Cisco TelePresence Codec C40

Also available as an integrator package with a Cisco TelePresence PrecisionHD™ 1080p Camera and one microphone.

The Cisco TelePresence™ portfolio creates an immersive, face-to-face experience over the network— empowering you to collaborate with others like never before. Through a powerful combination of technologies and design that allows you and remote participants to feel as if you are all in the same room, the Cisco TelePresence portfolio has the potential to provide great productivity benefits and transform your business. Many organizations are already using it to control costs, make decisions faster, improve customer intimacy, scale scarce resources, and speed products to market.

Product Overview

The Cisco TelePresence Codec C40 provides all the power required to transform any conference room to a HD video collaboration room. Designed for the integrator, the C40 is the ideal solution for everyday, customized telepresence and collaboration projects. 1080p HD video, HD Collaboration and embedded MultiSite features combine to make the C40 ideal for a variety of applications.

Cisco TelePresence Codec C40 Features

Table 1 summarizes the key features for the Cisco TelePresence Codec C40.

Table 1.   Cisco TelePresence Codec C40 Feature Summary

Feature Summary	
Design Features	• The next generation HD video collaboration codec for every team room • 1U high, rack-mountable, with rack-mounting solution included • Professional-grade connectors • Unmatched quality and flexibility • Standards-compliant 1080p solution — compatible with standards-based video without losing features
Application Features	• Individual Transcoding embedded MultiSite[**] • HD collaboration with resolutions up to WXGA at full frame rate • Ideal for team-based collaboration and industry applications
Performance Features	• Optimal definition up to 1080p • H.323/SIP up to 6 Mbps point-to-point • Connect up to 3 HD sources and 2 microphones directly into the interface • Full duplex audio with high-quality stereo sound • Full APIs • Ability to take advantage of Cisco® Total Solution Management, transcoded HD MultiSite, recording and streaming, Mulitway and firewall traversal • Utilizes ClearPath packet loss protection technology for optimal experience

Product Capabilities

Table 2 provides a listing of the product capability specifications for the Cisco TelePresence Codec C40.

Table 2.   Product Specifications

Specification	Description
Unit Delivered Complete With:	• Videoconferencing codec, wireless remote control, rack mounting ears, LAN cable, power cable
Bandwidth	• H.323/SIP up to 6 Mbps point-to-point
Firewall Traversal	• Cisco Expressway technology • H.460.18, H.460.19 Firewall Traversal
Video Standards	• H.261, H.263, H.263+, H.264
Video Features	• Native 16:9 Widescreen • Advanced Screen Layouts • Intelligent Video Management • Local Auto Layout
Video Inputs (4 Inputs)	**2 X HDMI Inputs, Supported Formats:** • 1920 x 1080@60, 59.94 Hz (1080p60) • 1920 x 1080@50 Hz (1080p50) • 1920 x 1080@30, 29.97 Hz (1080p30) • 1920 x 1080@25 Hz (1080p25) • 1920 x 1080@24, 23.97 Hz (1080p24) • 1280 x 720@60, 59.94 Hz (720p60) • 1280 x 720@50 Hz (720p50) • 720 x 480@60, 59.94 Hz (480p60) • 640 x 480@60 Hz (480p60) • 1600 x 1200@50, 60 Hz (UXGA) • 1280 x 1024@60, 75 Hz (SXGA) • 1024 x 768@60, 70, 75, 85 Hz (XGA) • 800 x 600@56, 60, 72, 75, 85 Hz (SVGA) • 1920 x 1200@50, 60 Hz (WUXGA) • 1680 x 1050@60 Hz (WSXGA+) • 1440 X 900@60 Hz (WXGA+) • 1280 x 768@60 Hz (WXGA) **1 X DVI-I Inputs, Supported Formats:** Analog (VGA): • 1920 x 1080@60 Hz (1080p) • 1280 x 720@60 Hz (720p) • 1600 x 1200@60 Hz (UXGA) • 1280 x 1024@60, 75 Hz (SXGA) • 1280 x 960@60 Hz • 1024 x 768@60, 70, 75, 85 Hz (XGA) • 1920 x 1200@50 Hz (WUXGA) • 1680 x 1050@60 Hz (WSXGA+) • 1440 x 900@60 Hz (WXGA+) • 1280 x 800@60 Hz (WXGA) • 1280 x 768@60 Hz (WXGA) Analog (YPbPr): • 1920 x 1080@60 Hz (1080p60) • 1920 x 1080@50 Hz (1080p50) • 1920 x 1080@30 Hz (1080p30) • 1920 x 1080@25 Hz (1080p25) • 1280 x 720@60 Hz (720p60) • 1280 x 720@50 Hz (720p50) • 1280 x 720@30 Hz (720p30) • 720 x 576@50 Hz (576p50) • 720 x 480@60 Hz (w480p60) Digital (DVI-D): • Same as HDMI, ref. above. **1 X S-Video/Composite Input (BNC Connectors):** • PAL/NTSC • Extended Display Identification Data (EDID)
Video Outputs (2 Outputs)	**1 X HDMI Output, 1 X DVI-I Output, Supported Formats:**

