

# Cisco Unified IP Phone 9971

**Figure 1.** Cisco Unified IP Phone 9971



## Product Overview

The Cisco Unified IP Phone 9971 is an executive class collaboration endpoint that provides voice, video, applications and accessories. Highlights include Gigabit Ethernet, Wideband Audio, Color Touchscreen Display, desktop Wi-Fi connectivity along with a new industrial design and user interface designed for simplicity and high usability. Accessories, sold separately, include a standard definition USB camera, Jawbone ICON for Cisco Bluetooth headset, color Key Expansion Module plus support for Bluetooth, USB, Secure Digital Input Output (SDIO) devices. Application support includes XML capabilities.

## Features and Benefits

- Newly developed industrial design and user experience designed for use with its VGA touchscreen display
- H.264 video support for 2-way standard definition calling with USB support for the Cisco Unified IP Camera
- Choice of 802.11 a/b/g desktop wi-fi connectivity or Gigabit Ethernet network connectivity and switch port available for a downstream PC
- Embedded Bluetooth radio and 2 USB ports for headsets and the camera
- Firmware support for XML applications

**Table 1.** Features and Benefits

| Feature                 | Benefits   |
|-------------------------|--|
| <b>Hardware</b>         |  |
| <b>Ergonomic Design</b> | Highly usable and intuitive arrangement of lines, features and calls. Transfer, Conference and Hold appear on hard keys to reduce the number of presented softkeys to a maximum of 4 per call state.   |
| <b>Customization</b>    | This model can be ordered as Arctic White or Charcoal Gray. Handsets are available internationally as slimline (5oz, 140g) or standard (6oz, 170g) and can be mixed and matched between users within the same work environment to enable a feeling of customization and ownership among the users. |

| Feature  | Benefits  |
|--|---|
| <b>Display</b>   | VGA presentation for calling, video calling and applications. 5.6-inch (14 cm) graphical TFT color touchscreen display, 24-bit color depth, 640 x 480 effective pixel resolution, with backlight. Display also supports localization requiring double-byte Unicode encoding for fonts.  |
| <b>Ethernet</b>  | Internal 2-port Cisco Ethernet switch allows for a direct connection to a 10/100/1000 BASE-T Ethernet network through an RJ-45 interface with single LAN connectivity for both the phone and a co-located PC. System administrator can designate separate VLANs (802.1Q) for the PC and phone, providing improved security and reliability of voice and data traffic. |
| <b>Desktop Wi-Fi Ethernet</b>                                | As an alternative to wired Ethernet, this model supports an on-board wi-fi radio and antenna that enables connectivity to a wi-fi access point thereby saving on the labor costs of pulling Ethernet cables to every work location. Complete Wi-Fi specifications are included in Table 4.  |
| <b>Bluetooth</b>   | Mobility for headset users within 30 feet of their desktop to enable the freedom to go to the printer, a colleague's desk or nearby private location while on a call. The 9971 supports the Hands-free and Headset Bluetooth profiles.  |
| <b>USB</b>   | 2 USB ports accelerate the usability of call handling and applications by enabling accessories such as the Cisco Unified IP Camera, wired and wireless headsets.  |
| <b>External Audio Ports</b>                                  | General Purpose Audio In and Audio Out ports enable a relaxed speakerphone experience over external speakers and microphone.  |
| <b>Secure Digital Input Output (SDIO)</b>                    | Enables an additional option for portability and presentation of confidential data, video and sample applications.  |
| <b>6 Lines Expanding to 114 with 3 Key Expansion Modules</b> | The convenience of many speed dials or programmable features, or the necessity of following the activity of many lines. Up to 200 calls supported per device.   |
| <b>Buttons</b>   | 6 feature buttons with state indicating LEDs<br>6 call session buttons with state indicating LEDs<br>Applications, Directories, Voicemail<br>Conference, Transfer, Hold<br>Volume Up/Down<br>Back-lit Mute, Speakerphone, Headset<br>Back, End Call, 5-Way Navigation Pad<br>Arabic keypad (only available through unique SKUs, see table 6 for more details)         |
| <b>Accessories</b>   |   |
| <b>Key Expansion Module</b>                                  | Available separately, enables advanced use of lines, speed dials and features.  |
| <b>Cisco Unified IP Camera</b>                               | Available separately, enables 2-way video calling between phones or video conferencing through a media conference unit.   |
| <b>Cisco Unified Video Advantage Support</b>                 | Alternatively to supporting the Cisco Unified IP Camera, the Cisco Unified Video Advantage camera and application (running on a PC) are also supported.   |
| <b>Headset Support</b>                                       | Integrated design & advanced, updateable firmware for Jawbone ICON for Cisco Bluetooth headset which also works with all major mobile phone models. Also supports standard Bluetooth and USB headsets via the hands-free and headset Bluetooth profiles. Wideband analog headset support also provided via a dedicated RJ9 headset port on the rear of the phone.     |
| <b>Firmware</b>  |   |
| <b>New User Experience</b>                                   | Advanced organization of lines, speed dials and programmable features separate from call appearances. Great for those who make few calls per day; better for those who handle dozens of calls per hour.   |
| <b>SIP Signaling</b>   | SIP interoperation with the call control and partner applications enables a rich unified communications solution.   |
| <b>Application Support</b>                                   | XML applications provided by Cisco's application development partners or customers' own development staff.  |

