Cisco Webex

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# Cisco Webex Room Kit Pro

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The Cisco Webex® Room Kit Pro provides a powerful and flexible platform for creating the ultimate video collaboration experience – large, custom video rooms, including boardrooms, auditoriums, and purpose-built rooms for vertical applications. The Room Kit Pro is the most advanced product within the Room Kit Series, built with integrators in mind and enabling flexibility and creativity for customized video collaboration rooms that delight customers.

The Room Kit Pro acts as the audio and video engine for Ultra-High-Definition (UHD) video collaboration applications and AV integrations in which multiple screens, cameras, and content sources may be required – whether with the Cisco Webex Quad Camera, Precision 60 Camera, or SpeakerTrack 60 dual camera. The Room Kit Pro continues the same artificial intelligence capabilities already offered on the rest of the Cisco Webex Room Series: intelligent views, noise suppression, voice commands, and people count.

The Room Kit Pro delivers up to 2160p60 end-to-end UHD video. The codec's rich set of video and audio inputs, flexible media engine, and support for up to three screens enable a variety of use cases, adaptable to your specific needs. The Room Kit Pro can register on premises or to Cisco Webex in the cloud.

The Room Kit Pro supports intelligent cameras and functionality to enable dynamic viewing capabilities in video meetings:

- Cisco Webex Quad Camera: Camera system with four embedded digital cameras that enable best overview and speaker tracking capabilities. With the Quad Camera, the Room Kit Pro can also deliver analytics such as people count.
- Cisco® SpeakerTrack 60 Camera: Dual camera system featuring a unique direct, fast-switching approach for speaker tracking with two Precision 60 cameras.
- Cisco PresenterTrack: Makes it easier for presenters to move around the front of the room, using the Precision 60 Camera to follow a presenter within a defined zone.

With its powerful media engine, the Room Kit Pro lets you build the video collaboration room of your dreams.



Figure 1. Cisco Webex Codec Pro

Cisco offers three options to purchase the Cisco Webex Room Kit Pro:

- Room Kit Pro: Codec Pro, Quad Camera, and Webex Room Navigator
- Room Kit Pro Precision 60: Codec Pro, Precision 60 Camera, and Webex Room Navigator
- Codec Pro: Codec only



**Figure 2.**Cisco Webex Room Kit Pro integrator package with Quad Camera and Webex Room Navigator

#### Bringing more intelligence to large and specialized rooms

The Cisco Webex Room Kit Pro is video innovation in box, bringing more intelligence and usability to your to your largest and specialized collaboration rooms and spaces. While others are still struggling to insert advanced features such as speaker tracking, wireless sharing, and 4K content into their high-end products, Cisco is already proliferating these innovations to meeting rooms of all sizes in a cost-effective and simple way. With the Room Kit Pro, Cisco is helping customers experience smarter meetings, enable smarter presentations, and create smarter room and device integrations. And when registered to the Cisco Webex in the cloud, additional cloud-based functionalities are enabled that enhance the user experience and team workflow as well as further simplifying deployment.

- Smart meetings: Powerful, integrated cameras deliver intelligent view capabilities, such as automatic framing and speaker tracking; automatic noise suppression reductions meeting disruptions
- **Smart presentations:** Supports up to three screens, dual content sources, wireless sharing, and 4K content make for great presentations
- **Smart integrations:** People count for usage metrics and resource allocation; tight integrations with screens to enhance user interactions; APIs and macros allow meeting personalization
- Registration flexibility: Built for both cloud and on-premises deployment, protecting your investment

## Product features

Table 1 summarizes the key features of the Cisco Webex Room Kit Pro.

