

# Cisco DX70





#### **Product Overview**

The Cisco® DX70 offers no-compromise collaboration for every desk. It's easy to be productive with this sleek 14-inch touchscreen device featuring best-in-class high-definition (HD) video and audio. Now is the time for a delightful collaboration experience so affordable you can empower every office and home-office desktop. The DX70 offers:

- A dedicated, always-on 1080p HD video communication system
- An IP phone that registers to Cisco Unified Communications Manager (UCM) call control
- · A high-quality audio system for speakerphone and media playback
- A 14-inch 16:9 screen that provides an engaging experience for video calls
- · A multitouch capacitive touchscreen that provides an elegant and powerful user interface
- · A self-provisioning device that is simple for users to take out of the box and start using immediately
- Flexibility for administrator to limit the feature set to core collaboration features or to add features enabled by the security-enhanced Android operating system

# Features and Benefits

Table 1 lists the features and benefits of the Cisco DX70.

Table 1. Features and Benefits

Feature	Benefit
Design features	<ul> <li>Install in minutes: The DX70 is an integrated device with fully touch-based on-screen controls. Just plug in the power cable and Ethernet cable (or use Wi-Fi). With self-provisioning your device will register itself. Authenticate to complete the setup.</li> </ul>
	<ul> <li>High-definition video: With a 1920x1080 14-inch screen, an 8MP camera, and best in-class video compression, the DX70 provides engaging experiences.</li> </ul>
	The high-performance audio and acoustics system is excellent for multimedia playback.
	Touchscreen interface: The multitouch capacitive touchscreen overlay provides an elegant and efficient user interface.
	<ul> <li>All controls on screen: You can easily place calls from the screen itself. You do not need an external device. Options are also accessible while on a call to ensure the participants can stay engaged during a conversation.</li> </ul>
	<ul> <li>Document camera: You can tilt the camera housing on top of the DX70 down to allow sharing of physical content and drawings.</li> </ul>
	<ul> <li>Inclinable screen: The DX70 accommodates users who want to sit and use the device at a reclined angle to type or draw comfortably at their desk. You can easily adjust the screen angle, which provides a usable range of between 20 and 85 degrees above the desktop.</li> </ul>

Feature	Benefit
Content- sharing features	<ul> <li>Share multimedia and presentations at the touch of a button: While you are on a call, you can see your laptop or desktop PC or Mac screen and share it instantly with other participants on the call.</li> <li>Easily swap between computer and DX interface: You can swap between the monitor mode and the DX70 interface by simply pressing the "Source" button.</li> </ul>
Application features	<ul> <li>The following application features are available for administrators who want to take advantage of the expanded feature set of the DX Series:</li> <li>Cisco Intelligent Proximity for Mobile Voice: You can make calls to or from your mobile device using the DX70 audio hardware and call control. In addition, you can synchronize your contacts and call history from your mobile device to the DX70.</li> <li>WebEx® and Jabber® integration: The DX70 comes with Cisco Collaboration applications preinstalled for instant messaging, presence and web conferencing.</li> <li>Compatibility with Google Android applications: The DX70 can run any compliant Android application. Cisco does not support third-party applications directly. You should consult the application vendor and/or developer if you need application support.</li> </ul>
Performance features	<ul> <li>The system offers simultaneous HD video and content sharing.</li> <li>RGB input is compatible with all modern PC and Mac computers.</li> <li>Audio is communicated through full-duplex, wideband audio.</li> <li>Provisioning and self-configuration are easy with Cisco UCM.</li> </ul>

# **Product Specifications**

Table 2 lists the specifications of the Cisco DX70.

