Cisco TelePresence Clinical Presence System

Figure 1. Cisco TelePresence Clinical Presence System

Dual monitor option available

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 Clinical Presence System (CPS) is a purpose-built telemedicine system that brings the power of TelePresence to healthcare. Connecting clinical staff and patients for specialist consults has never been easier. This system maximizes the legendary quality, ease of use, and reliability of Cisco products specifically for a medical environment. With flexible options, the CPS can be customized to meet your specific requirements:

- AC powered and rechargeable battery versions are available.
- Multiple options are available, including:
    - A wide variety of storage modules designed for medical devices, laptops, PCs, keyboards, and light sources
    - Adjustable scope holders and ancillary storage pods
    - Disposable splash guard
- The system is available in single- or dual-monitor configurations (Figure 1).

- The system is 1080p-capable, with a Cisco TelePresence PrecisionHD Camera with a 12x optical zoom lens and 24-inch LCD monitor.
- The system is powered by the Cisco TelePresence System Codec C40.

Features and Benefits

The Clinical Presence System was researched and developed with direct input from clinical healthcare professionals:

- Height adjustable: A full electronic worm drive provides accurate, variable height adjustment of platform, monitor, and camera.
- Clinic-friendly:
  - Camera and display assembly rotate for patient viewing and easy transport.
  - Dedicated high-output audio amplifier and speakers allow use in high-noise environments.
  - Four hospital-grade AC outlets power peripheral devices.
- Flexible connections:
  - Multiple audio, video, and high-resolution inputs and outputs enable connection of medical devices and external displays.
  - A second Cisco TelePresence PrecisionHD controllable camera can be connected.
- Control: The front panel has an intuitive, simple-to-operate tactile membrane control, with storage for a standard Cisco remote control.
- Modular: Multiple interchangeable storage options.
- Mobile:
  - Hospital grade wheels and molded handles for easier navigation throughout clinical environments.
  - Optional battery power.
  - Optional wireless access point for untethered network connectivity.

Figure 2 shows the multiple modular storage options of the Clinical Presence System.

Figure 2.   Modular Storage Options

Product Specifications

Table 1 lists the physical specifications; Table 2 gives video and audio specifications; and Table 3 gives network, security, and management specifications of the Cisco TelePresence Clinical Presence System.

Table 1. Product Specifications

Product compatibility	Fully compatible with standards-compliant telepresence and video systems
Software compatibility	Cisco TelePresence Software Version TC4.0 or later
Components	Fully integrated unit, including: ● Cisco TelePresence System Codec C40 ● Cisco TelePresence PrecisionHD Camera ● 24-in. widescreen LCD display ● Integrated microphone and speakers ● Cisco TelePresence Remote Control 5 (Cisco TRC5) remote control ● Simplified tactile control panel

Video inputs and outputs	● One S video input (4-pin mini din connector, input 4 on side interface panel)
	  ○ PAL/NTSC
	● Three composite inputs (RCA connectors, inputs 1-3 on side interface panel)
	  ○ PAL/NTSC
	● Two HDMI inputs (one designated as main camera input, the other labeled as AUX on side of cart); 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)
	● One DVI-I input (PC IN on rear interface panel); 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)
	  ○ 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; refer to list earlier in this table
	◦ Extended Display Identification Data (EDID)
	• One HDMI output (main display); supported formats:
	◦ 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@60 Hz (WUXGA)
	◦ 1360 x 768@60 Hz
	◦ 1366 x 768@60 Hz
	◦ 1280 x 768@60 Hz (WXGA)
	• One DVI-I output (dual display or VGA OUT on rear interface panel); supported formats:
	◦ Same as HDMI; refer to list earlier in this table
Audio inputs and outputs	• Audio inputs
	◦ Two microphones, 48V phantom powered, XLR connector, each with separate echo cancellers and noise reduction; all microphones can be set for balanced line level (one used for system microphone)
	◦ One RCA/Phono, line level, and one 3.5-mm PC audio in
	◦ One HDMI, digital: Stereo PC/DVD inputs
	• Audio output
	◦ One RCA/Phono, line level (dual mono)
Camera	• Cisco TelePresence PrecisionHD Camera, 1080p
	• One-third-in. complementary metal oxide semiconductor (CMOS)
	• 12x zoom
	• +15°/-25° tilt, +/-90° pan
	• 43.5° vertical field of view
	• 72° horizontal field of view
	• Focus distance 0.3m to infinity
	• 1920 x 1080 pixels progressive @60 fps
	• Other formats supported (configurable through dip-switch):
	◦ *1920 x 1080@60fps (HDMI only)
	◦ *1920 x 1080@50fps (HDMI only)
	◦ 1920 x 1080@30fps
	◦ 1920 x 1080@25fps
	◦ *1280 x 720@60fps
	◦ *1280 x 720@50fps
	◦ 1280 x 720@30fps
	◦ 1280 x 720@25fps
	• Automatic or manual focus, brightness, and white balance
	• Far-end camera control
	• Daisy-chain support (Visca protocol camera)
	• Upside-down mounting with automatic flipping of picture
User interface	• Cisco TelePresence Remote Control 5 (Cisco TRC5) infrared remote control for system control
	• Simplified tactile control panel for supplemental control of volume, camera, and video source