 Table 1.
 Feature summary

Feature Summary	
Design features	<ul> <li>One of the most powerful and feature-rich codecs available, with the ultimate in video and audio quality</li> <li>UHD resolution to support large screen surfaces</li> <li>1.5 Rack Units (RU) high, rack mountable, with optional rack-mounting solution</li> <li>Professional-grade connectors using Euroblock / Phoenix</li> <li>Unmatched quality and flexibility</li> <li>Standards-compliant 1080p and 2160p solution, compatible with standards-based video without losing features</li> </ul>
Application features	<ul> <li>Supports Cisco Intelligent Proximity for content sharing to mobile devices and wireless sharing from Macs and PCs</li> <li>Supports switched conferencing for enhanced layouts and enabling video on multiple screens</li> <li>Easy control of room peripherals such as lights, room dividers, and curtains directly from the Webex Room Navigator through the API (requires external third-party control system processor)</li> <li>Limitless integration possibilities</li> <li>Participate in Cisco Webex™ whiteboarding sessions from the Webex app; receive on-screen notification of shared whiteboard content (supported on cloud-registered devices)</li> <li>Embedded MultiSite with up to 5 participants</li> <li>6 simultaneous video inputs that can be combined individually on all 3 outputs</li> <li>Calls with HD video and UHD content</li> <li>Simplified join-meeting experience with One Button to Push (OBTP)</li> <li>Ideal for team-based collaboration, boardrooms, meeting rooms, and industry applications</li> </ul>
Performance features	<ul> <li>Optimal definition up to 1080p60</li> <li>Up to 15 Mbps total MultiSite bandwidth (6 Mbps in point-to-point calls)</li> <li>6 simultaneous video inputs - 3 4K and 3 Full HD</li> <li>Connect up to 8 microphones directly to the codec</li> <li>Full-duplex audio with high-quality stereo sound</li> <li>Full API</li> <li>Cisco Media Assure packet loss protection (Cisco ClearPath also supported)</li> </ul>

## Product capabilities

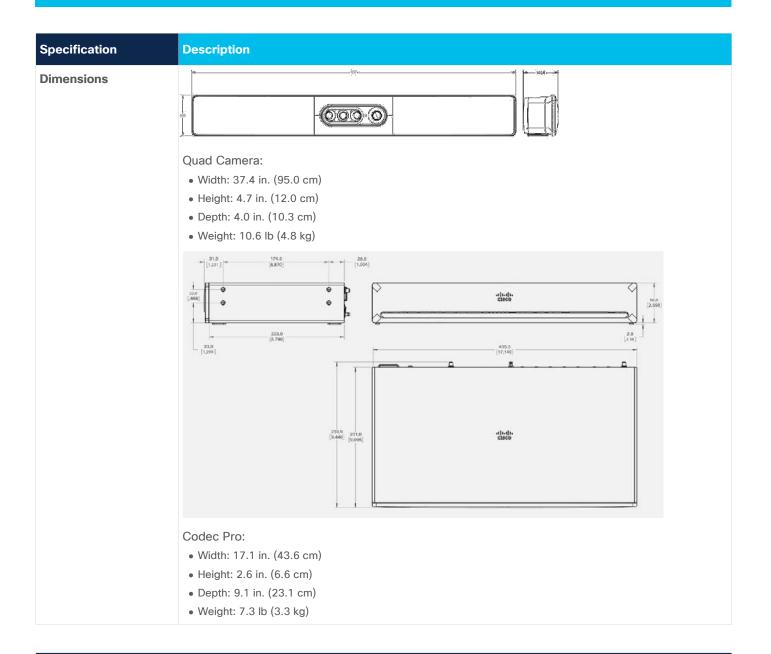
Table 2 lists the specifications for the Cisco Webex Room Kit Pro and select specifications for relevant cameras and peripherals where noted.

