

Cisco DX80



Product Overview

Discover a delightful new approach to working that is simple-to-use and offers a no-compromise collaboration experience. Upgrade your desktop with a virtual collaboration experience so stunning you will feel as though you and other participants are in the same room. Say goodbye to desktop clutter with a sleek Cisco® DX80. Say hello to all-in-one desktop collaboration featuring high-definition (HD) video, unified communications features, a display for your laptop, and expanded capabilities. The DX80 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
- A 23-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 quickly
- Ability for administrators to use Cisco Expressway or the built-in Cisco AnyConnect® VPN for the secure connection of their remote workers
- Flexibility for administrators 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 DX80.

Table 1. Features and Benefits

Feature	Benefit
Design features	<ul style="list-style-type: none"> • Ability to install in minutes: The DX80 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. • In-person video: With a large 23-inch screen and best-in-class video and audio capabilities, the DX80 allows for life-like experiences. • Intelligent audio: With a set of microphone arrays, the DX80 comes equipped with intelligent audio, which eliminates background noise and improves the experience for the remote party. • Top-notch monitor: You can use the DX80 as an external monitor when plugged into a laptop. It has a high-contrast LED panel with a wide viewing angle and a full touch surface. • Document camera: You can tilt the camera located on top of the DX80 down to allow sharing of physical content and drawings. • Inclinable screen: The DX80 accommodates users who want to sit and use it at a reclined angle to type or draw at their desk comfortably. You can easily pull the device toward yourself; it reclines to a 40° angle to the table.
Content-sharing features	<ul style="list-style-type: none"> • Share multimedia and presentations at the touch of a button: While on a call, you can see the laptop screen and share it instantly in full HD with the on-screen control bar. • Easily swap between computer and DX interface: Swap between the monitor mode and the DX80 interface by a simple press of the "Source" button.
Application features	<p>For administrators who want to take advantage of the expanded feature set of the DX Series, the following application features are available:</p> <ul style="list-style-type: none"> • Cisco Intelligent Proximity for Mobile Voice: You can see contacts on a mobile device from within the DX80 interface, and you can hand off voice calls from the mobile to the DX80. • WebEx® and Jabber® integration • Compatibility with Google Android applications: The DX80 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.
Performance features	<ul style="list-style-type: none"> • The system offers simultaneous HD video and content sharing. • RGB input is compatible with all modern PC and Mac computers. • Audio is communicated through full-duplex, full-band audio (CD quality). • Provisioning and self-configuration are easy with Cisco UCM.

Product Specifications

Table 2 lists the specifications of the Cisco DX80.

Table 2. Product Specifications

Feature	Benefit
Components	<p>Fully integrated unit including:</p> <ul style="list-style-type: none"> • Codec • Camera • Display • Microphones and loudspeaker <p>Included: Screen cleaning cloth, HDMI cable (2m), USB cable (2m), Ethernet cable (2.9m), and power supply</p>
Display	<ul style="list-style-type: none"> • 23-inch (0.58m) LCD monitor • Resolution: 1920 x 1080 (16:9) • High-contrast IPS LED panel • Contrast ratio: 1000:1 (typical) • Viewing angle: +/-178 degrees (typical) • Response time: 5 ms (typical) • Brightness: 215 cd/m2 (typical) • Color depth: 16.7 million colors • Color gamut 72% (of NTSC) • 10-point multitouch surface

