connector that can accommodate a Nokia-compatible headset. Please refer to http://www.plantronics.com/cisco for a list of headsets that are supported.
- Q. Can the Cisco Unified Wireless IP Phone 7920 Multi-Charger be used for the Cisco Unified Wireless IP Phone 7921G?
- **A.** No, there will be different multi-charger to accommodate the different form factor.
- **Q.** How many phones and batteries will the Cisco Unified Wireless IP Phone 7921G Multi-Charger charge simultaneously?
- **A.** This multi-charger can charge six phones and six batteries simultaneously. The unit can also be mounted on a desk or on the wall.

- Q. Can any of the Cisco Unified Wireless IP Phone 7920 accessories be reused with the Cisco Unified Wireless IP Phone 7921G?
- **A.** No, the Cisco Unified Wireless IP Phone 7921G has a different form factor and different connector than the Cisco Unified Wireless IP Phone 7920, so none of the accessories can be reused.
- Q. Does the Cisco Unified Wireless IP Phone 7921G desktop charger have more functions than the Cisco Unified Wireless IP Phone 7920 desktop charger?
- **A.** Yes. Both chargers can charge the phone and an extra battery, but the Cisco Unified Wireless IP Phone 7921G desktop charger also has an integrated speakerphone.
- Q. What are the major differences between the Cisco Unified Wireless IP Phone 7921G and the Cisco Unified Wireless IP Phone 7920?
- **A.** Table 2 summarizes the differences between the two phones.

Table 2. Differences Between the Cisco Unified Wireless IP Phone 7921G and the Cisco Unified Wireless IP Phone 7920

	Cisco Unified Wireless IP Phone 7920	Cisco Unified Wireless IP Phone 7921G
Radio	Single-band 802.11b radio	Dual-band 802.11a/b/g radios
Display	1.75 in. (4.4 cm) 128 x 80 black/white	2 in. (5 cm) 176 x 220 color
Dedicated buttons	No	Volume control, mute, and application button that supports Push-to-talk via XML
Push-to-talk (PTT) support on headset	No	Yes—via XML support
Soft keys	Two	Two
Antenna	Single	Dual—diversity in 5 GHz band
Speakerphone	No	Yes
Battery life	Standard: Up to 30 hrs standby OR 3.5 hrs talk time	Standard: Up to 80 hrs standby OR 10 hrs talk time
	Extended: Up to 40 hrs standby OR 4.25 hrs talk time	Extended: Up to 100 hrs standby OR 12 hrs talk time
Navigation keys	Four-way	Five-way
Ringer and speaker	Integrated	Separate
Ringing and message waiting indicator LED	No	Yes
Vibrate alert	Yes	Yes
Backlit keypad	Yes (white)	Yes (white)
Headset	2.5 mm (four conductor tri-band)	2.5 mm (four-conductor tri-band)
USB connector	Yes	Yes
Charging from USB	No	Yes
Dimensions (H x W x D)	5.2 x 2.1 x 1.0 in. (13.2 x 5.3 x 2.5 cm)	5.0 x 2.1 x 1 in. (12.9 x 5.3 x 2.5 cm)
Weight	4.8 oz (136.1 g)	5 oz (145 g)
Integrated speakerphone in desktop charger	No	Yes
Latex free	No	Yes
Lanyard hole	No	Yes
Protocol	SCCP	SCCP
Operating system	VxWorks	Linux
Cisco Unified CallManager	Cisco Unified CallManager Releases 3.3, 4.0, 4.1, 4.2, and 5.0 and later	Cisco Unified CallManager Releases 4.1, 4.2, and 5.0 and later
Cisco Unified CallManager Express	Cisco Unified CallManager Express Releases 3.2 and 3.3 and later	Cisco Unified CallManager Express Release 4.1 and later

Cisco Unified SRST	Cisco Unified SRST Release 2.0 and later	Cisco Unified SRST Release 4.1 and later
Cisco Compatible Extensions	Cisco Compatible Extensions Version 2.0	Cisco Compatible Extensions Version 4.0
Authentication	LEAP, EAP-FAST, 802.11i (802.1x Authentication + TKIP Encryption), and CCKM	LEAP, EAP-FAST, 802.11i (802.1x Authentication + TKIP Encryption, 802.1x Authentication + AES Encryption), and CCKM
Encryption	WEP (40/128 bit) and TKIP/MIC	WEP (40/128 bit), TKIP/MIC, and AES
QoS	QoS Basic Service Set (QBSS)	802.11e—Traffic Specification (TSPEC), Enhanced Distributed Channel Access (EDCA), and QBSS
Talk-time optimization	No	U-APSD and PS-Poll
Radar detection	-	Dynamic frequency selection (DFS) and transmit power control (TPC) according to 802.11h
World mode support according to 802.11d	No	Yes
Voice security features	No	Certificates; image, device, file, and signaling authentication; secure Cisco Unified SRST; media encryption using Secure Real-Time Protocol (SRTP); signaling integrity and encryption (Transport Layer Security [TLS] Protocol); Certificate Authority Proxy Function (CAPF); secure profiles; and encrypted configuration files
Extensible Markup Language (XML)	Yes	Yes
Configuration Webpage	Read-only	GUI for configuration
Syslog	Manual	Automatic