## Unified Communications Manager Support

- Cisco Unified Communications Manager version 7.1(3a)SU1 or later
  - Some features require more recent version of UC Manager and Dev Pack support. Please check the release notes for more information
- Survivable Remote Site Telephony (SRST) version 4.3 or later
- CME 8.6 or later

## Licensing

Phone licensing is dependent on the call control platform and its policies. For the Cisco Unified Communications Manager, the 9971 requires 4 Device License Units (DLUs) or an Enhanced IP User Connect License for UCM release 7.1(5) or later. There are no special licenses plus phone bundles for Tier II distributors. The 9971 is not supported on non-Cisco third party call control systems.

## Product Specifications

**Table 2.** Product Specifications

|                                     |   |
|-------------------------------------|---|
| <b>Protocols</b>                    | SIP for signaling<br>H.264 for video  |
| <b>Connectivity</b>                 | 10/100/1000 wired Ethernet network port plus switched PC port<br>802.11a/b/g wi-fi  |
| <b>Options</b>                      | Arctic White or Charcoal Gray color<br>Slimline (5oz, 140g) or Standard (6oz, 170g) handset   |
| <b>Language Support</b>             | Arabic, Bulgarian, Catalan, Chinese (People's Republic of China), Chinese (Hong Kong), Chinese (Taiwan), Croatian, Czech, Danish, Dutch, English - plus localized prompts for the UK, Estonian, French, Finnish, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese (Portugal), Portuguese (Brazil), Romanian, Russian, Spanish (Spain), Slovak, Swedish, Serbian (Republic of Serbia), Serbian (Republic of Montenegro), Slovenian, Thai, Turkish |
| <b>Physical Dimensions (HxWxD)</b>  | 9.2" (23.4 cm) x 10.33" (26.25 cm) x 1.56" (3.97 cm)<br>In slab mode with the footstand removed   |
| <b>Power</b>                        | IEEE Power over Ethernet 802.3af and 802.3at supported, class 4. The 9971 is compatible with both class 3 and class 4 IEEE PoE switch blades and supports both Cisco Discovery Protocol (CDP) and Link Layer Discovery Protocol - Power over Ethernet (LLDP-PoE)  |
| <b>Temperature Range</b>            |   |
| <b>Operational Temperature</b>      | 32 to 104°F (0 ~ 40°C)  |
| <b>Relative Humidity</b>            | 10 to 95% (noncondensing)   |
| <b>Storage Temperature</b>          | 14 to 140°F (-10 to 60°C)   |
| <b>Quantity Shipped per Pallate</b> | 320 units   |