 Table 2.
 Product Specifications

Feature	Benefit
Components	Fully integrated unit including:  Codec  Camera  Display  Microphones and speaker  Included: Screen cleaning cloth, Ethernet cable (2.9m), and power supply
Display	<ul> <li>14-inch LCD monitor</li> <li>Resolution: 1920 x 1080 (16:9)</li> <li>AHVA display technology</li> <li>Contrast ratio: 700:1 (typical)</li> <li>Viewing cone: 89/89/89/89</li> <li>Response time: 25 ms</li> <li>Brightness: 300 cd/m2 (5 points average)</li> <li>10-point multitouch surface with capacitive sensing</li> </ul>
Supported PC input resolutions	Up to 1080p
Ergonomic design	<ul> <li>The foot stand is retractable for easy transportation.</li> <li>You can easily tilt the unit from an angle of 5° to 70° from the vertical.</li> <li>You can tilt the camera from an angle of -5° to 70° from the display.</li> <li>The main I/O panel includes a flip cover to obscure connections.</li> </ul>
Audio	<ul> <li>Audio system playback: Frequency range: 100 Hz to 15 kHz, +/-3 dB<sup>*</sup></li> <li>Audio system playback: Maximum level: 90 dB at 1w/1m<sup>*</sup></li> <li>Optimally tuned and located analog omnidirectional microphone</li> <li>* Specification based on direct measurement of the acoustic sub-system</li> </ul>
Front camera	<ul> <li>63° horizontal field of view</li> <li>38° vertical field of view</li> <li>Resolution: 1080p30</li> <li>F 2.2</li> <li>Instant focus based on face detection</li> <li>Privacy shutter</li> </ul>

Feature	Benefit
Operating	Android OS 4.1.1
system	TIONAR ATTACKS ON A REAL AND A RE
Processor	TI OMAP 4470 1.5-GHz dual-core ARM Cortex-A9 processor
Storage	8-GB eMMC NAND flash memory (embedded multimedia card; nonvolatile)
Memory	2-GB RAM; Low Power Double Data Rate Synchronous Dynamic Random-Access Memory (LPDDR2 SDRAM)
Ports and slots	<ul> <li>High-Definition Multimedia Interface (HDMI) type A port for PC or Mac video input</li> <li>HDMI type A port output (supports mirror-mode output; cannot be used simultaneously with the HDMI input)</li> <li>High-speed USB 2.0 ports:         <ul> <li>Three standard type A ports (for keyboard, mouse, headset, external camera, thumb drive, and memory stick connectivity)</li> <li>Side-mounted USB port that provides high-current (2A) charging; the two rear-mounted ports each provide 500 mA charging</li> <li>One Micro-B USB port (serial port for diagnostic and service use)</li> </ul> </li> <li>Micro Secure Digital Standard Capacity (HDSC) slot for nonvolatile storage of applications or file expansion up to 32 GB (standard-definition [SD] card speed Class 4 or later recommended)</li> <li>One 3.5-mm analog headphone and headset jack</li> </ul>
Physical buttons	<ul> <li>Cap-sense "Source" button to swap between HDMI input and the DX70 interface; button is lit when HDMI input is connected</li> <li>Cap-sense Audio Volume up/down</li> <li>Cap-sense Audio Mute</li> <li>Power/Reset/Sleep button</li> </ul>
Visual indicator	<ul> <li>Camera LED indicator (incoming calls and camera activation)</li> <li>Microphone LED indicator (mute)</li> <li>Power button LED indicator (power on, sleeping, message waiting, and error)</li> <li>"Source" button (lights when HDMI IN source is present)</li> </ul>
Physical dimensions (H x W x D)	14.84 x 13.91 x 2.45 in. (377.1 x 353.1 x 62.3 mm)
Weight	7.5 lb (3.4 kg)
Power	Rated: 3.5A at 12V maximum  Low-power standby mode  Integrated Cisco EnergyWise® support
Physical security	Kensington Security Lock Slot
Connectivity	
Ethernet	<ul> <li>An internal 2-port Cisco Ethernet switch allows for a direct connection to a 10/100/1000BASE-T Ethernet network (IEEE802.3i/802.3u/802.3ab) through an RJ-45 interface with single LAN connectivity for both the phone and a co-located PC or Mac.</li> <li>The system administrator can designate separate VLANs (IEEE 802.1Q) for the PC and phone, providing improved security and reliability of voice and data traffic.</li> </ul>
Desktop Wi-Fi Ethernet	As an alternative to wired Ethernet, the DX70 supports connection to the network with 802.11a/b/g/n Wi-Fi.
Network features	<ul> <li>Cisco Discovery Protocol</li> <li>Cisco Peer-to-Peer Distribution Protocol (PPDP)</li> <li>Session Initiation Protocol (SIP) for signaling</li> <li>Session Description Protocol (SDP)</li> <li>User Datagram Protocol (UDP) (used only for Real-Time Transport Protocol [RTP] streams)</li> <li>Dynamic Host Configuration Protocol (DHCP) client or static configuration</li> <li>Transparent secure roaming</li> <li>Gratuitous Address Resolution Protocol (GARP)</li> <li>Switch auto-negotiation</li> <li>Domain Name System (DNS)</li> <li>Web proxy (configured manually or by auto-configuration Protected Access Credential [PAC] files)</li> <li>NT LAN Manager (NTLM) and Kerberos authentication</li> <li>Trivial File Transfer Protocol (TFTP)</li> </ul>