Feature	Benefit
Supported PC input resolutions	Up to 1080p
Ergonomic design	<ul style="list-style-type: none"> The stand is retractable in the upright position for easy transportation. You can tilt the screen from an angle of 11° to 50° from the vertical. You can tilt the camera from an angle of -5° to 70° from the display. You can lift the connector lid fully and lock it to the back of the unit with magnets.
Audio	<ul style="list-style-type: none"> The loudspeaker is mounted on the front panel and faces you. Four digital microphones are mounted in two arrays.
Front camera	<ul style="list-style-type: none"> 63° horizontal field of view 38° vertical field of view Resolution: 1080p30 F 2.2 Instant focus based on face detection Privacy shutter
Operating system	Android OS 4.1.1
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 style="list-style-type: none"> High-Definition Multimedia Interface (HDMI) type A port for PC or Mac video input High-Definition Multimedia Interface (HDMI) type A port output (reserved for future use) High-speed USB 2.0 ports: <ul style="list-style-type: none"> Three standard type A ports (for keyboard, mouse, thumb drive and memory stick, and headset connectivity) One standard type B port (reserved for future use) One Micro-B USB port with native RS-232 (serial port, intended for service only) Maximum of 500-mA power output at 5V or 2.5W for each USB port 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)
Physical buttons	<ul style="list-style-type: none"> Cap sense "Source" button to swap between HDMI input and the DX80 interface; button is lit when HDMI input is connected Volume up/down Mute
Visual indicator	<ul style="list-style-type: none"> Camera LED indicator (incoming calls, camera activation) Microphone LED indicator (mute) Power button LED indicator (power on, sleeping, message waiting, error) Source button (monitor mode)
Physical dimensions (H x W x D)	20.2 x 22.2 x 3.5 in. (51.2 x 56.5 x 8.9 cm)
Weight	15.65 lb (7.1 kg)
Power	Rated: 60W maximum Low-power standby mode Integrated Cisco EnergyWise® support
Physical security	Compatible with Kensington Security Slot
Connectivity	
Ethernet	<ul style="list-style-type: none"> 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. 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.
Desktop Wi-Fi	As an alternative to wired Ethernet, the DX80 supports a Wi-Fi radio with integrated antenna enabling connectivity to a Wi-Fi access-point infrastructure, thereby saving on the labor costs of pulling Ethernet cables to every work location.

Feature	Benefit
Network features	<ul style="list-style-type: none"> • Cisco Discovery Protocol • Cisco Peer-to-Peer Distribution Protocol (PPDP) • Link Layer Discovery Protocol (LLDP) and LLDP Media Endpoint Discovery (LLDP-MED) • Session Initiation Protocol (SIP) for signaling • Session Description Protocol (SDP) • User Datagram Protocol (UDP) (used only for Real-Time Transport Protocol [RTP] streams) • Dynamic Host Configuration Protocol (DHCP) client or static configuration • Transparent secure roaming • Gratuitous Address Resolution Protocol (GARP) • Switch auto-negotiation • Domain Name System (DNS) • Web proxy (configured manually or by auto-configuration Protected Access Credential [PAC] files) • NT LAN Manager (NTLM) and Kerberos authentication • Trivial File Transfer Protocol (TFTP) • 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	<p>Bluetooth 3.0 Enhanced Data Rate (EDR) Class 2 technology (up to 30-ft [10m] range)</p> <ul style="list-style-type: none"> • 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	
Cisco VESA mounting kit	The optional mounting kit includes an adapter that replaces the DX80 foot stand and provides mounting points for 75- x 75-mm and 100- x 100-mm VESA, 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 support; provisioning and management	<ul style="list-style-type: none"> • Minimum supported: Cisco UCM Versions 8.5(1), 8.6(1), and 8.6(2) • Recommended: Cisco UCM Versions 9.1(2), 10.5(1), and later • Minimum supported: Cisco UCM for Cisco Expressway: 9.1(2) SU1 • Minimum supported Cisco Expressway: X8.5.0 • Cisco Hosted Collaboration Solution (HCS) • Cisco Business Edition 6000 Version 9.1 or later
Upgrading process	<ul style="list-style-type: none"> • Software upgrade of the device through Cisco UCM • Support for online firmware upgrades using TFTP • HTTP firmware management
Temperature Range	
Operating temperature	<ul style="list-style-type: none"> • 32 to 104°F (0 to 40°C)
Relative humidity	<ul style="list-style-type: none"> • 10 to 90% (noncondensing)
Storage temperature	<ul style="list-style-type: none"> • -4 to 140°F (-20 to +60°C)

Feature	Benefit
Approvals and Compliance	
	<ul style="list-style-type: none"> • 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

Table 3 lists video and audio specifications, Table 4 lists software features, and Table 5 lists Wi-Fi features and specifications of the Cisco DX80.