| SKU               | Description  | Weight:<br>Hardware<br>lb (kg) | Weight:<br>Single Carton<br>lb (kg) | Weight:<br>Master Pack<br>of 8 Cartons<br>lb (kg) |
|-------------------|--|--------------------------------|-------------------------------------|---|
| CP-9971-C-K9=     | Cisco Unified IP Endpoint 9971, Charcoal, Standard Handset     | 3.48(1.577)                    | 4.55(2.065)                         | 38.00(17.235)                                     |
| CP-9971-CL-K9=    | Cisco Unified IP Endpoint 9971, Charcoal, Slimline Handset     | 3.41(1.546)                    | 4.36(1.979)                         | 36.62(16.610)                                     |
| CP-9971-W-K9=     | Cisco Unified IP Endpoint 9971, Arctic White, Standard Handset | 3.66(1.660)                    | 4.62(2.094)                         | 38.65(17.530)                                     |
| CP-9971-WL-K9=    | Cisco Unified IP Endpoint 9971, Arctic White, Slimline Handset | 3.59(1.629)                    | 4.56(2.067)                         | 38.17(17.315)                                     |
| CP-9971-C-A-K9=   | Cisco UC Phone 9971, Charcoal, Arabic keypad, Std HS           | 3.48(1.577)                    | 4.55(2.065)                         | 38.00(17.235)                                     |
| CP-9971-W-A-K9=   | Cisco UC Phone 9971, White, Arabic keypad, Std HS              | 3.66(1.660)                    | 4.62(2.094)                         | 38.65(17.530)                                     |
| CP-9971-C-A-C-K9= | Cisco UC Phone 9971, Charcoal, Arabic keypad, Std HS, Camera   | -                              | -                                   | -   |
| CP-9971-W-A-C-K9= | Cisco UC Phone 9971, White, Arabic keypad, Std HS, Camera      | -                              | -                                   | -   |
| CP-89/9900-HS-C=  | Spare Handset for 8900 or 9900 Series, Charcoal, Standard      | 0.39(0.177)                    | -                                   | -   |
| CP-89/9900-HS-CL= | Spare Handset for 8900 or 9900 Series, Charcoal, Slimline      | 0.32(0.146)                    | -                                   | -   |
| CP-89/9900-HS-W=  | Spare Handset for 8900 or 9900 Series, Arctic White, Standard  | 0.41(0.187)                    | -                                   | -   |
| CP-89/9900-HS-WL= | Spare Handset for 8900 or 9900 Series, Arctic White, Slimline  | 0.34(0.156)                    | -                                   | -   |

**Table 3.** Calling Features

| Feature                        | Specifications   |
|--------------------------------|--|
| <b>Calling Feature Support</b> | <ul style="list-style-type: none"> <li>• + Dialing</li> <li>• Abbreviated dialing</li> <li>• Adjustable ringing and volume levels</li> <li>• Adjustable display brightness</li> <li>• Agent Greeting/Whisper Coaching</li> <li>• Application Launch Pad</li> <li>• Auto-answer</li> <li>• Auto-detection of headset</li> <li>• Barge</li> <li>• Callback</li> <li>• Call forward</li> <li>• Call forward notification</li> <li>• Call history lists</li> <li>• Call park</li> <li>• Call pickup</li> <li>• Call timer</li> <li>• Call waiting</li> <li>• Caller ID</li> <li>• Corporate directory</li> <li>• Conference</li> <li>• Direct transfer</li> <li>• Extension mobility service</li> <li>• Fast-dial service</li> <li>• Forced access codes/Client matter codes</li> <li>• Group call pickup</li> <li>• Hold</li> <li>• Intercom</li> <li>• Immediate divert</li> <li>• Join</li> <li>• Last-number redial</li> <li>• Malicious-caller ID</li> <li>• Message-waiting indicator</li> <li>• Meet-me conference</li> <li>• Music on hold</li> <li>• Mute</li> <li>• Network profiles (automatic)</li> <li>• On- and off-network distinctive ringing</li> <li>• OPickUp</li> <li>• Personal directory</li> <li>• Predialing before sending</li> <li>• Privacy</li> <li>• Redial</li> <li>• Ring tone per line appearance</li> <li>• Service URL</li> <li>• Shared line</li> <li>• Time and date display</li> <li>• Transfer</li> <li>• Visual Voice Mail</li> <li>• Voice Mail</li> </ul> |
| <b>Audio Codec Support</b>     | G.711a, G.711u, G.729a, G.729ab, G.722, iSAC and iLBC audio compression codecs   |