Feature	Benefit
	Secure Hypertext Transfer Protocol (HTTPS)
	Wi-Fi management
	IPv4 configuration
	IPv6 configuration
	• VLAN
	Real-Time Control Protocol (RTCP) (provides quality-of-service [QoS] data [such as jitter, latency, and round-trip delay] on RTP streams in order to provide a better video experience)
	Secure Real-Time Transport Protocol (SRTP)
	Software port speed (manual or auto-configuration, including disablement)
	PC port speed (manual or auto-configuration, including disablement)
Bluetooth	Bluetooth 3.0 Enhanced Data Rate (EDR) Class 2 technology (up to 30-ft [10m] range)
	Human Interface Device (HID) keyboard and mouse support for adding additional input accessories
	Hands-Free Profile (HFP) for untethered headset connections and voice communications
	Phone Book Access Profile (PBAP), which enables the exchange of phone-book objects between devices
	Advanced Audio Distribution Profile (A2DP) for streaming audio
	Object Push Profile (OPP) for generic file exchange
Accessories	
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Cisco VESA mounting kit	This optional mounting kit includes an adapter that replaces the DX70 foot stand and provides mounting points in the two VESA standards (75 x 75 mm and 100 x 100 mm), allowing the use of third-party mounting solutions or the basic flush wall-mount included with the kit.
Firmware	
Version	10.2.5 firmware
Call platform	Minimum supported: Cisco UCM Versions 8.5(1), 8.6(1), and 8.6(2)
support;	• Recommended: Cisco UCM Versions 9.1.2, 10.5(1), and later
provisioning and	Minimum supported Cisco UCM for Cisco Expressway: 9.1(2) SU1
management	Minimum supported Cisco Expressway: X8.5.0
	Cisco Hosted Collaboration Solution (HCS)
	Cisco Business Edition 6000 Version 9.1 or later
Upgrading	Software upgrade of the device through Cisco UCM
process	Support for online firmware upgrades using TFTP
	HTTP firmware management
Townseture Box	
Temperature Rar	
Operating temperature	• 32 to 104°F (0 to 40°C)
Relative humidity	• 10 to 90% (noncondensing)
Storage temperature	• -4 to 140°F (-20 to 60°C)
Approvals and C	ompliance
	Directive 2006/95/EC (Low-Voltage Directive) - Standard EN 60950-1
	• Directive 2004/108/EC (EMC Directive) - Standard EN 55022, Class B - Standard EN 55024 - Standard EN 61000-3-2/-3-3
	Compliance with ETSI EN 301 489, ETSI EN 300 328, and ETSI EN 301 893
	Directive 2011/65/EU (RoHS), Directive 2009/125/EC (ErP), and Directive 2002/96/EC (WEEE)
	Approved according to UL 60950-1 and CNA/CSA C22.2 No. 60950-1-07
	Compliance with FCC CFR 47 Part 15 Class B
	Compliance with CFR 47 Part 15.247, CFR 47 Part 15.407, and 47 CFR Part 2.1093 FCC applicable KDBs
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Table 3 lists video and audio specifications, Table 4 lists software features, and Table 5 lists Wi-Fi features and specifications of the Cisco DX70.

