Cisco TelePresence System Scholar

Figure 1.   Cisco TelePresence System Scholar

Product Overview

The Cisco TelePresence® Education portfolio creates an immersive, face-to-face experience - empowering you to collaborate with others like never before. By combining Cisco collaboration application technologies with education-specific designs, you and remote classrooms and participants feel as if you are all in the same room. The Cisco TelePresence Education portfolio is designed to transform the way students learn and the way instructors present material in a collaborative, distributed environment. Schools are using these education solutions to take full advantage of scarce expertise, extend the reach of subject-matter experts, control costs, make decisions faster, reduce travel costs, and increase student retention and development.

Cisco TelePresence System Scholar (Scholar) is a fully integrated telepresence system designed specifically by teachers for teachers. This roll-about unit is fully integrated with a Cisco TelePresence codec, camera, microphone, and user interface. Scholar allows students and teachers to interact not only locally but now remotely as well with distance classrooms. Instructors can use the most natural form of communication via live telepresence.

Cisco TelePresence System Scholar Features

- Cisco TelePresence System Scholar (Figure 1) is based on the award-winning Cisco TelePresence System Educator MXP (Educator MXP)
- The system is designed for use in teaching sites at which both an instructor and students are located
- The system supports high-definition (HD) 720p video
- Integrated equipment rack fits on a cart at the installation and contains:
  - Fully featured microprocessor control system

- ◦ Award-winning Cisco TelePresence System Codec 6000 MXP (Codec 6000 MXP) complete with Natural Presenter software package
- ◦ Integrated simple touch interface panel designed specifically for educators
- ◦ Cisco TelePresence Video Switch
- Instructor desktop microphone
- Intuitive 10.4-inch color control touchpanel

Systems are supplied with the following major system components:

- Integrated electronics module: microprocessor control system and Cisco TelePresence System Codec 6000 MXP (Codec 6000 MXP) with Natural Presenter Package and Cisco TelePresence Video Switch
- Intuitive 10.4-inch color touch panel
- Instructor desktop microphone
- Ceiling-mounted AudioScience student microphone
- Front student cart with 50-inch plasma display with auto power switching and high-quality audio system
- Instructor and student Cisco TelePresence PrecisionHD Cameras
- Optional rear instructor cart with 50-inch plasma display with auto power switching and high-quality audio system
- Optional slim line podium

Cisco TelePresence System Scholar can be supplied in a variety of custom configurations to meet specific client requirements:

- 58-inch front or rear plasma display
- Optional slim line podium supplied without carts or displays (client supplied) including Cisco TelePresence PrecisionHD cameras

Product Specifications

Figure 2 shows Cisco TelePresence System Scholar components, and Table 1 provides product specifications.

Figure 2.   Cisco TelePresence System Scholar Components

Table 1.   Cisco TelePresence System Scholar Specifications

Cisco TelePresence System Scholar Package Part Number: CTS-SCHOLAR-K9 - Component Schedule	
Front Student Camera and Display Assembly	
Integrated cart with 4-in. locking wheels and camera mount	
Front student Cisco TelePresence PrecisionHD Camera	
50-in. plasma display with autopower switching	
Integrated speaker bar	
Integrated microprocessor control system	
Cisco TelePresence System Codec 6000 MXP with Natural Presenter Package software	
Rear Instructor Camera and Display Assembly	
Integrated cart with 4-in. locking wheels and camera mount	
Rear instructor Cisco TelePresence PrecisionHD Camera	
75-ft cables included for instructor cart.	
50-in. plasma display with autopower switching	
Integrated speaker bar	
Cisco TelePresence AudioScience Microphone	
Supplied with 50-ft plenum rated cable	
Specification	**Description**
Bandwidth	• H.320 up to 2 Mbps • H.323 up to 3 Mbps • SIP up to 4 Mbps • Up to 6 Mbps total Cisco TelePresence MultiSite bandwidth
Firewall traversal	• Cisco TelePresence Expressway technology automatic Natural Address Translation (NAT)
Video standards	• H.261, H.263, H.263+, H.263++ (Natural Video), and H.264
Video features	• Voice switching for VCR recording • Intelligent video management • Secondary or instructor camera plus 6 presets • Primary or student camera plus 6 presets • Support for Cisco TelePresence PrecisionHD Camera and Sony EVI-HD1 camera • Support for Sony and Panasonic audiovisual equipment
Video inputs (6 inputs)	• Up to 2 HD cameras using TVS • 2 x S-Video cameras (Cisco Telepresence Wide Angle View Camera) • 2 x Composite Docment Camera, DVD, or Aux inputs • 1 x SXGA: PC 1 x VNC connection • Input: 800 x 600 (at 60, 72, 75, and 85 Hz), 1024 x 768 (at 60, 70, and 75 Hz), and 1280 x 1024 (at 60 Hz)
Video outputs (6 outputs)	• 2 x RCA/Phono, composite: main and dual monitor • 2 x DVI: Primary or secondary • XGA output • 800 x 600 at 75 Hz, 1024 x 768 at 60 Hz, and 1280 x 768 (WXGA) at 60 Hz • VESA monitor power management • 1 x MiniDin, S-Video: Main monitor • 1 x MiniDin, S-Video: Dual monitor
Video format	• NTSC, PAL, VGA, SVGA, XGA, W-XGA, or SXGA 720p

