Cisco Webex 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® Webex 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 Webex DX80 offers:

- A dedicated, always-on HD video communication system
- An IP phone that provides essential features for knowledge workers
- 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
- Easy "One-Button-To-Push" (OBTP) calling that integrates with common calendaring programs
- Flexible registration models on-premises and in the cloud through Cisco Webex
- Ability for administrators to use Cisco Expressway™ Series for the secure connection of their remote workers

Features and Benefits

Table 1 lists the features and benefits of the Cisco Webex DX80.

Table 1.   Features and Benefits

Feature	Benefit
Whiteboard and annotation	• Create whiteboard content and annotate on shared content. • Share and collaborate on whiteboard content with meeting participants on the Cisco Webex Board, or Cisco Webex Teams app. • Meeting participants using the Cisco Webex Room Series will see shared whiteboards as content on-screen and edit content on their paired Cisco Webex Teams app. Cisco SX Series and Cisco MX Series will get a notification of shared whiteboards on-screen and can view shared whiteboard content and edit content on their paired Cisco Webex Teams app. • Supported on Cisco Webex-registered devices only.
Design features	• Ability to install in minutes: The Webex DX80 is an integrated device with fully touch-based on-screen controls. Just plug in the power cable and network. Get started with a simple set-up wizard. Authenticate to complete the setup. • In-person video: With a large 23-inch screen and best-in-class video and audio capabilities, the Webex DX80 allows for life-like experiences. • Top-notch monitor: You can use the Webex 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 Webex DX80 down to allow sharing of physical content and drawings. • Inclinable screen: The Webex 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. • Automatic wake-up: The collaboration system automatically detects when someone enters the room. It "wakes-up," says hello and provides guided instructions to make it effortless to start using the device.
Content-sharing features	• 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. • Enjoy the easy on-screen control interface accessible with a single tap on the screen.
Performance features	• The system offers simultaneous HD video and content sharing. • Audio is communicated through full-duplex, full-band audio (CD quality). • Provisioning and configuration are easy with Cisco Unified Communications Manager or with Cisco TelePresence® Video Communication Server (VCS) and Management Suite (TMS).
Registration models	• The Webex DX80 registers to Cisco VCS and Session Initiation Protocol (SIP)-based call controls, Cisco Unified Communications Manager, and the Cisco Hosted Collaboration Solution (HCS) and to Cisco Webex.

Product Specifications

Table 2 lists the specifications of the Cisco Webex DX80.

Table 2.   Product Specifications

Feature	Benefit
Components	Fully integrated unit including: • Codec • Camera • Display • Microphones and loudspeaker Included: Screen cleaning cloth, HDMI cable (2m), USB cable (2m), Ethernet cable (2.9m), and power supply.
Display	• 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	• 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	• The loudspeaker is mounted on the front panel and faces you • Four digital microphones are mounted in two arrays • Loudspeaker frequency range: 70 Hz to 20 kHz • Microphones frequency range: 100 Hz to 20 kHz
Front camera	• 63° horizontal field of view • 38° vertical field of view • Resolution: 1080p30 • F 2.2 • Privacy shutter
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	• High-Definition Multimedia Interface (HDMI) type A port for PC or Mac video input
	• HDMI type A port output (not in use)
	• High-speed USB 2.0 ports:
	  ◦ Three standard type A ports enable wired or wireless (dongle) headsets and handset use
	  ◦ 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

Physical buttons	• Volume up/down • Mute
Visual indicator	• Camera LED indicator (incoming calls and camera activation) • Microphone LED indicator (mute) • Power button LED indicator (power on, sleeping, message waiting, and error)
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
Physical security	Compatible with Kensington Security Slot
Connectivity	
Ethernet	• 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
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
Temperature Range	
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)

Feature	Benefit
Approvals and Compliance	
	• Directive 2014/35/EU (Low-Voltage Directive) • Directive 2014/30/EU (EMC Directive) – Class A • Directive 2014/53/EU (Radio Equipment Directive) • Directive 2011/65/EU (RoHS) • Directive 2002/96/EC (WEEE) • NRTL approved (Product Safety) • FCC CFR 47 Part 15B (EMC) – Class B • FCC Listed (Radio Equipment)

Firmware Options and Features

The Cisco Webex DX80 and Cisco MX and SX Series all support the Collaboration Endpoint (CE) Software. CE software is configurable to register to Cisco Webex (in the cloud) and for both Cisco Hosted Collaboration Solution and on-premises deployments (registered to Cisco Unified Communications Manager, Cisco Video Communication Server, or even standalone with H.323). For the time being, the capabilities offered by these configurations do vary. Table 3 describes the capabilities common to both. Table 4 lists the additional on-premises features, and Table 5 lists the major differences when registered to Cisco Webex. Table 6 lists W-Fi features and specifications for Cisco Webex and on-premises registered endpoints.