Table 3. Video and Audio Specifications

Feature	Specifications
Video standards	H.264 and AVC (H.264/MPEG-4 Part 10 Advanced Video Coding)
Minimum bandwidth for resolution and frame rate (30 fps)	<ul> <li>CIF 352 x 288 (4:3) 64–299 kbps</li> <li>VGA 640 x 480 (4:3) 400–1500 kbps</li> <li>360p (640 x 360) 300–599 kbps</li> <li>480p (848 x 480) 600–799 kbps</li> <li>576p (1024 x 576) 800–1299 kbps</li> <li>600p (1024 x 600) 800–3000 kbps</li> <li>720p (1280 x 720) 900–1300 kbps</li> <li>1080p (1920 x 1080) 2000–4000 kbps</li> </ul>
Frame or picture format	<ul> <li>CIF (352 x 288 pixels)</li> <li>VGA (640 x 480 pixels)</li> <li>240p (432 x 240 pixels)</li> <li>360p (640 x 360 pixels)</li> <li>480p (848 x 480 pixels)</li> <li>WSVGA (1024 x 600 pixels)</li> <li>HD 720p (1280 x 720 pixels)</li> <li>HD1080p (1920 x 1080 pixels)</li> </ul>
Video features	<ul><li>On-screen layout control for video and presentation</li><li>Self-View</li></ul>
Supported HDMI input resolutions	Support for formats up to maximum 1920 x 1080 @ 60 fps (HD1080p60), including:  • 640 x 480 @ 60 fps  • 1280 x 720 @ 60 fps  • 1920 x 1080 @ 30 fps  • 1920 x 1080 @ 60 fps  Note: High-definition inputs use progressive video formats.
Audio standards	<ul> <li>Narrowband audio compression codecs: G.711a, G.711u, G.729a, G.729ab, and iLBC</li> <li>Wideband audio compression codecs: G.722, Internet Speech Audio Codec (iSAC), iLBC, and AAC-LD audio compression codecs</li> </ul>
In-call audio features	<ul> <li>Up to 16-kHz sampling rate</li> <li>100 Hz to 15 kHz loudspeaker frequency response</li> <li>Automatic static noise reduction</li> <li>Acoustic echo cancellers</li> <li>Automatic Gain Control (AGC)</li> <li>Active lip synchronization</li> </ul>
Dual stream	<ul> <li>Binary Floor Control Protocol (BFCP) (SIP) dual stream</li> <li>Support for resolutions up to 1080p (1920 x 1080)</li> </ul>

 Table 4.
 Software Features

Feature	Specifications
Android core features	<ul> <li>Fully customizable Cisco Launcher and App Tray "Home Screen" enables you to place your own application shortcuts, widgets, and folders.</li> </ul>
	• Home screen supports up to five separate screen views or pages, each with a 6 x 5 icon grid.
	Landscape-orientated applications are supported.
	On-screen keyboard is supported.