 Table 2.
 Product specifications

Specification	Description
Software compatibility	Cisco Collaboration Endpoint (CE) Software Version 9.14.5 or later, or Cisco Webex RoomOS
Default components in Room Kit Pro	<ul> <li>Cisco Webex Codec Pro</li> <li>Cisco Webex Quad Camera (a package is also available with the Precision 60 camera)</li> <li>Cisco Webex Room Navigator</li> <li>Wall mount for Quad Camera</li> </ul>
Optional hardware components	<ul> <li>Cisco Table Microphone (with Euroblock plug), wall mount for Codec Pro, rack mount for Codec Pro, various cables</li> </ul>
Bandwidth	Up to 6 Mbps point-to-point
Minimum bandwidth for resolution/frame rate	<ul> <li>720p30 from 768 kbps</li> <li>720p60 from 1152 kbps</li> <li>1080p30 from 1472 kbps</li> <li>1080p60 from 2560 kbps</li> </ul>
Firewall traversal	Cisco Expressway <sup>™</sup> technology H.460.18, H.460.19 firewall traversal
Video standards	• H.264, H.265, H.263 for TANDBERG MXP interop only (check Admin Guide)
Video inputs (6)	<ul> <li>2 HDMI inputs support formats up to maximum 1080p60</li> <li>3 HDMI inputs support formats up to maximum UHD (3840 x 2160) @ 30 fps including HD1080p60</li> <li>One 3G-SDI/HD-SDI input supports formats up to maximum 1080p60</li> <li>Extended Display Identification Data (EDID)</li> <li>Consumer Electronics Control (CEC) 2.0</li> </ul>
Video outputs (3)	<ul> <li>2 HDMI outputs support formats up to 3840 x 2160@60 fps (4Kp60)</li> <li>1 HDMI output supports formats up to 3840 x 2160@30 fps (4Kp30)</li> <li>CEC 2.0</li> </ul>
Encode and decode	<ul><li>Video stream: Full HD 1080p60</li><li>Content stream: 4K 2160p15</li></ul>
Audio standards	• G.711, G.722, G.722.1, G.729AB, 64 kbps and 128 kbps MPEG4 AAC-LD mono and stereo, OPUS
Audio features	<ul> <li>High quality 20-kHz audio</li> <li>8 separate acoustic echo cancellers</li> <li>8-port audio mixer</li> <li>8 assignable equalizers</li> <li>Automatic Gain Control (AGC)</li> <li>Automatic noise reduction</li> <li>Active lip synchronization</li> </ul>
Audio inputs	<ul> <li>8 microphones, 48V phantom powered, Euroblock connector, each with separate echo cancellers and noise reduction; all microphones can be set for balanced line level</li> <li>3 HDMI, digital: stereo PC/DVD input</li> </ul>

Specification	Description
Audio outputs	<ul> <li>6 balanced line level outputs, Euroblock connector</li> <li>3 HDMI outputs</li> <li>HDMI input #1 supports Audio Return Channel (ARC) audio output to Quad Camera</li> <li>1 line out for subwoofer (Quad Camera)</li> </ul>
Speakers (Quad Camera)	<ul> <li>High-quality speakers</li> <li>Frequency response 70 Hz to 20 kHz</li> <li>Max output level SPL 90 dB</li> </ul>
Speaker tracking (Quad Camera, SpeakerTrack 60)	6-element microphone array for accurate speaker tracking
Dual stream	<ul> <li>H.239 (H.323) dual stream</li> <li>BFCP Session Initiation Protocol (SIP) dual stream</li> <li>Supports resolutions up to 3840 x 2160p15 fps and 1080p60</li> </ul>
Wireless sharing	<ul> <li>Cisco Webex clients (up to 3840 x 2160p5)</li> <li>Cisco Intelligent Proximity client (up to 1920 x 1080p5)</li> </ul>
Multipoint support	• 5-way embedded SIP/H.323 conferencing capability with MultiSite option
MultiSite features (embedded multipoint) (optional upgrade)	<ul> <li>Adaptive SIP/H.323 MultiSite:</li> <li>3-way resolution up to 1080p30 plus content up to 4Kp15</li> <li>4-way resolution up to 720p30 plus content up to 4Kp15</li> <li>5-way resolution up to 720p30 plus content up to 4Kp15</li> <li>Full individual audio and video transcoding</li> <li>H.323, SIP, and VoIP in the same conference</li> <li>Support for presentation (H.239, BFCP) from any participant at resolutions up to 3840 x 2160p5</li> <li>Best impression (automatic continuous presence layouts)</li> <li>Encryption and dual stream from any site</li> </ul>
Protocols	<ul><li>H.323</li><li>SIP</li><li>Cisco Webex</li></ul>
Embedded encryption	<ul> <li>H.323 and SIP point-to-point</li> <li>Standards-based: H.235 v3 and Advanced Encryption Standard (AES)</li> <li>Automatic key generation and exchange</li> </ul>
IP network features	<ul> <li>DNS lookup for service configuration</li> <li>Differentiated Services (DiffServ) (Quality of Service [QoS])</li> <li>IP-adaptive bandwidth management (including flow control)</li> <li>Automatic gatekeeper discovery</li> <li>Dynamic playout and lip-sync buffering</li> <li>H.245 dual-tone multifrequency (DTMF) tones in H.323</li> <li>DTMF tones in SIP, RFC 4733</li> <li>Date and time support using Network Time Protocol (NTP)</li> <li>Packet loss-based down speeding</li> <li>Uniform Resource Identifier (URI) dialing</li> <li>TCP/IP</li> </ul>