In addition, the DX80 can run on Android-based software. This software is compatible only with Cisco Unified Communications Manager. Tables 7 and 8 summarize the Android-based software.

Table 3.   Features Common When Registered to Cisco Webex and to On-Premises Registered Endpoints

Feature	Cisco CE 9.1.1 Software for Managed and Hosted
Video inputs	Support for formats up to maximum 1920 x 1080 @ 60 fps (HD1080p60), including: • 640 x 480 • 720 x 480 • 800 x 600 • 1024 x 768 • 1280 x 720 • 1366 x 768 • 1920 x 1080 High-definition inputs use progressive video formats Extended Display Identification Data (EDID)
Live video resolutions	• 176 x 144 @ 30 fps (QCIF) (decode only) • 352 x 288 @ 30 fps (CIF) • 512 x 288 @ 30 fps (w288p) • 576 x 448 @ 30 fps (448p) • 768 x 448 @ 30 fps (w448p) • 704 x 576 @ 30 fps (4CIF) • 1024 x 576 @ 30 fps (w576p) • 640 x 480 @ 30 fps (VGA) • 800 x 600 @ 30 fps (SVGA) • 1024 x 768 @ 30 fps (XGA) • 1280 x 1024 @ 30 fps (SXGA) • 1280 x 720 @ 30 fps (720p30) • 1280 x 768 @ 30 fps (WXGA) • 1920 x 1080 @ 30 fps (1080p30) • 1440 x 900 @ 30 fps (WXGA+) • 1680 x 1050 @ 30 fps (WSXGA+)

Feature	Cisco CE 9.1.1 Software for Managed and Hosted
Audio features	• Up to 48-kHz sampling rate • High-quality 20-kHz stereo audio • Acoustic echo cancellers • Automatic Gain Control (AGC) • Automatic noise reduction
Wi-Fi	• See Table 6
Bluetooth headsets	• Bluetooth 3.0 (HFP, A2DP) – wideband not supported
Language support	Arabic (from release 9.2.x), Catalan, Czech, Danish, Dutch, English, Finnish, French, German, Hebrew (from release 9.2.x), Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese-Brazilian, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish; depends on software version. For regions that support Cisco Webex Teams, please visit: cs.co/geos.

Table 4.   Software Features for Endpoints Registered On-Premises or Cisco Hosted Collaboration Solution

Feature	Cisco CE 8.3.0 Software
Bandwidth	H.323 and SIP: Up to 3 Mbps point to point
Minimum bandwidth for resolution/frame rate	720p30 from 768 kbps 1080p30 from 1472 kbps
Firewall traversal	Cisco TelePresence Expressway technology
Video standards	H.263, H.263+, H.264, and AVC (H.264/MPEG-4 Part 10 Advanced Video Coding)
Video features	• On-screen layout control for video and presentation • Active control (participants list, active speaker and content sharing, end participant call, and muted participants) • Layout controls • Self-View • Far-end camera control
Audio standards	• 64- and 128-kbps AAC-LD, OPUS, G.722, G.722.1, G.711mu, G.711a, G.729ab, and G.729
Audio features	• Active lip synchronization
Dual stream	• H.239 (H.323) dual stream • Binary Floor Control Protocol (BFCP) (SIP) dual stream • Support for resolutions up to 1080p (1920 x 1080)
Multipoint support	Cisco Ad-Hoc Conferencing (requires Cisco Unified Communications Manager, Cisco HCS, Cisco TelePresence Server, and Cisco TelePresence Conductor)
Embedded encryption	• SIP point-to-point • Standards-based: Advanced Encryption Standard (AES) • Automatic key generation and exchange • Supported in dual stream
Calling features	• + Dialing (ITU E.164) • Add consultative call • Adjustable ringing and volume levels • Adjustable display brightness • Auto-answer • Auto-detection of headset • Call forward • Call forward notification • Call-history lists • Caller ID • Corporate directory • Conference (ad hoc) • Do Not Disturb (DND) • Extension Mobility service • Favorites • Hold (and Resume) • Join (ad hoc merge) • Message waiting indicator