Feature	Specifications
Android bundled applications and widgets	<ul> <li>Calculator</li> <li>Calendar</li> <li>Camera</li> <li>Clock</li> <li>Contacts</li> <li>Direct dial</li> <li>Email <ul> <li>Internet Message Access Protocol (IMAP)</li> <li>Post Office Protocol 3 (POP3)</li> <li>Microsoft Exchange ActiveSync</li> </ul> </li> <li>Favorites</li> <li>Gallery</li> <li>Phone features (for example, forward all, privacy, Do Not Disturb (DND), mobility, and Self-View)</li> <li>Wallpapers (including live wallpapers)</li> <li>Web browser</li> </ul>
Google bundled applications	<ul> <li>Google Play (enabled by administrator through Cisco UCM; includes country-approved Google mobile services applications)</li> <li>Gmail</li> <li>Google settings</li> <li>Maps</li> <li>Play Books</li> <li>Play Magazines</li> <li>Play Movies</li> <li>Play Music</li> <li>Google Now</li> </ul>
Cisco bundled applications	<ul> <li>Cisco AnyConnect® Secure Mobility Client (VPN)</li> <li>Cisco Jabber IM (which offers chat and presence capabilities)</li> <li>Cisco WebEx conferencing</li> <li>Quick Contact Badge (allows you to easily collaborate with your contacts to place a call, send an email message, send an instant message (IM), or start a WebEx meeting)</li> <li>Visual Voicemail</li> </ul>
Cisco Intelligent Proximity for Mobile Voice	<ul> <li>Contact synchronization with Bluetooth-paired, Android, or iOS mobile device that supports PBAP</li> <li>Call-history synchronization to view placed or missed calls from mobile device on the DX70</li> <li>Audio path routing, which sends audio through the DX70 for a mobile device-connected call</li> </ul>
Configuration modes	<ul> <li>Enhanced, fully functional mode that enables all aspects of the phone including applications and accounts</li> <li>Simple mode that hides applications and accounts and provides only voice and video call capabilities</li> <li>Public mode based on simple mode with restrictions on user settings modifications</li> </ul>
Application deployment options and management	<ul> <li>The administrator can disable downloading of all applications on the Cisco DX650, DX70, and DX80. Specifically, the administrator can configure the DX650, DX70, and DX80 to prohibit the installation of any third-party Android applications.</li> <li>Google Play access can be administratively disabled (default). Applications from "unknown sources" can be administratively disabled (default):</li> <li>The administrator can optionally install applications using Cisco UCM with the APK file.</li> <li>With Company Photo Directory, the administrator can set up and link the directory URL image location associated with a respective user.</li> </ul>
Built-in training and setup assistance	Setup Assistant wizard (helps configure email, Jabber IM, WebEx conferencing, and voicemail account settings)
Third-party application development	Cisco Collaboration application programming interfaces (APIs) through a Software Developer Kit (SDK): <a href="https://developer.cisco.com/site/dxseries/overview/index.gsp">https://developer.cisco.com/site/dxseries/overview/index.gsp</a>
Language support	<ul> <li>Arabic, Egypt (ar_EG)</li> <li>Bulgarian, Bulgaria (bg_BG)</li> <li>Catalan, Spain (ca_ES)</li> <li>Chinese, PRC (zh_CN)</li> <li>Chinese, Taiwan (zh_TW)</li> <li>Croatian, Croatia (hr_HR)</li> </ul>

Feature	Specifications
	Czech, Czech Republic (cs_CZ)
	Danish, Denmark (da_DK)
	Dutch, Netherlands (nl_NL)
	English, Britain (en_GB)
	English, United States (en_US)
	• Finnish, Finland (fi_FI)
	• French, France (fr_FR)
	• German, Germany (de_DE)
	• Greek, Greece (el_GR)
	Hebrew, Israel (he_IL)
	Hungarian, Hungary (hu_HU)
	• Italian, Italy (it_IT)
	● Japanese (ja_JP)
	• Korean (ko_KR)
	• Latvian, Latvia (lv_LV)
	• Lithuanian, Lithuania (It_LT)
	Norwegian bokmål, Norway (nb_NO)  Direct (ALD)
	• Polish (pl_PL)
	Portuguese, Brazil (pt_BR)
	Portuguese, Portugal (pt_PT)
	• Romanian, Romania (ro_RO)
	• Russian (ru_RU)
	Serbian, Republic of Serbia (sr_RS)
	• Slovak, Slovakia (sk_SK)
	Slovenian, Slovenia (sl_Sl)
	• Spanish, Spain (es_ES)
	Swedish, Sweden (sv_SE)
	• Thai, Thailand (th_TH)
	Turkish, Turkey (tr_TR)
Calling feature	• + Dialing (ITU E.164)
support	Abbreviated dialing
	Adjustable ringing and volume levels
	Adjustable display brightness
	• Auto-answer
	Auto-detection of headset
	Barge (cBarge)
	• Callback
	• Call Chaperone
	• Call forward
	Call history lists
	Call history lists     Call park (including Discrete d Call Bark and Assisted Discrete d Call Bark)
	Call park (including Directed Call Park and Assisted Directed Call Park)
	• Call pickup
	• Call timer
	Call waiting
	• Caller ID
	Corporate directory
	Conference (ad hoc)
	Direct transfer
	Divert (iDivert)
	Do Not Disturb (DND)
	Extension Mobility service
	Fast-dial service
	Forced-access codes and client-matter codes
	Group call pickup
	Hold (and Resume)
	. in the land industrial