Specification	Description
	<ul> <li>Dynamic Host Configuration Protocol (DHCP)</li> <li>802.1X network authentication</li> <li>802.1Q Virtual LAN</li> <li>802.1p QoS and class of service</li> <li>Cisco Media Assure and ClearPath</li> </ul>
Call control	<ul> <li>Cisco Collaboration Cloud / Webex</li> <li>Cisco Unified Communications Manager (CUCM)</li> <li>Native registration CUCM</li> <li>Requires CUCM Version 10.5.2 or later with device pack for Room Kit Pro</li> <li>Cisco TelePresence Video Communication Server (VCS)</li> <li>Native registration with VCS</li> <li>Third-party H.323 gatekeepers and standards-based SIP proxies</li> </ul>
IPv6 network support	<ul> <li>Single call stack support for both H323 and SIP</li> <li>Dual-stack IPv4 and IPv6 for DHCP, SSH, HTTP, HTTPS, DNS, DiffServ</li> <li>Support for static IP address assignment, stateless auto-configuration, and DHCP v6</li> </ul>
Security features	<ul> <li>Management using HTTPS and SSH</li> <li>IP administration password</li> <li>Password to access administration features on Touch controller</li> <li>Disable IP services</li> <li>Network settings protection</li> </ul>
Certificate management	<ul> <li>Certificate Authority Proxy Function (CAPF) support for additional security</li> <li>Manufacturer-Installed Certificates (MIC)</li> <li>Locally Significant Certificates (LSC)</li> <li>X.509 Digital Certificates (DER encoded binary); both DER and Base-64 formats are acceptable for the client and server certificates; certificates with a key size of 1024, 2048, and 4096 are supported</li> </ul>
Network interfaces Codec Pro	<ul> <li>1 Ethernet (RJ-45) 10/100/1000 for LAN</li> <li>2 Ethernet (RJ-45) 10/100/1000 for direct pairing with camera (camera control)</li> <li>2 Ethernet (RJ-45) 10/100/1000 with PoE, 1 dedicated for direct pairing with Touch 10</li> <li>Wi-Fi 802.11a/b/g/n/ac 2.4 GHz and 5 GHz for LAN</li> <li>2x2 multiple input and multiple output (MIMO)</li> <li>Note: Due to compliance regulations, it is required that 802.11d is enabled in the access point for the product to operate properly within 5725 MHz - 5875 MHz.</li> <li>Using a Wifi connection is a flexible option, however an Ethernet connection is always preferred for high performance.</li> </ul>
Other interfaces	2x USB A port, USB-B, uUSB, factory reset pinhole
Power supply (Quad Camera)	<ul> <li>100 to 240 VAC, 50/60 Hz, 12V DC input</li> <li>Standby 6W, average 20W, peak 70W</li> </ul>
Operating temperature and humidity	<ul> <li>0° to 40°C (32° to 104°F) ambient temperature</li> <li>10% to 90% Relative Humidity (RH)</li> </ul>
Storage and transport temperature	• -20° to 60°C (-4° to 140°F) at RH 10% to 90% (noncondensing)



#### **Camera Overview**

5K Ultra HD camera

Support up to 60 fps

15.1 MP image sensor

1/1.7 CMOS

5x digital zoom (3 tele-lenses each with 50° horizontal field of view)

f/2.0 aperture

83° horizontal field of view; 51.5° vertical field of view

Auto-framing (audio + face detect)

## Regulatory compliance

- Directive 2014/30/EU (EMC Directive) and Directive 2014/35/EU (Low-Voltage Directive) for the non-radio versions
- Directive 2014/53/EU (Radio Equipment Directive) for the radio versions
- Directive 2011/65/EU (RoHS)
- Directive 2002/96/EU (WEEE)
- NRTL approved (Product Safety)
- FCC Listed (Radio Equipment)

#### Standards

- Radio: EN 300 328, EN 301 893, EN 300 440 (only for the radio versions)
- EMC: EN 301 489-1 & -17 (only for the radio versions), EN 55032 Class A, EN 55024
- Safety: EN 60950-1 (for radio and non-radio), EN 62479, EN 62311 (for the radio versions)
- FCC CFR 47 Part 15B (EMC) Class A
- FCC CFR 47 Part 15C (RF)
- FCC CFR 47 Part 15E (RF)

Please check the Product Approval Status Database <a href="https://www.ciscofax.com/">https://www.ciscofax.com/</a> for approval documents per country.