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 style="list-style-type: none"> • CIF 352 x 288 (4:3) 64–299 kbps • VGA 640 x 480 (4:3) 400–1500 kbps • 360p (640 x 360) 300–599 kbps • 480p (848 x 480) 600–799 kbps • 576p (1024 x 576) 800–1299 kbps • 600p (1024 x 600) 800–3000 kbps • 720p (1280 x 720) 900–1300 kbps • 1080p (1920 x 1080) 2000–4000 kbps
Frame or picture format	<ul style="list-style-type: none"> • CIF (352 x 288 pixels) • VGA (640 x 480 pixels) • 240p (432 x 240 pixels) • 360p (640 x 360 pixels) • 480p (848 x 480 pixels) • WSVGA (1024 x 600 pixels) • HD 720p (1280 x 720 pixels) • HD1080p (1920 x 1080 pixels)
Video features	<ul style="list-style-type: none"> • On-screen layout control for video and presentation • Self-View
Supported HDMI input resolutions	<p>Support for formats up to maximum 1920 x 1080 @ 60 fps (HD1080p60), including:</p> <ul style="list-style-type: none"> • 640 x 480 @ 60 fps • 1280 x 720 @ 60 fps • 1920 x 1080 @30 fps • 1920 x 1080 @60 fps <p>Note: High-definition inputs use progressive video formats.</p>
Audio standards	<ul style="list-style-type: none"> • Narrowband audio compression codecs: G.711a, G.711u, G.729a, G.729ab, and Internet Low Bitrate Codec (ILBC) • Wideband and full-band audio compression codecs: G.722, Internet Speech Audio Codec (iSAC), and AAC-LD (MP4A-LATM) audio compression codecs
Audio features	<ul style="list-style-type: none"> • Loudspeaker frequency range: 70 Hz to 20 kHz • Microphones frequency range: 100 Hz to 20 kHz • Up to 48 kHz sampling rate • Automatic static noise reduction • Configurable directive microphone • Acoustic echo cancellers • Automatic Gain Control (AGC) • Active lip synchronization
Dual stream	<ul style="list-style-type: none"> • Binary Floor Control Protocol (BFCP) (SIP) dual stream • Support for resolutions up to 1080p (1920 x 1080)

Table 4. Software Features

Feature	Specifications
Android core features	<ul style="list-style-type: none"> • Fully customizable Cisco Launcher and App Tray “Home Screen” enables you to place your own application shortcuts, widgets, and folders. • Home screen supports up to five separate screen views or pages with a 12 x 9 icon grid. • Landscape-orientated applications are supported. • On-screen keyboard is supported.
Android bundled applications and widgets	<ul style="list-style-type: none"> • Calculator • Calendar • Camera • Clock • Contacts • Direct Dial • Email <ul style="list-style-type: none"> ◦ Internet Message Access Protocol (IMAP) ◦ Post Office Protocol 3 (POP3) ◦ Microsoft Exchange ActiveSync • Favorites • Gallery • Phone features (for example, forward all, privacy, Do Not Disturb (DND), mobility, and Self-View) • Wallpapers (including live wallpapers) • Web browser
Google bundled applications	<ul style="list-style-type: none"> • Google Play (enabled by administrator through Cisco UCM; includes country-approved Google mobile services applications) • Gmail • Google settings • Maps • Play Books • Play Magazines • Play Movies • Play Music • Google Now
Cisco bundled applications	<ul style="list-style-type: none"> • Cisco AnyConnect Secure Mobility Client (VPN) • Cisco Jabber IM (which offers chat and presence capabilities) • Cisco WebEx conferencing • 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) • Visual Voicemail
Cisco Intelligent Proximity for Mobile Voice	<ul style="list-style-type: none"> • Contact synchronization with Bluetooth-paired, Android, or iOS mobile device that supports PBAP • Call-history synchronization to view placed or missed calls from mobile device on the DX80 • Audio path routing, which sends audio through the DX80 for a mobile device-connected call
Configuration modes	<ul style="list-style-type: none"> • Enhanced, fully functional mode that enables all aspects of the phone including applications and accounts • Simple mode that hides applications and accounts and provides only voice and video call capabilities • Public mode based on simple mode with restrictions on user settings modifications
Application deployment options and management	<ul style="list-style-type: none"> • 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. • Google Play access can be administratively disabled (default). Applications from “unknown sources” can be administratively disabled (default): <ul style="list-style-type: none"> ◦ The administrator can optionally install applications using Cisco UCM with the APK file. ◦ With Company Photo Directory (ability to set up and link photo directory URL image location associated with respective user) ◦ With Company Photo Directory, the administrator can set up and link a photo-directory URL image location associated with a respective user.