Specification	Description
	• 1920 x 1080@60 Hz (1080p60) • 1280 x 720@60 Hz (720p60) • 1600 x 1200@60 Hz (UXGA) • 1280 x 1024@60 Hz (SXGA) • 1024 x 768@60 Hz (XGA) • 800 x 600@60 Hz (SVGA) • 640 x 480@60 Hz (VGA) • 1920 x 1200@60Hz (WUXGA) • 1360 x 768@60 Hz • 1366 x 768@60 Hz • 1280 x 768@60 Hz (WXGA) • VESA Monitor Power Management • Extended Display Identification Data (EDID)
Live Video Resolutions (Encode/Decode)	• 176 x 144@30 fps (QCIF) • 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) • 1280 x 720@30 fps (720p30) • 1920 x 1080@30 fps (1080p30)[**] • 512 x 288@60 fps (w288p60) • 768 x 448@60 fps (w448p60) • 1024 x 576@60 fps (w576p60) • 1280 x 720@60 fps (720p60)[**] • 640 x 480@30 fps (VGA) • 800 x 600@30 fps (SVGA) • 1024 x 768@30 fps (XGA) • 1280 x 768@30 fps (WXGA) • 720p30 from 768kbps • 720p60 from 1152kbps • 1080p30 from 1472kpbs
Audio Standards	• G.711, G.722, G.722.1, 64 bit kbps & 128 bit kbps MPEG4 • AAC-LD, AAC-LD Stereo
Audio Features	• CD-Quality 20KHz Mono and Stereo • Two separate acoustic echo cancellers • 2-port Audio mixer • Automatic Gain Control (AGC) • Automatic Noise Reduction • Active lip synchronization
Audio Inputs (5 Inputs)	• 2 x microphone, 48V phantom powered, XLR connector each with separate echo cancellers and noise reduction, all microphones can be set for balanced line level • 2 x RCA/Phono, Line Level: Stereo PC input, configurable to 2 x RCA/Phono, Line Level: Mono auxiliary/DVD input • 1 x HDMI, digital: Stereo PC/DVD inputs
Audio Outputs (3 Outputs)	• 2 x RCA/Phono, line level, stereo main audio, configurable to S/PDIF or 2 x RCA/Phono, line level, mono to recording device • 1 x HDMI, digital, stereo main audio
Dual Stream	• H.239 (H.323) dual stream • BFCP (SIP) dual stream • Support for resolutions up to WXGAp30, Independent of the Main Stream Resolution