Feature	Cisco CE 8.3.0 Software
	• Mute (audio and video) • Network profiles (automatic) • Self-View (video call) • One-Button-To-Push (OBTP) • Shared line • Single Number Reach (SNR) • Transfer • Voicemail
Using the Cisco Proximity app to navigate the video system	When entering a room or area with a Webex DX80 device, both the DX and the Cisco Proximity application visually indicate that they are paired or connected together. This pairing provides the following capabilities: • Video system control: Use the Cisco Proximity app on a mobile device to initiate, answer, or hang up a call on the on-premises registered endpoint. You can also move the call from the mobile device to the DX and visa versa • View shared content: Use the Cisco Proximity app on a mobile device to view the content being shared. Use the Cisco Proximity app on a laptop to share the content wirelessly in and out of a call The Cisco Proximity app on iOS, Android, Windows, and MacOS is enabled for pairing by default. Control is available to anyone with the Cisco Proximity app. Alternatively, users who do not have a mobile or desktop device or the Cisco Proximity app can control the system with the DX's touchscreen.
IP network features	• Domain Name System (DNS) lookup for service configuration • Differentiated Services (Quality of Service [QoS]) • IP adaptive bandwidth management (including flow control) • Dynamic playout and lip-sync buffering • Date and Time support with Network Time Protocol (NTP) • Packet loss-based downspeeding • URI Dialing • TCP/IP • Dynamic Host Configuration Protocol (DHCP) • 802.1x network authentication • 802.1Q virtual LAN • 802.1p (QoS and Class of Service [CoS]) • ClearPath v1 and v2
In-room controls	With in-room controls, you can add custom elements to the user interface. Controls for lights, blinds, or other peripherals can be added to the DX interface. Custom panels creation from the web UI interface • Global panel accessible in the system bar tray • Home screen panel accessible from the control tray • In-call panel accessible from the in-call tray

Call control	• Cisco Unified Communications Manager (Cisco Unified CM)
	  ◦ Native table with Cisco Unified CM
	• Cisco Expressway
	  ◦ Native registration with Expressway
	• Cisco Webex
	• Third-party H.323 Gatekeepers and standards-based SIP proxies

IPv6 network support	• Dual-stack IPv4 and IPv6 for DHCP, Secure Shell (SSH) Protocol, HTTP, Secure HTTP (HTTPS), DNS, and Differentiated Services (DiffServ) • Support for both static and autoconfiguration (stateless address autoconfiguration)
Security features	• Management through HTTPS and SSH • IP administration password • Menu administration password • Disable IP services • Network settings protection
System management	• Support for the Cisco TelePresence Management Suite (TMS) • Total management through embedded Simple Network Management Protocol (SNMP), Telnet, SSH, XML, and Simple Object Access Protocol (SOAP) • Remote software upload: Through web server, HTTP, and HTTPS
Directory services	• Support for local directories (My Contacts) • Corporate directory (through Cisco Unified Communications Manager and Cisco TMS) • Server directory supporting Lightweight Directory Access Protocol (LDAP) and H.350 (requires Cisco TelePresence Management Suite) • Call history with received, placed, and missed calls with date and time

Feature	Cisco CE 8.3.0 Software
Language support	Arabic, Catalan, Czech, Danish, Dutch, English, Finnish, French, German, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese-Brazilian, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish; depends on software version.

When registered to Cisco Webex, the DX80 can call other devices including other Cisco Webex room devices, tablets, PCs, and Macs using URI dialing[*]. With Cisco Webex Hybrid Calling Service enabled, the DX80 can dial the PSTN and can be part of your corporate dial plan. The services offered in this configuration are listed in Table 5. Also, if you have meetings with more than three parties, you can use the DX80 with any meeting services such as Cisco Webex Meetings.