| Feature                               | Specifications   |
|---------------------------------------|--|
| <b>Configuration Options</b>          | <ul style="list-style-type: none"> <li>• Dynamic Host Configuration Protocol (DHCP) client or static configuration</li> <li>• Support for online firmware upgrades using Trivial File Transfer Protocol (TFTP)</li> <li>• Domain Name System (DNS)</li> <li>• HTTP Firmware Management</li> </ul>  |
| <b>Network Features</b>               | <ul style="list-style-type: none"> <li>• Cisco Discovery Protocol (CDP)</li> <li>• Link Layer Discovery Protocol Power over Ethernet (LLDP-PoE)</li> <li>• Transparent secure roaming</li> <li>• Provisioning of network parameters through DHCP</li> <li>• Switch Auto-Negotiation</li> <li>• VPN Client</li> </ul>   |
| <b>Security Features</b>              | <ul style="list-style-type: none"> <li>• Certificates</li> <li>• Image authentication</li> <li>• Device authentication</li> <li>• File authentication</li> <li>• Signaling authentication</li> <li>• Media encryption using Secure Real-Time Protocol (SRTP)</li> <li>• Signaling encryption using Transport Layer Security (TLS) Protocol</li> <li>• Certificate authority proxy function (CAPF)</li> <li>• Secure profiles</li> <li>• Encrypted configuration files</li> </ul> |
| <b>Provisioning and Manufacturing</b> | <ul style="list-style-type: none"> <li>• Cisco Unified Communications Manager Express Version Negotiation</li> <li>• Web server for configuration and statistics</li> <li>• QoS reporting: jitter, delay, dropped packets, and latency on a per-call basis</li> <li>• Real Time Control Protocol (RTCP) support and monitoring</li> <li>• Syslog</li> </ul>  |

