Cisco TelePresence SX20 Quick Set

Product Overview

The Cisco TelePresence[®] SX20 Quick Set (SX20 Quick Set) can transform any flat panel display into a sleek and powerful video conferencing system. The SX20 Quick Set is designed to deliver high definition video and multiparty conferencing with the flexibility to accommodate various room size and configurations - all at a value price. The SX20 Quick Set supports optional embedded multipoint support with Cisco[®] TelePresence MultiSite technology, enabling users to add three additional participants to a video call.

SX20 Quick Set combines a powerful codec, premium resolution of 1080p, three camera choices, and a dual-display feature in an easy-to-deploy and easy-to-use solution. Whether you're a small business just getting started with telepresence or a large enterprise looking to expand your existing deployment, the SX20 Quick Set delivers the performance you would expect from more expensive systems - in a compact, feature-rich and affordable package. Cisco TelePresence SX20 Quick Set is designed to truly extend the power of in-person to everyone, everywhere.

Figure 1.   Cisco TelePresence SX20 Quick Set in a Small Meeting Room Environment

Figure 2.   Cisco TelePresence SX20 Quick Set with PrecisionHD 4x Camera, Table Microphone, and Remote Control

Features and Benefits

Table 1 summarizes the primary features for the Cisco TelePresence SX20 Quick Set.

Table 1.   Cisco TelePresence SX20 Quick Set Feature Summary

Feature Summary	
Design Features	● Transforms a flat panel display into a 1080p high-definition meeting space ● Intuitive connections make setup as easy as connecting a DVD player ● Provides up to 1080p60 resolution - compatible with standards-based video without loss of features ● Sleek, compact design
Application Features	● Multimedia and presentations can be shared at the touch of a button ● Supports Cisco Intelligent Proximity for content sharing to mobile devices and wireless sharing from Macs and PCs[1] ● Supports Switched Conferencing (SVC) for enhanced layouts and enabling video on both screens of dual screen endpoints[1] ● Basic API available over IP (Telnet or Secure Shell Protocol [SSH]) ● Dual-display ● High-definition content sharing up to 1080p15 resolution ● One button to push (OBTP) to start a meeting
Performance Features	● Premium resolution (1080p60) ● H.323/SIP calls up to 6 Mbps ● Built-in individually transcoded multipoint conferencing (optional) offers ability to add three additional participants ● Easy provisioning and self-configuration with Cisco Unified Communications Manager (CUCM), Cisco TelePresence Video Communications Server (VCS), or Cisco WebEx TelePresence ● Takes advantage of the Cisco TelePresence Total Solution approach, including Cisco TelePresence ad-hoc conferencing features, recording and streaming, and firewall traversal services ● Cisco Unified Communications Manager native support (requires Cisco Unified Communications Manager Version 8.6 or higher)

Figure 3. Cisco TelePresence SX20 Quick Set on Wall Mount

Product Specifications

Table 2 lists the product capability specifications for the Cisco TelePresence SX20 Quick Set.

Table 2. Product Specifications

Specification	Description
Software compatibility	Cisco TelePresence Software Version TC 7.1 or later Cisco Collaboration Endpoint Software Version 8.0 or later (requires Touch 10 or TRC5 remote control)
Default components in SX20 Quickset	● SX20 Codec, Cisco TelePresence Precision Camera (option of 2.5x, 4x and 12x cameras), Cisco TelePresence Table Microphone 20, remote control, cables, and power supply
Optional hardware components	● Cisco TelePresence Touch 10 ● Wall mount kit ● Additional microphone
Bandwidth	● H.323 and SIP up to 6 Mbps
Minimum bandwidth for resolution/frame rate	● 720p30 from 768 kbps ● 720p60 from 1152 kbps ● 1080p30 from 1472 kbps ● 1080p60 from 2560 kbps
Firewall Traversal	● Cisco TelePresence Expressway Technology ● H.460.18, H.460.19 firewall traversal
Video Standards	● H.263, H.263+, H.264
Video Features	● Native 16:9 widescreen ● Advanced screen layouts ● Intelligent video management ● Local auto-layout