Feature	Specifications
Built-in training and setup assistance	<ul style="list-style-type: none"> • Setup Assistant wizard (helps configure email, Jabber IM, WebEx conferencing, and voicemail account settings)
Third-party application development	<p>Cisco Collaboration application programming interfaces (APIs) through a Software Developer Kit (SDK)</p> <p>https://developer.cisco.com/site/dxseries/overview/index.jsp</p>
Language support	<ul style="list-style-type: none"> • Arabic, Egypt (ar_EG) • Bulgarian, Bulgaria (bg_BG) • Catalan, Spain (ca_ES) • Chinese, PRC (zh_CN) • Chinese, Taiwan (zh_TW) • Croatian, Croatia (hr_HR) • 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 (lt_LT) • Norwegian bokmål, Norway (nb_NO) • 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_SI) • Spanish, Spain (es_ES) • Swedish, Sweden (sv_SE) • Thai, Thailand (th_TH) • Turkish, Turkey (tr_TR)
Calling feature support	<ul style="list-style-type: none"> • + Dialing (ITU E.164) • Abbreviated dialing • Adjustable ringing and volume levels • Adjustable display brightness • Auto-answer • Auto-detection of headset • Barge (cBarge) • Callback • Call Chaperone • Call forward • Call forward notification • Call history lists • Call park (including Directed Call Park and Assisted Directed Call Park) • Call pickup • Call timer

Feature	Specifications
	<ul style="list-style-type: none"> • 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) • 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 features	<p>Additional accessibility features for the vision impaired, blind, and the hearing and mobility impaired include user-defined and customizable:</p> <ul style="list-style-type: none"> • 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 Features	
Hardware	<ul style="list-style-type: none"> • Secure boot • Secure credential storage • Device authentication • File authentication and encryption • Image authentication and encryption • Signaling authentication • Random bit generation • Hardware cryptographic acceleration • Encrypted configuration files • Encrypted file system

Feature	Specifications
Certificate management	<ul style="list-style-type: none"> • Certificate Authority Proxy Function (CAPF) support for additional security • Manufacturer-Installed Certificates (MIC) • Locally Significant Certificates (LSC) • 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
Network	<ul style="list-style-type: none"> • Wired: 802.1x supplicant options for network authentication use: <ul style="list-style-type: none"> ◦ Extensible Authentication Protocol: Extensible Authentication Protocol-Flexible Authentication via Secure Tunneling (EAP-FAST) ◦ Extensible Authentication Protocol: EAP Transport Layer Security (EAP-TLS) • Wireless (refer to Table 5) • Wireless: Wi-Fi Protected Access 2 (WPA2) (EAP-FAST) • Wireless Equivalent Privacy (WEP) • Wireless EAP-TLS • Protected Extensible Authentication Protocol - Generic Token Card (PEAP-GTC)
Media and data signaling	<ul style="list-style-type: none"> • TLS • SRTP • HTTPS for clients
Enterprise access	<ul style="list-style-type: none"> • Cisco AnyConnect Secure Mobility Client • Web Proxy (manual configuration or auto-configuration of Protected Access Credential [PAC] files) • NTLM and Kerberos authentication
Device management	<ul style="list-style-type: none"> • Remote wipe • ActiveSync remote wipe (email, contacts, calendar, etc.) • Self-service wipe • Wipe after unsuccessful login attempts • Factory reset
Policy management	<ul style="list-style-type: none"> • 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 style="list-style-type: none"> • 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).

Table 5. Wi-Fi Features and Specifications

Feature	Specifications
Protocol	IEEE 802.11a, 802.11b, 802.11g, and 802.11n
Frequency band and operating channels	<ul style="list-style-type: none"> • 2.412–2.472 GHz (channels 1–13) • 5.180–5.240 GHz (channels 36–48) • 5.260–5.320 GHz (channels 52–64) • 5.500–5.700 GHz (channels 100–140) • 5.745–5.825 GHz (channels 149–165) <p>Note: IEEE 802.11d is used to identify available channels.</p>
Nonoverlapping channels	<ul style="list-style-type: none"> • 2.4 GHz (20-MHz channels): Up to 3 channels • 5 GHz (20-MHz channels): Up to 24 channels • 5 GHz (40-MHz channels): Up to 9 channels
Operating modes	<ul style="list-style-type: none"> • Auto (default), preference to strongest RSSI for 2.4 or 5 GHz • 2.4 GHz only • 5 GHz only