Physical dimensions	- Width: 25 in. (63.5 cm) - Depth: 33 in. (83.8 cm) - Height: - Lift down: 67 in. (170.2 cm) - Lift up: 77 in. (195.6 cm) - Weight: - AC powered: 270 lb (122.5 kg) - Battery powered: 310 lb (140.6 kg)
Power	- AC-powered: 120 VAC, 60 Hz or 230 VAC, 50 Hz; 785 watts maximum - Rear of cart: Four 120 VAC, 60-Hz medical-grade AC receptacles or four 230 VAC 50-Hz IEC-type AC receptacles for accessories; 400 watts maximum - Medical-grade isolation transformer - Battery-powered: 120 VAC, 60 Hz or 230 VAC, 50 Hz; 760 watts maximum - Rear of cart: Four 120 VAC, 60-Hz medical-grade AC receptacles or four 230 VAC 50-Hz IEC-type AC receptacles for accessories; 150 watts maximum - Medical-grade isolation transformer 55 AH sealed lead-acid battery
Operating temperature and humidity	50 to 95℉ (10 to 35℃) ambient temperature 20 to 90% relative humidity (RH) - Atmospheric pressure: 700 to 1060 hPa
Storage and transport temperature	-4 to 140℉ (-20 to 60℃) at RH 10 to 90% (nonconden sing) and at RH 20 to 90% (condensing) - Atmospheric pressure: 700 to 1060 hPa
Approvals and compliance	- CAN/CSA-C22.2 No. 601.1 - UL Standard No. 60601-1 - Complies with FCC 47 CFR Part 15 - IEC 60601-1 3rd Edition - FDA Class I Medical Device Data System (MDDS) - EN 60601-1 Medical Device Directive (MDD) 93/42/EEC

Table 2. Video and Audio Specifications

Bandwidth	- H.323/Session Initiation Protocol (SIP) up to 6 Mbps point-to-point or 10 Mbps in Cisco TelePresence MultiSite deployments (requires option) 720p30 from 768 kbps 720p60 from 1152 kbps 1080p30 from 1472 kbps
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
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) (requires option) 512 x 288@60 fps (w288p60)

	• 768 x 448@60 fps (w448p60) • 1024 x 576@60 fps (w576p60) • 1280 x 720@60 fps (720p60) (requires option) • 640 x 480@30 fps (VGA) • 800 x 600@30 fps (SVGA) • 1024 x 768@30 fps (XGA) • 1280 x 768@30 fps (WXGA)
Audio standards	• G.711 • G.722 • G.722.1 • 64 kbps MPEG4 AAC-LD
Audio features	• CD-quality 20-kHz mono • One acoustic echo canceller • Automatic Gain Control (AGC) • Automatic noise reduction • Active lip synchronization
MultiSite features	• Four-way SIP/H.323 multisite resolution up to w576p30 • Full individual audio and video transcoding • Individual layouts in Cisco TelePresence MultiSite CP (takes out self view) • H.323, SIP, and voice over IP (VoIP) in the same conference • Support for presentation (H.239/Binary Floor Control Protocol [BFCP]) from any participant at resolutions up to WXGAp30 • Best impression (automatic MultiSite CP layouts) • H.264, encryption, and dual stream from any site • IP downspeeding • Dial in and dial out • Conference rates up to 10 Mbps
Dual stream	• H.239 (H.323) dual stream • BFCP (SIP) dual stream • Support for resolutions up to WXGAp15 (main video maximum 720p30)