**Table 4.** Wi-Fi Features and Specifications

| Feature                                      | Specifications   |                                       |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
|--|--|---------------------------------------|---------------|---------------|---------------------------------------|------------------------|---------------------------------------|-----------------|-----------------|-----------------|------------------|-------------------|------------------|------------------|------------------|------------------|------------------|--|------------------|------------------|--|------------------|------------------|--|------------------|------------------|--|------------------|
| <b>Protocol</b>                              | IEEE 802.11a, 802.11b, and 802.11g   |                                       |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| <b>Frequency Band and Operating Channels</b> | Uses IEEE 802.11d to identify band ranges and channels   |                                       |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| <b>Support Mode</b>                          | IEEE 802.11a<br>IEEE 802.11b/g<br>Autosensing, IEEE 802.11b/g preferred over IEEE 802.11a<br>Received signal strength indicator (RSSI) (default)   |                                       |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| <b>Data Rates</b>                            | <table border="1"> <thead> <tr> <th>IEEE 802.11a:</th> <th>IEEE 802.11b:</th> <th>IEEE 802.11g:</th> </tr> </thead> <tbody> <tr> <td>6, 9, 12, 18, 24, 36, 48, and 54 Mbps</td> <td>1, 2, 5.5, and 11 Mbps</td> <td>6, 9, 12, 18, 24, 36, 48, and 54 Mbps</td> </tr> </tbody> </table>   | IEEE 802.11a:                         | IEEE 802.11b: | IEEE 802.11g: | 6, 9, 12, 18, 24, 36, 48, and 54 Mbps | 1, 2, 5.5, and 11 Mbps | 6, 9, 12, 18, 24, 36, 48, and 54 Mbps |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| IEEE 802.11a:                                | IEEE 802.11b:  | IEEE 802.11g:                         |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 6, 9, 12, 18, 24, 36, 48, and 54 Mbps        | 1, 2, 5.5, and 11 Mbps   | 6, 9, 12, 18, 24, 36, 48, and 54 Mbps |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| <b>Nonoverlapping Channels</b>               | IEEE 802.11a: Up to 23 (including radar channels)<br>IEEE 802.11b/g: 3 (Japan uses 4)<br>(Bluetooth 2.0 also makes use of the 2.4 GHz spectrum, so IEEE 802.11a is recommended when using Bluetooth 2.0)   |                                       |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| <b>Wireless Modulation</b>                   | IEEE 802.11a: OFDM<br>IEEE 802.11b: Direct sequence spread spectrum (DSSS)<br>IEEE 802.11g: OFDM and DSSS  |                                       |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| <b>Receiver Sensitivity (Typical)</b>        | <table border="1"> <thead> <tr> <th>IEEE 802.11a:</th> <th>IEEE 802.11b:</th> <th>v802.11g:</th> </tr> </thead> <tbody> <tr> <td>6 Mbps: -91 dBm</td> <td>1 Mbps: -96 dBm</td> <td>6 Mbps: -91 dBm</td> </tr> <tr> <td>9 Mbps: -90 dBm</td> <td>2 Mbps: -95 dBm</td> <td>9 Mbps: -90 dBm</td> </tr> <tr> <td>12 Mbps: -88 dBm</td> <td>5.5 Mbps: -90 dBm</td> <td>12 Mbps: -87 dBm</td> </tr> <tr> <td>18 Mbps: -86 dBm</td> <td>11 Mbps: -87 dBm</td> <td>18 Mbps: -86 dBm</td> </tr> <tr> <td>24 Mbps: -82 dBm</td> <td></td> <td>24 Mbps: -82 dBm</td> </tr> <tr> <td>36 Mbps: -80 dBm</td> <td></td> <td>36 Mbps: -80 dBm</td> </tr> <tr> <td>48 Mbps: -77 dBm</td> <td></td> <td>48 Mbps: -77 dBm</td> </tr> <tr> <td>54 Mbps: -75 dBm</td> <td></td> <td>54 Mbps: -76 dBm</td> </tr> </tbody> </table> | IEEE 802.11a:                         | IEEE 802.11b: | v802.11g:     | 6 Mbps: -91 dBm                       | 1 Mbps: -96 dBm        | 6 Mbps: -91 dBm                       | 9 Mbps: -90 dBm | 2 Mbps: -95 dBm | 9 Mbps: -90 dBm | 12 Mbps: -88 dBm | 5.5 Mbps: -90 dBm | 12 Mbps: -87 dBm | 18 Mbps: -86 dBm | 11 Mbps: -87 dBm | 18 Mbps: -86 dBm | 24 Mbps: -82 dBm |  | 24 Mbps: -82 dBm | 36 Mbps: -80 dBm |  | 36 Mbps: -80 dBm | 48 Mbps: -77 dBm |  | 48 Mbps: -77 dBm | 54 Mbps: -75 dBm |  | 54 Mbps: -76 dBm |
| IEEE 802.11a:                                | IEEE 802.11b:  | v802.11g:                             |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 6 Mbps: -91 dBm                              | 1 Mbps: -96 dBm  | 6 Mbps: -91 dBm                       |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 9 Mbps: -90 dBm                              | 2 Mbps: -95 dBm  | 9 Mbps: -90 dBm                       |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 12 Mbps: -88 dBm                             | 5.5 Mbps: -90 dBm  | 12 Mbps: -87 dBm                      |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 18 Mbps: -86 dBm                             | 11 Mbps: -87 dBm   | 18 Mbps: -86 dBm                      |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 24 Mbps: -82 dBm                             |  | 24 Mbps: -82 dBm                      |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 36 Mbps: -80 dBm                             |  | 36 Mbps: -80 dBm                      |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 48 Mbps: -77 dBm                             |  | 48 Mbps: -77 dBm                      |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |
| 54 Mbps: -75 dBm                             |  | 54 Mbps: -76 dBm                      |               |               |                                       |                        |                                       |                 |                 |                 |                  |                   |                  |                  |                  |                  |                  |  |                  |                  |  |                  |                  |  |                  |                  |  |                  |