### Ordering information

To place an order, please contact your local Cisco representative and refer to Table 3.

 Table 3.
 Ordering information

Product Name	Part Number	Compliance Model Number
Cisco Room Kit Pro - GPL, including	CS-KITPRO-K9	NA
Codec Pro	CS-CODEC-PRO+	TTC6-13
Quad Camera	CS-QUADCAM+	TTC8-10
Room Navigator control unit	CS-T10-TS+	TTC5-15
Cisco Webex Room Kit Pro with Precision 60 - GPL, including	CS-KITPRO-P60-K9	-
Codec Pro	CS-CODEC-PRO+	TTC6-13
Precision 60 Camera	CTS-CAM-P60	TTC8-07
Room Navigator control unit	CS-T10-TS+	TTC5-15
Cisco Webex Codec Pro - GPL, including	CS-CODEC-PRO-K9	TTC6-13
Codec Pro	CS-CODEC-PRO+	TTC6-13
Cisco Webex Codec Pro, No Radio - GPL	CS-CODEC-PRO-NR-K9	TTC6-13
Codec Pro - No Radio	CS-CODEC-PRO-NR+	TTC6-13

Product Name	Part Number	Compliance Model Number
Cisco Webex Codec Pro - TAA compliant, including Codec Pro - TAA, No Radio, or Codec Pro - TAA	CS-CODEC-PRO-K9++ CS-CODEC-PRO-NR++ CS-CODEC-PRO++	TTC6-13 TTC6-13
Cisco Webex Codec Pro, No Radio, nonencrypted - GPL Codec Pro - No Radio	CS-CODEC-PRO-K7 CS-CODECPRO-NR-K7+	TTC6-13 TTC6-13
Options		
Rack ears for Codec Pro	CS-CPRO-RACKEARS	-
Wall-mount kit for Codec Pro	CS-CPRO-WMK	-
Cisco Table Microphone with Euroblock connector	CS-MIC-TABLE-E	TTC5-14
Extension cable for Table Microphone	CAB-MIC-EXT-E	-
Cisco Ceiling Microphone	CTS-MIC-CLNG-G2	TTC5-13
Shielded cable for Ceiling Microphone (non-plenum rated)	CAB-ETHRSHLD-10M	-
8 m/26 ft HDMI 2.0 certified cable	CAB-PRES-2HDMI-GR	-
HDMI 2.0 cable 1.5 m/5 ft, gray	CAB-2HDMI-1.5M-GR	-
HDMI 2.0 cable 3 m/10 ft, gray	CAB-2HDMI-3M-GR	-
Ethernet cable 1.5 m/5 ft, gray	CAB-ETH-1.5M-GR	-
Ethernet cable 3 m/10 ft, gray	CAB-ETH-3M-GR	-
Ethernet cable 5 m/16.4 ft, gray	CAB-ETH-5M-GR	-
Software options - ordered separately		
Remote Monitoring	L-KIT-RM (L-TP-RM)	-
MultiSite (embedded multipoint)	L-KITPRO-MS	-
Spares		
Cisco Webex Codec Pro	CS-CODEC-PRO=	TTC6-13
Cisco Webex Codec Pro - No Radio No Crypto	CS-CODEC-PRO-NR-K7=	TTC6-13
Cisco Webex Quad Camera	CS-QUADCAM=	TTC8-10
Cisco Precision 60 Camera	CTS-CAM-P60=	TTC8-07

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#### Cisco environmental sustainability

Information about Cisco's environmental sustainability policies and initiatives for our products, solutions, operations, and extended operations or supply chain is provided in the "Environment Sustainability" section of Cisco's Corporate Social Responsibility (CSR) Report.

Reference links to information about key environmental sustainability topics (mentioned in the "Environment Sustainability" section of the CSR Report) are provided in the following table:

Sustainability topic	Reference
Information on product material content laws and regulations	<u>Materials</u>
Information on electronic waste laws and regulations, including products, batteries, and packaging	WEEE compliance

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#### Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. Learn more.

#### For more information

- Learn more about the Cisco Webex Room Kit Pro.
- Download the <u>Cisco Webex app</u>.

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