Specification	Description
Video Inputs **(Two Inputs)**	**One HDMI and One DVI-I (Analog and Digital); supports formats up to maximum 1920x1080 @ 60 fps (HD1080p60), including:** ● 640x480 ● 720x480 ● 720x576 ● 800x600 ● 848x480 ● 1024x768 ● 1152x864 ● 1280x720 ● 1280x1024 ● 1280x768 ● 1280x800 ● 1280x960 ● 1360x768 ● 1366x768 ● 1400x1050 ● 1440x900 ● 1680x1050 ● 1920x1080 Extended Display Identification Data (EDID)
Video Outputs **(Two Outputs)**	**Two HDMI Outputs Supported Formats:** ● 1920 x 1080@60 fps (1080p60) ● 1920 x 1080@50 fps (1080p50) ● 1280 x 720@60 fps (720p60) ● 1280 x 720@50 fps (720p50) ● 1366 x 768@60 fps (WXGA) ● 1360 x 768@60 fps(WXGA) ● 1280 x 768@60 fps (WXGA) ● 1280 x 1024@60 fps[1] ● 1024 x 768@60 fps[1] VESA Monitor Power Management EDID **Live Video Resolutions (Encode and Decode):** ● 176 x 144@30, 60 fps (QCIF) (Decode only) ● 352 x 288@30, 60 fps (CIF) ● 512 x 288@30, 60 fps (w288p) ● 576 x 448@30, 60 fps (448p) ● 768 x 448@30, 60 fps (w448p) ● 704 x 576@30, 60 fps (4CIF) ● 1024 x 576@30, 60 fps (w576p) ● 640 x 480@30, 60 fps (VGA) ● 800 x 600@30, 60 fps (SVGA) ● 1024 x 768@30, 60 fps (XGA) ● 1280 x 768@30, 60 fps (WXGA) ● 1280 x 720@30, 60 fps (HD720p) ● 1920 x 1080@30, 60 fps (HD1080p)
Audio Standards	● G.711, G.722, G.722.1, G.728, G.729, AAC-LD and OPUS
Audio Features	● High quality 20 KHz stereo ● Two acoustic echo cancellers ● Automatic Gain Control (AGC) ● Automatic noise reduction ● Active lip synchronization

Specification	Description
Audio Inputs **(Four Inputs)**	● Two microphones, 4-pin minijack ● One minijack for line-in (stereo) ● One audio in from camera (HDMI)
Audio Outputs **(Two Outputs)**	● One minijack for line out (stereo) ● One HDMI, (digital main audio)
Dual Stream	● H.239 (H.323) dual stream ● BFCP (SIP) dual stream ● Support resolutions up to 1080p (1920 x 1080)

Multipoint Support	● Four-way embedded SIP/H.323 conferencing capability with MultiSite option
	● Ad-hoc conferencing supported through:
	  ○ Unified Communications Manager Media Resource Group (requires a Cisco TelePresence MCU)
	  ○ Cisco TelePresence Multiway [requires Cisco TelePresence Video Communication Server (Cisco VCS) and a Cisco TelePresence MCU]
	● Ability to natively join multipoint conferences hosted on Cisco Telepresence Multipoint Switch (CTMS)
	● Switched conferencing (SVC)[1]

MultiSite Features **(Embedded Multipoint)** **(Optional upgrade)**	● Adaptive SIP/H.323 MultiSite; resolution up to 720p30
	  ○ 3-way resolution up to 720p30
	  ○ 4-way resolution up to 576p30
	● Full individual audio and video transcoding
	● Individual layouts in MultiSite continuous presence
	● H.323/SIP/VoIP in the same conference
	● Support for Presentation (H.239/BFCP) from any participant at resolutions up to 1080p15 or 720p30
	● Best Impression (automatic continuous presence layouts)
	● H.264, encryption and dual stream from any site
	● IP downspeeding
	● Participants can be added by dialing in or host can dial out
	● Conference rates up to 6 Mbps

Protocols	● H.323 ● SIP ● ISDN (requires Cisco TelePresence ISDN Link)
Embedded Encryption	● H.323 and SIP point-to-point ● Standards-based: H.235 v3 and Advanced Encryption Standard (AES) ● Automatic key generation and exchange ● Supported in dual stream
IP Network Features	● DNS lookup for service configuration ● Differentiated services (quality of service [QoS]) ● IP-adaptive bandwidth management (including flow control) ● Automatic gatekeeper discovery ● Dynamic playout and lip-sync buffering ● H.245 Dual Tone Multi-frequency (DTMF) tones in H.323 ● Date and time support using Network Time Protocol (NTP) ● Packet loss-based down speeding ● Uniform resource identifier (URI) dialing ● TCP/IP ● DHCP ● 802.1x network authentication ● 802.1Q Virtual LAN ● 802.1p (QoS and class of service [QoS]) ● ClearPath