- Q. When is the Cisco Unified Wireless IP Phone 7920 going to go to end-of-life status?
- **A.** There is currently no plan to move the Cisco Unified Wireless IP Phone 7920 to end-of-life status.
- **Q.** Is there a program for customers to migrate from the Cisco Unified Wireless IP Phone 7920 to the Cisco Unified Wireless IP Phone 7921G?
- **A.** Yes, there is a trade-in program through the Cisco Technology Migration Program.
- Q. Is the Cisco Unified Wireless IP Phone 7921G more durable than the Cisco Unified Wireless IP Phone 7920?
- A. Yes, the drop specification for the Cisco Unified Wireless IP Phone 7921G is higher.
- **Q.** Is Push-to-talk (PTT) natively supported on Cisco Unified CallManager or does it require a third-party application and server?
- **A.** PTT is not supported natively on Cisco Unified CallManager. To support PTT, the Cisco Unified Wireless IP Phone 7921G relies on support via an XML application.
- Q. How is PTT different on the Cisco Unified Wireless IP Phone 7921G compared to the Cisco Unified Wireless IP Phone 7920?
- **A.** The Cisco Unified Wireless IP Phone 7921G has a dedicated application button that supports PTT via XML; the Cisco Unified Wireless IP Phone 7920 uses soft keys for PTT.
- Q. What voice security features are supported on the Cisco Unified Wireless IP Phone 7921G?
- **A.** This phone supports the following security features:
 - Certificates

- · Image authentication
- · Device authentication
- · File authentication
- · Signaling authentication
- Secure Cisco Unified SRST
- · Media encryption using SRTP
- · Signaling encryption using TLS Protocol
- CAPF
- · Secure profiles
- Encrypted configuration files
- Q. Does the Cisco Unified Wireless IP Phone 7921G have internal diversity?
- A. This phone has antenna switched diversity in the 5-GHz band, not in the 2.4-GHz band.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support radar detection?
- **A.** Yes, this phone supports the following radar detection features: DFS and TPC according to 802.11h.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support the IEC 60601-1-2 standard?
- A. Yes.
- Q. Is the Cisco Unified Wireless IP Phone 7921G Restriction of Hazardous Substances (RoHS) compliant?
- A. Yes, this phone and all its accessories are RoHS compliant.
- Q. In what ways is the Cisco Unified Wireless IP Phone 7921G more user friendly than the Cisco Unified Wireless IP Phone 7920?
- **A.** The Cisco Unified Wireless IP Phone 7921G has dedicated buttons for volume control, mute, and an application button that supports PTT via XML. It supports a speakerphone as well. This phone also has a large high-resolution color display. The user interface is more intuitive than that of the Unified Wireless IP Phone 7920 and there is no need for any soft-key scrolling.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support SIP?
- A. No, this phone supports only the SCCP protocol. Support for SIP protocol will come later.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support XML?
- **A.** Yes. In fact, several third-party vendors are building XML applications that work with the Cisco Unified Wireless IP Phone 7921G.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support remote management?
- **A.** A Web interface, accessible using a USB cable or WLAN, is available that can be used for configuration and troubleshooting.
- Q. Is the ring volume louder on the Cisco Unified Wireless IP phone 7921G compared to the volume on the Cisco Unified Wireless IP Phone 7920?
- **A.** Yes, the Cisco Unified Wireless IP Phone 7921G has separate ringer and speaker features, providing louder ring volume.

- Q. Can the Cisco Unified Wireless IP Phone 7921G be charged from a laptop?
- A. Yes, this phone can be charged from a laptop using a USB cable. However, the charge time will be longer compared to charging from the desktop charger or from the power cable plugged directly into the phone.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support the Cisco IP Contact Center (IPCC)?
- A. Yes.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support dynamic transmit power control (DTPC)?
- **A.** Yes, this phone supports up to 50 mW for CCK and 40 mW for Orthogonal Frequency Division Multiplexing (OFDM).
- Q. Does the Cisco Unified Wireless IP Phone 7921G support Cisco Communications IManager Extension Mobility?
- A. Yes.
- Q. What data rates are supported on the Cisco Unified Wireless IP Phone 7921G?
- **A.** This phone supports the following data rates:
 - 802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps
 - 802.11b: 1, 2, 5.5, and 11 Mbps
 - 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps
- Q. Is a Cisco SMARTnet[®] service agreement available for the Cisco Unified Wireless IP Phone 7921G and all its accessories?
- **A.** Cisco SMARTnet support is available for the Cisco Unified Wireless IP Phone 7921G, desktop charger, and multi-charger only. It is not available for any other accessories.
- Q. Does the Cisco Unified Wireless IP Phone 7921G have a message waiting indicator LED?
- **A.** Yes, this phone has a ring, message waiting, and charging LED.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support headset detection?
- A. Yes, this phone supports headset detection and answer.
- Q. Is Instant Messaging supported on the Cisco Unified Wireless IP Phone 7921G?
- **A.** Many XML applications can provide this support, including Cisco IP Phone Messenger using the Cisco Unified Presence Server.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support single access point mode?
- **A.** Yes, this is an optional setting that can be enabled to save battery life.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support syslog?
- A. Yes.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support ring tone selection per line appearance and on-network and off-network distinctive ringing?
- A. Yes.
- Q. How can the firmware be upgraded?
- **A.** The firmware can be upgraded over online using the Trivial File Transfer Protocol (TFTP) or the Web interface.

- Q. How large is the color display on the Cisco Unified Wireless IP Phone 7921G?
- **A.** The display is a 2-in. (5-cm) color display with 176 x 220 pixel resolution.
- Q. Does the Cisco Unified Wireless IP Phone 7921G have a lanyard hole?
- A. Yes.
- Q. Does the Cisco Unified Wireless IP Phone 7921G support Bluetooth?
- A. No, Cisco Unified Wireless IP Phone 7921G does not support Bluetooth.



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