Live video resolutions	HD resolution: • HD 448p (576 x 448) • HD 720p (1280 x 720) Native NTSC: • 4SIF (704 x 480 pixels), Digital Clarity • Interlaced SIF (352 x 480 pixels), Natural Video • SIF (352 x 240 pixels) Native PAL: • 4CIF (704 x 576 pixels), Digital Clarity • Interlaced CIF (352 x 576 pixels), Natural Video • CIF (352 x 288 pixels) • QCIF (176 x 144 pixels) • SQCIF (128 x 96 pixels) Native PC resolution: • XGA (1024 x 768) • SVGA (800 x 600 pixels) • VGA (640 x 480 pixels)
Audio standards	• G.711, G.722, G.722.1, G.728, 64-bit, and 128-bit MPEG4 AAC-LD
Audio features	• CD-quality 20-kHz mono and stereo • Telephone add-on through MultiSite • Four separate acoustic echo cancellers • Audio mixer • Automatic gain control (AGC) • Automatic noise reduction • Audio level meters • VCR ducking • Custom microphone mute • Optional stereo package • Packet loss management • Active lip synchronization • Comrex DH-20 telephone add-on device support
Audio inputs (4 inputs)	• 3 x microphone, 24V phantom powered, XLR connector, each with separate echo cancellers • 2 x RCA/Phono, line level: Stereo Aux 1 • 2 x RCA/Phono, line level: Stereo Aux 2 • 2 x RCA/Phono, line level: Stereo VCR/DVD • 3.5 Min stereo for PC
Audio outputs (5 outputs)	• 1 x RCA/Phono, S/PDIF (mono and stereo) or 2 x analogue line level: main audio or analogue stereo L • 1 x RCA/Phono, line level: Auxiliary (or analog stereo R or VCR Stereo L) • 1 x RCA/Phono, line level: VCR (mono or Stereo R) • 1 x RCA/Phono, line level for telephone add-on device
Frame rates	• 30 frames per second at 168 kbps and greater • 60 fields per second at 336 kbps and greater (point to point)
Dual stream	• DuoVideo and H.239 • Available on H.323 and H.320 • Available in Cisco Telepresence MultiSite from any site
Network features	• Auto H.320 and H.323 dialing • SIP • Downspeeding • Intelligent call management • HO on ISDN-PRI facility • Maximum call-length timer • Automatic SPID and line number configuration (National ISDN and GR-2941-CORE) • SoftMux • NATO standard KG194/KIV-7 encryptor support • H.331 broadcast mode

Cisco TelePresence MultiSite features	• H.323, H.320, SIP, telephony, and voice over IP (VoIP) in the same conference
	• Audio and video transcoding
	• Video rate matching from 56 kbps: maximum conference rate
	• CP4, CP 5+1, and voice switched
	• Best impression (automatic CP layouts)
	• H.264, encryption, and Digital Clarity
	• Dual stream from any site
	• ISDN and IP downspeeding and IPLR
	• MultiSite (H.243) cascading on H.320 and H.323
	• Dial-in and dial-out
	• Chair control for host system
	• Snapshot of ongoing conference (JPEG)
	• Snapshot of ongoing DuoVideo and H.239 presentation (JPEG)
	• Separate welcome page for encrypted conferences
	• Conference rates up to 6 Mbps
	• Up to 6 video and 5 audio sites
	• 4 sites at 2 Mbps and 6 sites at 768 (plus telephone calls)
	• Mixed ISDN (BRI or PRI) or serial interface (V.35) with IP up to maximum conference rate
Embedded encryption	• H.320 and H.323 point-to-point and multipoint calls
	• Standards-based: H.233, H.234, H.235 v2&v3, DES, and AES
	• NIST-validated AES
	• NIST-validated DES
	• Automatic key generation and exchange
	• Supported in dual stream and MultiSite
IP network features	• H.235 authentication
	• Differentiated services (DiffServ)
	• Resource Reservation Protocol (RSVP)
	• IP precedence
	• IP type of ser vice (ToS)
	• IP adaptive bandwidth management (including flow control)
	• Auto gatekeeper discover y
	• Dynamic playout and lip-sync buffering
	• Intelligent packet loss recovery (IPLR)
	• H.245 DTMF tones in H.323
	• Cisco® Unified Communications Manager integration using ECS
	• IP address conflict warning
Security features	• Management using HTTPS
	• IP administration password
	• Menu administration password
	• H.243 MCU password
	• VNC password
	• SNMP security alerts
	• Disable IP services
	• MD-5 Challenge
	• Network settings protection
	• SIP authentication using NTLM
	• Security-level access to touch-panel features
	• FIPS 140-2 level 1 certification
	• Touch panel has configurable security and features access
Network interfaces	• 6 x ISDN BRI (RJ-45), S-interface
	• 1 x E1/T1 G.703 (RJ-45) for ISDN PRI or leased E1/T1
	• 1 x E1/T1 G.703 (RJ-45) for future use
	• 1 x LAN/Ethernet (RJ-45) 10/100 Mbps (LAN, DSL, and cable modem)
	• 1 x X.21, V.35, and RS-449 with RS-366 dialing, leased line, or data-triggered mode
	• 1 x USB