Specification	Description
Cisco Unified Communications Manager (Requires Cisco Unified Communications Manager Version 8.6 or Later)	● Native registration with Cisco Unified Communications Manager ● Basic Cisco Unified Communications Manager provisioning ● Software upgrade from Cisco Unified Communications Manager ● Cisco Discovery Protocol and DHCP option 150 support ● Basic telephony features such as hold/resume/transfer and Corporate Directory lookup
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 Automatic IP configuration (stateless address auto configuration)
Security Features	● Management using HTTPS and SSH ● IP administration password ● Menu administration password ● Disable IP services ● Network settings protection
Network Interfaces	● One LAN and Ethernet (RJ-45) 10/100/1000 Mbit
Other Interfaces	● Two USB ports can be used for serial control
System management	● Support for the Cisco TelePresence Management Suite ● Total management using embedded SNMP, Telnet, SSH, XML, SOAP ● Remote software upload: using web server, secure copy (SCP), HTTP, HTTPS ● Cisco TelePresence Touch 10 (optional) ● 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 (requires Cisco TelePresence Management Suite) ● Unlimited number for corporate directory (through Cisco TelePresence Management Suite) ● Received calls with date and time ● Placed calls with date and time ● Missed calls with date and time
Power	● Auto-sensing power supply ● 100 - 240 VAC, 50/60 Hz ● Maximum 40 watts for codec and main camera
Operating Temperature and Humidity	● 0°C to 40°C (32°F to 104°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)
SX20 Codec Dimensions	● Width: 11.8 inches (30.0 cm) ● Height: 1.4 inches (3.4 cm) ● Depth: 7.1 inches (18.0 cm) ● Weight: 3.1 pounds (1.4 kg)

Camera Overview Part Number		
PrecisionHD 2.5x Camera	**PrecisionHD 4x Camera**	**PrecisionHD 12x Camera**
5x zoom (2.5x optical plus digital*)	8x zoom (4x optical plus digital*)	12x optical zoom
Motorized +5°/-25°tilt, +/- 30°pan	Motorized +15°/-25°tilt, +/- 90°pan	Motorized +15°/-25°tilt, +/- 90°pan
51.5° vertical field of view	43.5° vertical field of view	43.5° vertical field of view

Camera Overview Part Number		
83° horizontal field of view	70° horizontal field of view	72° horizontal field of view
F 2.0	F 1.7	F 1.7
1920 x 1080 pixels progressive @ 60 fps		
Automatic or manual focus, brightness, and white balance		
Far-end camera control		
Dual HDMI/Camera Control and USB output	Dual HDMI/Camera control	HDMI, HD-SDI output, and daisy chain
Upside-down mounting, picture flips automatically	Upside-down mounting, manual picture flip	Upside-down mounting, picture flips automatically
Focus distance 0.3 m - infinity		

[*] Available from TC7.1

[1] Requires Collaboration Endpoint Software Version 8.0 or later

Regulatory Compliance

- Directive 2006/95/EC (Low-Voltage Directive) - Standard IEC/EN 60950-1
- Directive 2004/108/EC (EMC Directive) - Standard EN 55022, Class A - Standard EN 55024 - Standard EN 61000-3-2/-3-3
- Approved according to UL 60950-1 and CAN/CSA-C22.2 No. 60950-1-07
- Complies with FCC CFR 47 Part 15 Class A

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 TelePresence SX20 Quick Set with PrecisionHD 2.5x Camera	CTS-SX20PHD2.5X-K9	TTC7-21 (SX20 Codec) TTC8-08 (2.5x Camera)
Cisco TelePresence SX20 Quick Set with PrecisionHD 4x Camera	CTS-SX20-PHD4X-K9	TTC8-05 (4x Camera) TTC8-05 (Camera)
Cisco TelePresence SX20 Quick Set with PrecisionHD 12x Camera	CTS-SX20-PHD12X-K9	TTC8-02 (12x camera) TTC8-02 (Camera)
Cisco TelePresence SX20 MultiSite option	LIC-SX20-MS L-SX20-MS (through L-SX-SERIES-PAK)	
Cisco TelePresence Touch 10 Control Device	CTS-CTRL-DVX-10	
Cisco TelePresence Touch 10 PoE power injector	CTS-PWR-AIR-INJ5=	
Cisco TelePresence Remote Control 5	CTS-RMT-TRC5=	
Cisco TelePresence Table Microphone 20	TS-QSC20-MIC	
Wall Mount Kit for SX20	CTS-SX20-QS-WMK	
Camera Break Out Cable to RJ45 and HDMI (both female)	CAB-PHD4XS2-SPLIT	
Extension Cable for the Table Microphone 20	CAB-MIC20-EXT	

Cisco Service and Support

Cisco and our partners provide a broad portfolio of smart, personalized services and support that can help you realize the full business value of your Cisco TelePresence investment by increasing business agility and network availability. This portfolio of services accelerates business innovation by harnessing the network as a powerful business platform. For more information about these services, please visit: http://www.cisco.com/go/telepresenceservices.

For More Information

For more information about the Cisco TelePresence SX20 Quick Set, http://www.cisco.com/go/telepresence or contact your local account representative.