Table 5. Software Features for the Cisco Webex

Feature	Cisco CE 8.3.0 Software for Cisco Webex
Calling into another audio or video device	Video devices registered to Cisco Webex can call to any other Cisco Webex registered system as well as standards-based video and conferencing systems using URI dialing only. Cisco Webex also enables video conferencing with Skype for Business. With Cisco Webex Hybrid Calling Service enabled, the DX80 can connect to Cisco Unified Communications Manager or Cisco Hosted Collaboration Solution. Assign an extension and E.164 number from. your enterprise dial plan to the Webex DX80 Users can make and receive calls to or from other Cisco Unified Communications Manager registered devices and external PSTN numbers using the assigned number.
Bitrate and video quality	Video calls will typically allow currently up to 720p30fps in a point-to-point call. In a multiparty call, Cisco Webex will send several independent streams and maintain a constant bitrate. In conditions where the network does not allow full bitrate, the rate will be automatically adjusted and the video gracefully degraded.
Firewall traversal	Cisco Webex does not require additional equipment for firewall traversal. Refer to this article for more information: https://support.ciscospark.com/customer/en/portal/articles/1911657-firewall-and-network-requirements-for-the-cisco-spark-app.
Video and audio standards	Devices registered to Cisco Webex will typically use H.264 for video and OPUS for audio.
Video features	• On-screen layout control for video and presentation • Active control (participants list, active speaker and content sharing, and end participant call) • Self-View
Content sharing	• Up to 1080p5fps
Multiparticipants	• Multiparty meetings are supported by call control or by the Cisco Webex, not the endpoint itself
Pairing for room system control and moving calls	When entering a room or area with a DX80, both the DX80 and the Cisco Webex Teams app visually indicate that they are paired or connected together. This pairing provides the following capabilities: • Device control: Use the Cisco Webex Teams app on a mobile device to initiate, answer, or hang up a call on the Cisco Spark Room System • Move calls: Smoothly move a call from the Webex Teams app on a mobile device to a DX80 when walking into the room. Or move a call from the DX80 to the Webex Teams app when leaving the conference room • The Webex Teams app on iOS and Android is enabled for pairing by default. Control is available to anyone with a Webex Teams app, even the free version. Alternatively, users who do not have a mobile or desktop device or the Webex Teams app can control the system with the DX80's touchscreen
IP network features	• IPv4 • IP adaptive bandwidth management (including flow control) • Date and Time support with Network Time Protocol (NTP) • URI Dialing • TCP/IP • DHCP • 802.1Q Virtual LAN • ClearPath v2
System management	Webex device management is accessible to customers through the Cisco Webex Control Hub. Cisco Webex automates software upgrades.

[*] **Note:** Unless Webex Hybrid Calling Service is deployed, when registered to Cisco Webex, the DX80 will not have telephony capabilities, such as the ability to place or receive phone calls. They have URI dialing capabilities only.

For more information about Cisco Webex, go to https://www.cisco.com/webex.

Table 6. Wi-Fi Features and Specifications for Cisco Webex Service and On-Premises Registered Endpoints

Feature	Specifications		
Protocol	IEEE 802.11a, 802.11b, 802.11g, and 802.11n		
Frequency band and operating channels	• 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) **Note:** IEEE 802.11d is used to identify available channels.		
Nonoverlapping channels	• 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	• Auto (default), preference to strongest RSSI for 2.4 or 5 GHz • 2.4 GHz only • 5 GHz only		
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 • 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: • 1 Mbps: – 95 dBm • 2 Mbps: –93 dBm • 5.5 Mbps: –90 dBm • 11 Mbps: –86 dBm	IEEE 802.11g: • 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: • 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: • 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: • 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: • 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: • 802.11b: Up to 16 dBm • 802.11g: Up to 16 dBm • 802.11n HT20: Up to 15 dBm	5 GHz: • 802.11a: Up to 16 dBm • 802.11n HT20: Up to 15 dBm • 802.11n HT40: Up to 15 dBm	
Antenna	• 2.4 GHz: 4.6 dBi peak gain • 5 GHz: 7.0 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
	  ◦ Minimum: 12.4(21a)JY
	  ◦ Recommended: 12.4(25d)JA2 or later		

Feature	Specifications	
Wireless security	Authentication: • 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: • Advanced Encryption Standard (AES)
Fast secure roaming	Cisco Centralized Key Management (CKM).	
QoS	• 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.	