Feature	Specifications
	• Intercom
	International call logging
	Join (ad hoc)
	Last-number redial (LNR)
	Malicious-caller ID
	Message-waiting indicator (MWI)
	Meet-me conference
	Mobility (Cisco Mobile Connect and Mobile Voice Access)
	Music on hold (MoH)
	Mute (audio and video)
	Network profiles (automatic)
	On- and off-network distinctive ringing
	Personal directory
	PickUp
	Predialing before sending
	Privacy
	Private Line Automated Ringdown (PLAR)
	Ring tone per line appearance
	Self-View (video call)
	Service URL
	Shared line(s)
	Silent Monitoring and Recording
	Time and date display
	• Transfer (ad hoc)
	Visual Voicemail
	Voicemail
Emergency services	Emergency Calling Service dialing
Accessibility	Additional accessibility features for the vision impaired, the blind, and the hearing and mobility impaired include user-defined
features	and customizable:
	Display font size and screen brightness settings
	Touchscreen customizable touch and hold delay
	Talkback audio prompts and spoken password     Support for Explore by Touch features
Security Feature	
Hardware	Secure boot
	Secure credential storage
	Device authentication
	• File authentication and encryption
	Image authentication and encryption
	Signaling authentication
	Random bit generation
	Hardware cryptographic acceleration     They will apply the file.
	Encrypted configuration files
	Encrypted file system
Certificate management	Certificate Authority Proxy Function (CAPF) support for additional security
manayement	Manufacturer-Installed Certificates (MIC)
	Locally Significant Certificates (LSC)  A VASS Picture (PSP)  A VASS PICTURE (PSP)
	<ul> <li>X.509 Digital Certificates (DER encoded binary); both DER and Base-64 formats are acceptable for the client and server certificates; certificates with a key size of 1024, 2048, and 4096 are supported</li> </ul>
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Feature	Specifications
Network	Wireless Equivalent Protected Access 2 (WPA2) (EAP-FAST)  Wireless Equivalent Protected Access 2 (WPA2) (EAP-FAST)  Wireless Equivalent Protected Access 2 (WPA2) (EAP-FAST)  Protected Extensible Authentication Protocol - Generic Token Card (PEAP-GTC)
Media and data signaling	TLS SRTP HTTPS for clients
Enterprise access	<ul> <li>Cisco AnyConnect Secure Mobility Client</li> <li>Web Proxy (manual configuration or auto-configuration of Protected Access Credential [PAC] files)</li> <li>NTLM and Kerberos authentication</li> </ul>
Device management	<ul> <li>Remote wipe</li> <li>ActiveSync remote wipe (email, contacts, calendar, etc.)</li> <li>Self-service wipe</li> <li>Wipe after unsuccessful login attempts</li> <li>Factory reset</li> </ul>
Policy management	Password complexity Ability to disable USB Ability to disable Speakerphone Ability to disable headset Secure digital I/O (SDIO) enable/disable Bluetooth Wi-Fi Access to Android market Screen lock and automatic lock (Personal Identification Number [PIN] or password) device Android Debug Bridge (ADB)
Diagnostics	<ul> <li>The integrated Cisco Collaboration Problem Report Tool can send information directly to your system administrator when you experience problems with your phone or application (requires a configured email account)</li> <li>Log server</li> </ul>