| Feature  | Specifications   |  |   |
|--|--|--|---|
| <b>Transmitter Output Power</b>  | IEEE 802.11a OFDM:<br>40 mW (16 dBm)<br>32 mW (15 dBm)<br>20 mW (13 dBm)<br>8 mW (9 dBm)<br>3.2 mW (5 dBm)<br>1 mW (0 dBm)   | IEEE 802.11b CCK:<br>50 mW (17 dBm)<br>20 mW (13 dBm)<br>8 mW (9 dBm)<br>3.2 mW (5 dBm)<br>1 mW (0 dBm)  | IEEE 802.11g OFDM:<br>40 mW (16 dBm)<br>32 mW (15 dBm)<br>20 mW (13 dBm)<br>8 mW (9 dBm)<br>3.2 mW (5 dBm)<br>1 mW (0 dBm)  |
| <b>Range<br/>(Stated Ranges Are from Measured Open-Site Range Testing)</b> | IEEE 802.11a:<br>6 Mbps: 604ft (184 m)<br>9 Mbps: 604 ft (184 m)<br>12 Mbps: 551 ft (168 m)<br>18 Mbps: 545 ft (166 m)<br>24 Mbps: 512 ft (156 m)<br>36 Mbps: 420 ft (128 m)<br>48 Mbps: 322 ft (98 m)<br>54 Mbps: 289 ft (88 m)   | IEEE 802.11b:<br>1 Mbps: 1,010 ft (308 m)<br>2 Mbps: 951 ft (290 m)<br>5.5 Mbps: 919 ft (280 m)<br>11 Mbps: 902 ft (275 m)   | IEEE 802.11g:<br>6 Mbps: 709 ft (216 m)<br>9 Mbps: 650 ft (198 m)<br>12 Mbps: 623 ft (190 m)<br>18 Mbps: 623 ft (190 m)<br>24 Mbps: 623 ft (190 m)<br>36 Mbps: 495 ft (151 m)<br>48 Mbps: 413 ft (126 m)<br>54 Mbps: 394 ft (120 m) |
| <b>Access Point Support</b>  | Ranges and actual throughput vary based on numerous environmental factors so individual performance may differ.  |  |   |
|  | Cisco 500 Series Wireless Express Access Points<br>Cisco 1000 Series Lightweight Access Point<br>Cisco Aironet 1100 Series Access Point<br>Cisco Aironet 1130 AG Series<br>Cisco Aironet 1200 Series<br>Cisco Aironet 1140 AG Series<br>Cisco Aironet 1230 AG Series<br>Cisco Aironet 1240 AG Series<br>Cisco Aironet 1250 Series<br>Cisco Aironet 1300 Series | Required versions:<br>Cisco Wireless LAN Controller (lightweight)<br>Minimum: Version 4.0.217.0<br>Recommended: Version 5.1.151.0 or later<br>Cisco IOS® Software access points (autonomous)<br>Minimum: Version 12.3(8)JEA<br>Recommended: Version 12.3(4g)JA1 or later |   |
| <b>Wireless Security</b>   | Authentication:<br>Cisco Wireless Security Suite IEEE 802.1X<br>Lightweight Extensible Authentication Protocol (LEAP) Authentication<br>Extensible Authentication Protocol and Flexible Authentication with Secure Tunneling (EAP-FAST)<br>Wi-Fi Protected Access (WPA) Versions 1 and 2: Personal and Enterprise<br>Cisco Centralized Key Management (CKM)    | Encryption:<br>40- and 128-bit static Wired Equivalent Privacy (WEP)<br>Temporal Key Integrity Protocol (TKIP) and Message Integrity Check (MIC)<br>Advanced Encryption Standard (AES)   |   |
| <b>QoS</b>   | IEEE 802.11e and Wi-Fi Multimedia (WMM)<br>Traffic Specification (TSPEC)<br>Enhanced Distributed Channel Access (EDCA)<br>QoS Basic Service Set (QBSS)   |  |   |
| <b>Radar Detection</b>   | Dynamic frequency selection (DFS) and transmit power control (TPC) according to IEEE 802.11h   |  |   |