Table 3.   Network, Security, and Management Specifications

Protocols	• H.323 • SIP
Network interfaces	• One LAN/Ethernet (RJ-45) 10/100/1000 Mbps
Other interfaces	• One USB input for future usage • One additional LAN/Ethernet (RJ-45) interface for future usage
IP network features	• Domain Name System (DNS) lookup for service configuration • Differentiated Services (quality of service [QoS]) • IP adaptive bandwidth management (including flow control) • Auto gatekeeper discovery • Dynamic playout and lip-sync buffering • H.245 dual-tome multifrequency (DTMF) tones in H.323 • Date and time support with Network Time Protocol (NTP) • Packet-loss-based downspeeding • Uniform Resource Identifier (URI) dialing • TCP/IP • Dynamic Host Configuration Protocol (DHCP) • IEEE 802.1x network authentication • ClearPath
Firewall traversal	• Cisco TelePresence Expressway technology • H.460.18 and H.460.19 Firewall Traversal

Embedded encryption	• H.323/SIP point-to-point • Standards-based: H.235v2 and v3 and Advanced Encryption Standard (AES) • Automatic key generation and exchange • Supported in dual stream
Security features	• Management through Secure HTTP (HTTPS) and Secure Shell (SSH) Protocol • IP administration password • Menu administration password • Disable IP services • Network settings protection
System management	• Support for the Cisco TelePresence Management Suite (Cisco 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, Secure Copy Protocol, HTTP, and HTTPS • Remote control and on-screen menu system
Directory services	• Support for local directories (My Contacts) • Corporate directory • Lightweight Directory Access Protocol (LDAP) and H.350 • Unlimited number for corporate directory (available with Cisco TelePresence Management Suite Local Directory: 200 numbers • Received calls • Placed calls • Missed calls with date and time

To place an order, please contact your Cisco representative and refer to Table 4.

Table 4.   Ordering Information

Product Name	Part Number
Cisco TelePresence Clinical Presence System (CPS) - Three Base Configurations	
Clinical Presence System - Single Monitor AC Powered System (110V)	CTS-CPS-SM-K9
Clinical Presence System - Dual Monitor AC Powered System (110V)	CTS-CPS-DM-K9
Clinical Presence System - Single Monitor Battery Powered System (110V)	CTS-CPS-DC-K9
Clinical Presence System - Single Monitor AC Powered System (240V)	CTS-CPS-SM-P240-K9
Clinical Presence System - Dual Monitor AC Powered System (240V)	CTS-CPS-DM-P240-K9
Clinical Presence System - Single Monitor Battery Powered System (240V)	CTS-CPS-DC-P240-K9
All versions of the CPS listed above come complete with:	
Base cart with integrated Codec C40, Natural Presenter Package software option, Cisco PrecisionHD camera 1080p 12x, widescreen 24" LCD, integrated microphone and speakers.	
Software Feature Options for Clinical Presence System (all versions)	
Codec C40 Multisite MS Option	LIC-C40-MS
Codec C40 Premium Resolution Option	LIC-C40-PR
Codec C40 Dual Display Option (automatically included in Dual Monitor configuration)	LIC-C40-DD
Accessory Options for Clinical Presence System (all versions)	
CPS Wireless Ethernet Module	ACC-CPS-WIFI= Or AIR-AP1142N-X-K9 (recommended)
CPS Locking Cabinet Module	ACC-CPS-CM
CPS Full Drawer Module	ACC-CPS-DM
CPS Scope Hook Accessory	ACC-CPS-HOOK
CPS Laptop Keyboard Shelf Module	ACC-CPS-KBS
CPS Splash Guard Kit	ACC-CPS-SGK
CPS PC/Light Source Shelf Module	ACC-CPS-SM

Product Name	Part Number
CPS Small Storage Pod	ACC-CPS-SP

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 Cisco solutions, 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.