 Table 5.
 Wi-Fi Features and Specifications

Feature	Specifications
Protocols	IEEE 802.11a, 802.11b, 802.11g, and 802.11n
Frequency bands and operating channels	<ul> <li>2.412–2.472 GHz (channels 1–13)</li> <li>5.180–5.240 GHz (channels 36–48)</li> <li>5.260–5.320 GHz (channels 52–64)</li> <li>5.500–5.700 GHz (channels 100–140)</li> <li>5.745–5.825 GHz (channels 149–165)</li> <li>Note: IEEE 802.11d is used to identify available channels.</li> </ul>
Nonoverlapping channels	<ul> <li>2.4 GHz (20-MHz channels): Up to 3 channels</li> <li>5 GHz (20-MHz channels): Up to 24 channels</li> <li>5 GHz (40-MHz channels): Up to 9 channels</li> </ul>
Operating modes	<ul> <li>Auto (default), preference to strongest received signal strength indication (RSSI) for 2.4 or 5 GHz</li> <li>2.4 GHz only</li> <li>5 GHz only</li> </ul>
Data rates	<ul> <li>802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps</li> <li>802.11b: 1, 2, 5.5, and 11 Mbps</li> <li>802.11g: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps</li> <li>802.11n: HT MCS 0, MCS 1, MCS 2, MCS 3, MCS 4, MCS 5, MCS 6, and MCS 7</li> </ul>

2.4-GHz receiver					
	EEE 802.11b:	IEEE 802.11g:		IEEE 802.11n HT20:	
sensitivity	• 1 Mbps: –95 dBm	• 6 Mbps: –89 dBm		• MCS 0: -88 dBm	
	• 2 Mbps: –93 dBm	• 9 Mbps: –89 dBm		• MCS 1: -86 dBm	
	• 5.5 Mbps: –90 dBm	• 12 Mbps: –87 dBm		• MCS 2: -84 dBm	
	• 11 Mbps: –86 dBm	• 18 Mbps: –85 dBm		• MCS 3: -81 dBm	
		• 24 Mbps: -81 dBm		<ul> <li>MCS 4: –78 dBm</li> </ul>	
		• 36 Mbps: –78 c	dBm	<ul> <li>MCS 5: –73 dBm</li> </ul>	
		• 48 Mbps: –74 c	dBm	<ul> <li>MCS 6: –71 dBm</li> </ul>	
		• 54 Mbps: –72 dBm		• MCS 7: –69 dBm	
	EEE 802.11a:	IEEE 802.11n HT20:		IEEE 802.11n HT40:	
sensitivity	• 6 Mbps: –91 dBm	• MCS 0: –91 dBm		• MCS 0: -90 dBm	
	• 9 Mbps: –91 dBm	• MCS 1: -89 dBm		• MCS 1: -87 dBm	
	• 12 Mbps: –90 dBm	• MCS 2: –86 dBm		<ul> <li>MCS 2: –85 dBm</li> </ul>	
	• 18 Mbps: –88 dBm	<ul> <li>MCS 3: –84 dB</li> </ul>	3m	• MCS 3: -81 dBm	
	• 24 Mbps: –85 dBm	<ul> <li>MCS 4: –81 dB</li> </ul>	Sm .	<ul> <li>MCS 4: –78 dBm</li> </ul>	
	• 36 Mbps: –81 dBm	<ul> <li>MCS 5: –76 dB</li> </ul>	ßm .	<ul> <li>MCS 5: –74 dBm</li> </ul>	
	• 48 Mbps: –77 dBm	<ul> <li>MCS 6: –74 dB</li> </ul>	ßm .	<ul> <li>MCS 6: –72 dBm</li> </ul>	
	• 54 Mbps: –76 dBm	• MCS 7: –72 dB	Sm .	• MCS 7: –70 dBm	
	.4 GHz:		5 GHz:		
output power	• 802.11b: Up to 16 dBm	• 802.11a: Up to		16 dBm	
	• 802.11g: Up to 16 dBm		• 802.11n HT20:	802.11n HT20: Up to 15 dBm	
	• 802.11n HT20: Up to 16 dBm		• 802.11n HT40:	Up to 15 dBm	
Antenna	• 2.4 GHz: 2.6-dBi peak gain				
	• 5 GHz: 4.0-dBi peak gain				
Access-point support	Cisco Unified Access Points:  Minimum: 7.0.240.0				
	Recommended: 7.4.121.0, 7.6.110.0, or later				
	Cisco Autonomous Access Points:				
	<ul><li>Minimum: 12.4(21a)JY</li></ul>				
	<ul> <li>Recommended: 12.4(25d)JA2 or later</li> </ul>				
	Authentication:		Encryption:		
security	Wi-Fi Protected Access (WPA) Versions 1 and 2 Personal and     Tatanaire		40- and 128-bit static WEP		
	Enterprise  ● EAP-FAST		Temporal Key Integrity Protocol (TKIP) and Message Integrity Check (MIC)		
	Protected Extensible Authentication Protocol - Microsoft Challenge Handshake Authentication Protocol Version 2		_ ·	yption Standard (AES)	
	(PEAP-MSCHAPv2)	Conorio Takar			
	Protected Extensible Authentication Protocol - Generic Token     Card (PEAP-GTC)     FARTIS				
	• EAP-TLS				
Fast secure C roaming	Cisco Centralized Key Management (Cisco CKM	1)			
QoS	• IEEE 802.11e and Wi-Fi Multimedia (WMM)				
Enhanced Distributed Channel Access (EDCA)					
	QoS Basic Service Set (QBSS)				
Radar detection D	Dynamic frequency selection (DFS) and transmit	nower control (TPC	C) according to IEEE	802 11h	