Feature	Specifications		
Data rates	<ul style="list-style-type: none"> 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 802.11n: HT MCS 0, MCS 1, MCS 2, MCS 3, MCS 4, MCS 5, MCS 6, and MCS 7 		
2.4-GHz receiver sensitivity	IEEE 802.11b: <ul style="list-style-type: none"> 1 Mbps: –95 dBm 2 Mbps: –93 dBm 5.5 Mbps: –90 dBm 11 Mbps: –86 dBm 	IEEE 802.11g: <ul style="list-style-type: none"> 6 Mbps: –89 dBm 9 Mbps: –89 dBm 12 Mbps: –87 dBm 18 Mbps: –85 dBm 24 Mbps: –81 dBm 36 Mbps: –78 dBm 48 Mbps: –74 dBm 54 Mbps: –72 dBm 	IEEE 802.11n HT20: <ul style="list-style-type: none"> MCS 0: –88 dBm MCS 1: –86 dBm MCS 2: –84 dBm MCS 3: –81 dBm MCS 4: –78 dBm MCS 5: –73 dBm MCS 6: –71 dBm MCS 7: –69 dBm
5-GHz receiver sensitivity	IEEE 802.11a: <ul style="list-style-type: none"> 6 Mbps: –91 dBm 9 Mbps: –91 dBm 12 Mbps: –90 dBm 18 Mbps: –88 dBm 24 Mbps: –85 dBm 36 Mbps: –81 dBm 48 Mbps: –77 dBm 54 Mbps: –76 dBm 	IEEE 802.11n HT20: <ul style="list-style-type: none"> MCS 0: –91 dBm MCS 1: –89 dBm MCS 2: –86 dBm MCS 3: –84 dBm MCS 4: –81 dBm MCS 5: –76 dBm MCS 6: –74 dBm MCS 7: –72 dBm 	IEEE 802.11n HT40: <ul style="list-style-type: none"> MCS 0: –90 dBm MCS 1: –87 dBm MCS 2: –85 dBm MCS 3: –81 dBm MCS 4: –78 dBm MCS 5: –74 dBm MCS 6: –72 dBm MCS 7: –70 dBm
Transmitter output power	2.4 GHz: <ul style="list-style-type: none"> 802.11b: Up to 16 dBm 802.11g: Up to 16 dBm 802.11n HT20: Up to 15 dBm 	5 GHz: <ul style="list-style-type: none"> 802.11a: Up to 16 dBm 802.11n HT20: Up to 15 dBm 802.11n HT40: Up to 15 dBm 	
Antenna	<ul style="list-style-type: none"> 2.4 GHz: 4.6 dBi peak gain 5 GHz: 7.0 dBi peak gain 		
Access-point support	<ul style="list-style-type: none"> Cisco Unified Access Points <ul style="list-style-type: none"> Minimum: 7.0.240.0 Recommended: 7.4.121.0, 7.6.110.0, or later Cisco Autonomous Access Points <ul style="list-style-type: none"> Minimum: 12.4(21a)JY Recommended: 12.4(25d)JA2 or later 		
Wireless security	Authentication: <ul style="list-style-type: none"> Wi-Fi Protected Access (WPA) Versions 1 and 2 Personal and Enterprise EAP-FAST Protected Extensible Authentication Protocol - Microsoft Challenge Handshake Authentication Protocol Version 2 (PEAP-MSCHAPv2) Protected Extensible Authentication Protocol - Generic Token Card (PEAP-GTC) EAP-TLS 	Encryption: <ul style="list-style-type: none"> 40- and 128-bit static Wired Equivalent Privacy (WEP) Temporal Key Integrity Protocol (TKIP) and Message Integrity Check (MIC) Advanced Encryption Standard (AES) 	
Fast secure roaming	Cisco Centralized Key Management (Cisco CKM)		
QoS	<ul style="list-style-type: none"> IEEE 802.11e and Wi-Fi Multimedia (WMM) Enhanced Distributed Channel Access (EDCA) QoS Basic Service Set (QBSS) 		
Radar detection	Dynamic frequency selection (DFS) and transmit power control (TPC) 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 DX80 requires a minimum-level Enhanced IP User Connect License (UCL). There are no

special licenses plus phone bundles for tier-2 distributors. The DX80 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 [Product Warranties](#) 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

Product Name	Part Number
Cisco DX80	CP-DX80-K9=
Cisco DX80, TAA version	CP-DX80-K9++=

Table 7. Replacement Parts

Product Name	Part Number
HDMI/USB grey cable for Cisco DX80	CAB-COMBO-2M=
Ethernet grey cable for Cisco DX80	CAB-GREY-2.9M=
Foot stand for Cisco DX80	CP-DX80-FS=
Power transformer for the DX70 and DX80 series	CP-PWR-CUBE-5=

Table 8. Accessories

Product Name	Part Number
Cisco VESA adapter and wall mounting option	CP-DX80-VESA=
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

Cisco Services

Cisco Services make networks, applications, and the people who use them work better together.

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For More Information

For more information about the Cisco DX80, visit <http://www.cisco.com/go/dx> or contact your local Cisco account representative.



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