Table 7.   Software Features for the Android-Based Software

Feature	Specifications
Android core features	• 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	• Calculator • Calendar • Camera • Clock • Contacts • Direct Dial • Email • 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	• Google Play (enabled by administrator through Cisco Unified Communications Manager; includes country-approved Google mobile services applications) • Gmail • Google settings • Maps • Play Books • Play Magazines • Play Movies • Play Music • Google Now
Cisco bundled applications	• Cisco AnyConnect® Secure Mobility Client (VPN) • Cisco Jabber® Instant Messaging (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	• Contact synchronization with Bluetooth-paired, Android, or iOS mobile device that supports Bluetooth Phone Book Access Profile (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

Feature	Specifications
Configuration modes	• 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	• The administrator can disable downloading of all applications on the DX80. Specifically, the administrator can configure the 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): ◦ The administrator can optionally install applications using Cisco Unified Communications Manager with the APK file ◦ With Company Photo Directory (ability to set up and link photo directory URL image location associated with respective user), the administrator can set up and link a photo-directory URL image location associated with a respective user
Built-in training and setup assistance	• Setup Assistant wizard (helps configure email, Jabber® IM, Webex Meetings, and voicemail account settings)
Third-party application development	Cisco Collaboration Application Programming Interfaces (APIs) through a Software Developer Kit (SDK) https://developer.cisco.com/site/dxseries/overview/index.gsp.
Language support	• 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)

Feature	Specifications
Calling feature support	+ Dialing (ITU E.164) - Abbreviated dialing - Adjustable ringing and volume levels - Adjustable display brightness - Auto-answer - Autodetection 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 - Call waiting - Caller ID - Corporate directory - Conference (ad hoc) - Direct transfer - Divert (iDivert) - Do Not Disturb (DND) - Cisco 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

Feature	Specifications
Accessibility features	Additional accessibility features for the vision impaired, blind, and the hearing and mobility impaired include user-defined 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 Features	
Hardware	• 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
Certificate management	• 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	• Wired: 802.1x supplicant options for network authentication use:
	  ◦ 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 7):
	  ◦ 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	• TLS • Secure Real-Time Transport Protocol (SRTP) • HTTPS for clients
Enterprise access	• Cisco AnyConnect Secure Mobility Client • Web Proxy (manual configuration or autoconfiguration of Protected Access Credential [PAC] files) • NT LAN Manager (NTLM) and Kerberos authentication
Device management	• Remote wipe • ActiveSync remote wipe (email, contacts, calendar, etc.) • Self-service wipe • Wipe after unsuccessful login attempts • Factory reset
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	• 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 8. Wi-Fi Features and Specifications for Android-Based Software

Feature	Specifications		
Protocol	IEEE 802.11a, 802.11b, 802.11g, and 802.11n		
Frequency band and operating channels	• 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) **Note:** IEEE 802.11d is used to identify available channels.		
Nonoverlapping channels	• 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	• Auto (default), preference to strongest RSSI for 2.4 or 5 GHz • 2.4 GHz only • 5 GHz only		
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 • 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: • 1 Mbps: – 95 dBm • 2 Mbps: –93 dBm • 5.5 Mbps: –90 dBm • 11 Mbps: –86 dBm	IEEE 802.11g: • 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: • 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: • 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: • 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: • 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: • 802.11b: Up to 16 dBm • 802.11g: Up to 16 dBm • 802.11n HT20: Up to 15 dBm	5 GHz: • 802.11a: Up to 16 dBm • 802.11n HT20: Up to 15 dBm • 802.11n HT40: Up to 15 dBm	
Antenna	• 2.4 GHz: 4.6 dBi peak gain • 5 GHz: 7.0 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
	  ◦ Minimum: 12.4(21a)JY
	  ◦ Recommended: 12.4(25d)JA2 or later		

Feature	Specifications	
Wireless security	Authentication: • 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: • 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	• 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 Webex DX80 covered by the Cisco 1-Year Limited Hardware Warranty. Find warranty information on Cisco.com at the Product Warranties page.

Ordering Information

Tables 9 and 10 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 9.   Ordering Information for On-Premises Deployment

This configuration is for on-premises registration **to** VCS, Cisco Unified Communications Manager, or third-party call control.

Product Name	Part Number
Cisco Webex DX80 – GPL[*]	CP-DX80-K9=
Cisco Webex DX80, for U.S. Government (Trade Agreement Act compliant) - GPL[*]	CP-DX80-K9++=

Table 10.   Ordering Information for Cloud Deployment

This configuration is for registration to the Cisco Webex service and requires a Cisco Webex subscription.

Product Name	Part Number
Cisco Webex DX80 – MSRP[*]	CS-DX80-K9=
Cisco Webex service registration for small rooms and desks	A-SPK-SH-RMS

[*] GPL = Global Price List

[*] MSRP = Manufacturer's Suggested Retail Price

Table 11.   Replacement Parts

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

Table 12.   Accessories

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

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For More Information

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

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