# Licensing

Phone licensing depends on the call-control platform and its policies. For the Cisco Unified Communications Manager, the Cisco DX70 requires a minimum-level Enhanced IP User Connect License (UCL). There are no special licenses plus phone bundles for tier-2 distributors. The DX70 is not supported on third-party call-control systems.

#### Warranty Information

The DX Series endpoints are covered by the Cisco 1-Year Limited Hardware Warranty. Find warranty information on Cisco.com at the <u>Product Warranties</u> page.

## **Ordering Information**

Tables 6 through 8 give ordering information to help customers understand all the components or parts they need to purchase in order to install and use the product.

To place an order, visit the Cisco Ordering Home Page. To download software, visit the Cisco Software Center.

**Table 6.** Ordering Information for Cisco DX70

Product Name	Part Number	
Cisco DX70	CP-DX70-W-K9=	
Cisco DX70, TAA version	CP-DX70-W-K9++=	

Table 7. Ordering Replacement Parts

Product Name	Part Number	
Ethernet cable, grey, 2.9m	CAB-GREY-2.9M=	
Foot stand for Cisco DX70	CP-DX70-FS=	
Power transformer for the DX70 and DX80 series	CP-PWR-CUBE-5=	

Table 8. Ordering Optional Accessories

Product Name	Part Number
Cisco DX70 VESA mounting kit	CP-DX70-VESA=
HDMI-to-HDMI cable, 3m	CAB-DX-2HDMI-3M
SPVAC-H450-W-US=	Jabra Handset 450 for Cisco - US - White
SPVAC-H450-W-TW=	Jabra Handset 450 for Cisco - Taiwan - White
SPVAC-H450-W-JP=	Jabra Handset 450 for Cisco - Japan - White
SPVAC-H450-W-EU=	Jabra Handset 450 for Cisco - EU, Australia, and NZ - White

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#### For More Information

For more information about the Cisco DX70, visit <a href="http://www.cisco.com/go/dx">http://www.cisco.com/go/dx</a> or contact your local Cisco account representative.



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