Specification	Description
Multisite Features	• 4-way SIP/H.323 MultiSite. Resolution up to w576p30 • Full individual audio and video transcoding • Individual layouts in multisite CP (takes out SelfView) • H.323/SIP/VoIP in the same conference • Support for Presentation (H.239/BFCP) from any participant at resolutions up to WXGAp30 • Best Impression (Automatic CP Layouts) • H.264, Encryption, Dual Stream from any site • IP Downspeeding • Dial in/Dial out • Additional telephone call (no license required) • Conference rates up to 10 Mbps
Protocols	• H.323 • SIP
Embedded Encryption	• H.323/SIP point-to-point • Standards-based: H.235 v2 & v3 and AES • Automatic key generation and exchange • Supported in Dual Stream
IP Network Features	• DNS lookup for service configuration • Differentiated Services (QoS) • IP adaptive bandwidth management (including flow control) • Auto gatekeeper discovery • Dynamic playout and lip-sync buffering • H.245 DTMF tones in H.323 • Date and Time support via NTP • Packet Loss based Downspeeding • URI Dialing • TCP/IP • DHCP • 802.1x Network authentication • ClearPath
IPv6 Network Support	• Single call stack support for both H323 and SIP • Dual-stack IPv4 and IPv6 for DHCP, SSH, HTTP, HTTPS, DNS, DiffServ • Support for both Static and Autoconfig (stateless address auto config)
Security Features	• Management via HTTPS and SSH • IP Administration Password • Menu Administration Password • Disable IP services • Network Settings protection
Network Interfaces	• 2 x LAN/Ethernet (RJ-45) 10/100/1000 Mbit
Other Interfaces	• USB device for future usage
Cisco TelePresence Precision HD Camera (1080p)	• 1/3" CMOS • 12 x zoom/4 x zoom • +15°/-25° tilt, +/- 90° pan • 43.5° vertical field of view • 72° horizontal field of view • Focus distance 0.3m–infinity • 1920 x 1080 pixels progressive @ 60fps (12 x version) • 1920 x 1080 pixels progressive @ 30fps (4 x version) • Other formats supported (configurable through Dip-switch): • 1920x1080@60fps (HDMI only)[*] • 1920x1080@50fps (HDMI only)[*] • 1920x1080@30fps • 1920x1080@25fps • 1280x720@60fps[*] • 1280x720@50fps[*] • 1280x720@30fps • 1280x720@25fps

Specification	Description
	• Automatic or manual focus/brightness/white balance • Far-end camera control • Daisy-chain support (Visca protocol camera)[*] • Dual HDMI and HD-SDI output • Upside-down mounting with automatic flipping of picture
System Management	• Support for the Cisco® TelePresence Management Suite • Total management via embedded SNMP, Telnet, SSH, XML, SOAP • Remote software upload: via web server, SCP, HTTP, HTTPS • 1 x RS-232 for local control and diagnostics • Remote control and on-screen menu system
Directory Services	• Support for Local directories (My Contacts) • Corporate Directory • Unlimited entries using Server directory supporting • LDAP and H.350 • Unlimited number for Corporate directory (through Cisco TelePresence Management Suite) • 200 number local directory • Received Calls • Placed Calls • Missed Calls with Date and Time
Power	• Auto-sensing power supply • 100–240 VAC, 50/60 Hz • 175 watts max. for codec and main camera
Operating Temperature and Humidity	• 0°C to 35°C (32°F to 95°F) ambient temperature • 10% to 90% Relative Humidity (RH)
Storage and Transport Temperature	• -20°C to 60°C (-4°F to 140°F) at RH 10–90% (non -condensing)
Dimensions	• Length: 17.4"/44.2 cm • Height: 1.7"/4.4 cm • Depth: 10.9"/27.8 cm • Weight: 8.8 lbs/4 kg

[*] Not supported on 4x zoom camera
[**] Requires option

Regulatory Compliance

- Directive 2006/95/EC (Low-Voltage Directive) — Standard EN 60950-1

- Directive 2004/108/EC (EMC Directive) — Standard EN 55022, Class B — Standard EN 55024 — Standard EN 61000-3-2/-3-3

- Approved according to UL 60950-1 and CSA 60950-1-07

- Complies with FCC15B Class B

Ordering Information

A standard boilerplate paragraph regarding ordering information will be placed here for all datasheets.

Service and Support

Cisco and our partners provide a broad portfolio of intelligent, personalized services and support that can help you realize the full value of your Cisco TelePresence investment by increasing business agility and network availability. This portfolio of services accelerates business innovation through a network-based collaboration platform that enables businesses to collaborate anywhere, anytime. For more information about these services, visit: http://www.cisco.com/go/telepresenceservices.

For More Information

For more information about the Cisco TelePresence Codec C40, visit http://www.cisco.com/go/telepresence or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.

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