Ethernet, Internet and intranet connectivity	● TCP/IP, DHCP, ARP, FTP, Telnet, HTTP, HTTPS, SOAP and XML, and MD-5 Challenge ● SNMP enterprise management ● Internal web server ● Internal streaming server
Other major standards supported	● H.231, H.233, H.234, H.235 v2 and v3, H.239, H.241, H.243, H.281, BONDING (ISO 13871), H.320, H.323, and H.331 ● RFC 3261, RFC 2237, RFC 3264, RC 3311, RFC 3550, RFC 2032, RFC 2190, RFC 2429, and RFC 3407
Cisco TelePresence Wide Angle View Camera	● 10 x zoom ¼-in. CCD 15- to –20-degree tilt ● +/–95-degree pan ● 61-degree vertical field of view ● 96-degree total vertical field of view ● 77-degree horizontal field of view ● 267-degree total horizontal field of view ● 460 (PAL) or 470 (NTSC) TV lines ● Minimum illumination 2 Lux (F1.8) ● Automatic or manual focus, brightness, and white balance ● Far-end camera control ● Remote-source switching with source labels ● Camera control and presets
Cisco TelePresence PrecisionHD Camera	● 1280 x 720 pixels progressive at 30 frames per second (fps) ● 7 x zoom 1/3-in. CMOS, 10- to –20-degree tilt and +/–95-degree pan ● 42-degree vertical field of view
Touch-panel interface	● 10.4-in. color video ● Configurable, easy-to-use human interface ● Built-in speakers that provide audio cues for local operation ● Full control of a wide variety of audiovisual devices
Presentations and collaboration	Natural Presenter Package including: ● PC Presenter (DVI-I and SXGA In) ● PC SoftPresenter ● Digital Clarity and native formats ● Advanced video layouts ● Streaming compatible with Cisco IP/TV, Apple QuickTime, RealPlayer v8, etc.
System management	● Support for the Cisco TelePresence Management Suite ● Total management through embedded web server, SNMP, Telnet, XML, SOAP, and FTP ● Remote software upload through web server or FTP server ● Remote control and on-screen menu system ● Web access to user interface
Directory services	● 100-number local director y ● Call history
Language	● English
Power	● 100 to 240 VAC, 50 and 60 Hz, and 150W ● Codec 6000 MXP 100 to 240 VAC, 50 to 60 Hz, and 65W for codec and camera ● Total power dependent on display type
Operating temperature and humidity	● 32 to 95°F (0 to 35°C) ambient temperature ● 10 to 90% relative humidity
Storage and transport temperature	● –4 to 140°F (–20 to 60°C) at 10 to 90% relative humi dity (noncondensing)
Dimensions	● 3RU high, 19-in. rack mount, and 12-in. deep ● Codec 6000 MXP: 1RU high, 19-in. rack mount, and 11-in. deep
Footprint of optional slimline podium (W x D x H)	● 58.22 x 32.75 x 40 in. (149.7 x 83.1 x 101.6 cm)

Ordering Information

Table 2 lists ordering information. To place an order, visit the Cisco Ordering homepage.

Table 2. Ordering Information

Product Name	Part Number
Cisco TelePresence Scholar MXP System with Dual 50"	CTS-SCHOLAR-K9

Service and Support

Cisco and our partners provide a broad portfolio of intelligent, personalized services and support that can help you achieve 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, at any time. 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.

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