**Table 5.** Video Features and Specifications

| Feature                         | Specifications  |
|---------------------------------|---|
| <b>Video Standards</b>          | H.264/AVC   |
| <b>Frame Rates</b>              | 30 fps (maximum) using H.264/AVC for video  |
| <b>Frame or Picture Formats</b> | SQCIF (128 x 96 pixels)<br>QCIF (176 x 144 pixels)<br>QVGA (320 x 240 pixels)<br>SIF (352 x 240 pixels)<br>CIF (352 x 288 pixels)<br>VGA (640 x 480 pixels) |

## Ordering Information

Help customers understand all the components or parts they need to purchase in order to install and use the product. This section also provides a direct link to the Cisco Ordering Tool and lists part numbers for customer convenience.

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 Unified IP Phone 9971, Charcoal, Standard Handset, Spare  | CP-9971-C-K9=     |
| Cisco Unified IP Phone 9971, Charcoal, Slimline Handset, Spare  | CP-9971-CL-K9=    |
| Cisco Unified IP Phone 9971, White, Standard Handset, Spare   | CP-9971-W-K9=     |
| Cisco Unified IP Phone 9971, White, Slimline Handset, Spare   | CP-9971-WL-K9=    |
| Cisco UC Phone 9971, Charcoal, Arabic keypad, Std HS  | CP-9971-C-A-K9=   |
| Cisco UC Phone 9971, White, Arabic keypad, Std HS   | CP-9971-W-A-K9=   |
| Cisco UC Phone 9971, Charcoal, Arabic keypad, Std HS, Camera  | CP-9971-C-A-C-K9= |
| Cisco UC Phone 9971, White, Arabic keypad, Std HS, Camera   | CP-9971-W-A-C-K9= |
| Cisco Unified IP Phone 9971, Charcoal, Standard Handset Configurable with Camera and Jawbone ICON for Cisco Headset. (Offered in United States only.) | CP-9971-CHSUS-K9  |
| Cisco Unified IP Phone 9971, Charcoal, Slimline Handset Configurable with Camera and Jawbone ICON for Cisco Headset. (Offered in United States only.) | CP-9971-CLHSUS-K9 |

**Table 7.** Spare Parts

|   |                   |
|---|-------------------|
| Spare Handset for 8900 or 9900 Series, White, Slimline    | CP-89/9900-HS-WL= |
| Spare Handset for 8900 or 9900 Series, White, Standard    | CP-89/9900-HS-W=  |
| Spare Handset for 8900 or 9900 Series, Charcoal, Slimline | CP-89/9900-HS-CL= |
| Spare Handset for 8900 or 9900 Series, Charcoal, Standard | CP-89/9900-HS-C=  |
| Spare Handset Cord, White                                 | CP-HS-CORD-W=     |
| Spare Handset Cord, Charcoal                              | CP-HS-CORD-C=     |
| Spare footstand for 8900 or 9900 Series, White            | CP-89/9900-FS-W=  |
| Spare footstand for 8900 or 9900 Series, Charcoal         | CP-89/9900-FS-C=  |

**Table 8.** Accessories

Accessories include the camera, Jawbone ICON for Cisco Bluetooth headset, Key Expansion Modules and Locking Wall Mount Kits. The Cisco Unified Video Camera is offered at no additional hardware price when ordered with the configurable phone SKUs or with phone and camera bundles listed in Table 6.

For more information about accessories, go to:

- [Cisco Unified Video Camera for the 9900 Series IP Phone](#)
- [Jawbone ICON for Cisco Bluetooth Headset](#)
- [Cisco Unified IP Color Key Expansion Module](#)

|   |                    |
|---|--------------------|
| Cisco Unified Video Camera for the 9900 Series IP Phone, Charcoal                       | CP-CAM-C=          |
| Cisco Unified Video Camera for the 9900 Series IP Phone, White                          | CP-CAM-W=          |
| Jawbone ICON for Cisco Bluetooth Headset, Charcoal, Australia Power Cube, Spare         | CP-ICON-HS-C-AU=   |
| Jawbone ICON for Cisco Bluetooth Headset, Arctic White, Australia Power Cube, Spare     | CP-ICON-HS-W-AU=   |
| Jawbone ICON for Cisco Bluetooth Headset, Charcoal, Europe Power Cube, Spare            | CP-ICON-HS-C-CE=   |
| Jawbone ICON for Cisco Bluetooth Headset, Arctic White, Europe Power Cube, Spare        | CP-ICON-HS-W-CE=   |
| Jawbone ICON for Cisco Bluetooth Headset, Charcoal, North America Power Cube, Spare     | CP-ICON-HS-C-NA=   |
| Jawbone ICON for Cisco Bluetooth Headset, Arctic White, North America Power Cube, Spare | CP-ICON-HS-W-NA=   |
| Jawbone ICON for Cisco Bluetooth Headset, Charcoal, United Kingdom Cube, Spare          | CP-ICON-HS-C-UK=   |
| Jawbone ICON for Cisco Bluetooth Headset, Arctic White, United Kingdom Cube, Spare      | CP-ICON-HS-W-UK=   |
| Cisco Unified IP Color Key Expansion Module, Charcoal                                   | CP-CKEM-C=         |
| Cisco Unified IP Color Key Expansion Module, White                                      | CP-CKEM-W=         |
| Locking Wallmount Kit for 8900 or 9900 Series, Charcoal                                 | CP-89/9900-LWМК-C= |
| Locking Wallmount Kit for 8900 or 9900 Series, Arctic White                             | CP-89/9900-LWМК-W= |
| Locking Wallmount Kit for 8900 or 9900 Series and KEM, Charcoal                         | CP-89/9900-LK-K-C= |
| Locking Wallmount Kit for 8900 or 9900 Series and KEM, Arctic White                     | CP-89/9900-LK-K-W= |

**Table 9.** Local Power Options: Cube and Regional Cords

The power cube is new for the 8900 and 9900 Series IP Phones, but the cords are the same cords as used with the 7900 series. Power Cube 4 supports up to 44W and is internationally rated for different power grids worldwide.

| Product Name  | Part Number     |
|---|-----------------|
| Cisco Unified IP Endpoint Power Cube 4: 48V; 0.917A; 47-63Hz; 100-240V~0.8A | CP-PWR-CUBE-4=  |
| Asia Pacific  | CP-PWR-CORD-AP= |
| Argentina   | CP-PWR-CORD-AR= |
| Australia   | CP-PWR-CORD-AU= |
| European Community  | CP-PWR-CORD-CE= |
| China   | CP-PWR-CORD-CN= |
| Japan   | CP-PWR-CORD-JP= |
| North America   | CP-PWR-CORD-NA= |
| Switzerland   | CP-PWR-CORD-SW= |
| United Kingdom  | CP-PWR-CORD-UK= |



---

## Cisco Services

Cisco Services integrates closely with CMO teams as an essential element of any technology solution. Please contact your Cisco Services marcom manager if you have not already received targeted services content blocks for integration. Please e-mail [ca-marcom@cisco.com](mailto:ca-marcom@cisco.com) if you are not sure of the appropriate contact.

The following text is a **placeholder** and should ideally be replaced with targeted content:

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

Today, the network is a strategic platform in a world that demands better integration between people, information, and ideas. The network works better when services, together with products, create solutions aligned with business needs and opportunities.

The unique Cisco Lifecycle approach to services defines the requisite activities at each phase of the network lifecycle to help ensure service excellence. With a collaborative delivery methodology that joins the forces of Cisco, our skilled network of partners, and our customers, we achieve the best results.



---

Americas Headquarters  
Cisco Systems, Inc.  
San Jose, CA

Asia Pacific Headquarters  
Cisco Systems (USA) Pte. Ltd.  
Singapore

Europe Headquarters  
Cisco Systems International BV Amsterdam,  
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)