

# Cisco TelePresence Server MSE 8710

#### **Product Overview**

The Cisco TelePresence Server is a pioneering solution that brings together telepresence, high-definition (HD), and standard-definition (SD) video conferencing users into the same virtual meeting. It preserves the immersive telepresence experience while connecting to a wide range of endpoints and delivering the best call experience for every participant.

Figure 1. Cisco TelePresence Server MSE 8710



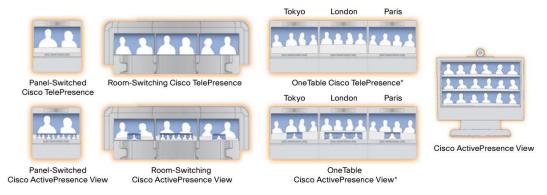
# **Features and Benefits**

Table 1 summarizes the key features of the Cisco TelePresence Server MSE 8710.

 Table 1.
 Cisco TelePresence Server MSE 8710 Feature Summary

Feature	Benefit
Design features	<ul> <li>Offers multivendor telepresence interoperability</li> <li>Standards-based and compatible with major vendors' video conferencing endpoints</li> <li>Intelligently recognizes the type of system joining a conference</li> <li>Provides participants the best possible view for their systems</li> <li>Future proof with the ability to scale up conference sizes as your organization grows</li> <li>Provides easy-to-use and versatile management interface</li> <li>Designed to carrier-class levels of reliability and availability</li> <li>Provides high-seed backplane to create multiblade Cisco TelePresence Servers</li> </ul>
Application features	<ul> <li>Supports single and multi-screen Cisco TelePresence systems.</li> <li>The server interworking with Polycom RPX and TPX telepresence systems.</li> <li>The server interconnects telepresence, HD, and SD endpoints.</li> <li>Cisco TelePresence ClearVision technology provides resolution enhancement.</li> <li>Cisco ActivePresence™ and Telepresence View ensures the telepresence experience is always maintained.</li> <li>The server supports for OneTable and Room-Switched configurations (Figure 2).</li> <li>The server integrates with Cisco TelePresence Management Suite.</li> <li>You can mix Cisco TelePresence Server capabilities with gateway and recording capabilities in the same chassis.</li> </ul>
Performance features	<ul> <li>Cisco ActivePresence supports a full-screen immersive view of the primary speakers with a seamless overlay of others in the call; designed to maximize the large scale immersive telepresence experience</li> <li>Up to 144 Cisco ActivePresence HD screens supported in a single chassis</li> <li>High-definition transcoding for every participant</li> <li>Up to 64 Cisco ActivePresence screens are supported in a single HD telepresence call</li> <li>Cisco TelePresence Universal Port technology</li> <li>Constant high capacity</li> <li>High-definition video resolutions</li> <li>Additional wideband audio ports</li> <li>Bandwidth per screen up to 4 Mbps</li> <li>Advanced Encryption Standard (AES) encryption</li> <li>Up to 1080p30 and 720p60 frames per second (fps)</li> </ul>

Figure 2. Cisco TelePresence Server Supported Modes



<sup>\*</sup>Available on Cisco TelePresence T3 only.

# **Product Specifications**

Table 2 lists the physical specifications; Table 3 gives video and audio specifications; and Table 4 gives network, security, and management specifications for the Cisco TelePresence Server MSE 8710.

Table 2. Product Specifications

Product compatibility	Standards-based and compatible with all major vendors' endpoints	
, ,		
High-definition performance	<ul> <li>Up to 1080p, 30 fps, and 720p, 60 fps, H.264 6Mbps ActivePresence (including content)</li> <li>Comprehensive HD audio</li> <li>Dual video H.239, BFCP or Auto Collaborate</li> </ul>	
Universal transcoding and transrating	<ul> <li>The server can combine telepresence, HD, and SD within the same virtual meeting.</li> <li>The server provides automatic audio and video transcoding and transrating on all calls.</li> <li>Any bandwidth, any resolution, and any video or audio codec can be used on any video call within the same meeting.</li> <li>Each endpoint has its own decode and encode.</li> </ul>	
Cisco TelePresence Server features	<ul> <li>Panel-switched Cisco ActivePresence view or standard telepresence view for all single screen endpoints</li> <li>Supports single and multi-screen Cisco TelePresence systems</li> <li>Ability to integrate with Experia</li> <li>Ability to interwork with Polycom telepresence systems while preserving the full Cisco ActivePresence view (requires feature key)</li> <li>Ability to dial in or dial out through web server</li> <li>Support for up to 64 Cisco ActivePresence telepresence screens per telepresence call</li> <li>Cisco ActivePresence is standard on all ports</li> <li>Support for up to 16 Cisco ActivePresence telepresence screens per blade</li> <li>Support for 10 additional audio-only participants per blade</li> <li>Automatic intelligence layout</li> <li>Text identification of sites</li> <li>Built-in conference scheduling and reservation</li> <li>On-demand and impromptu conferences</li> </ul>	
Content Features	<ul> <li>Automatic content handover</li> <li>Widescreen (16:9) support</li> <li>Dual video using H.239, BFCP or Auto Collaborate</li> <li>Picture in Picture: video and content composed into video stream</li> <li>Each endpoint has its own content encoder.</li> </ul>	
Built-in web server	Complete configuration, control, and monitoring of the system and conferences	
Language support	English as standard	
Chassis physical dimensions (H x W x D)	<ul> <li>33.25 x 17.2 x 20.5 in. (842 x 437 x 520 mm) (19 rack units [19RUs])</li> <li>19-inch rack-mountable (kit supplied)</li> </ul>	
Weight	• 6.6 kg	
Power	• Power: -48 VDC, 100-240 VAC, 50/60 Hz	
Environmental data	<ul> <li>Ambient operating temperature: 32 to 95°F (0 to 35°C)</li> <li>Relative humidity: Below 95% (noncondensing)</li> </ul>	
Approvals and compliance	<ul> <li>European safety: EN 60950-1</li> <li>USA/Canada safety: UL 60950-1</li> <li>CB, CE</li> <li>EMC: EN55022 class A, ETS EN300 386, EN61000-3-2, EN61000-3-3, EN55024: EN61000-4-2,-3,-4,-5,-6,-11,</li> <li>FCC Part 15 class A, VCCI class A, AS/NZS 3548</li> <li>RoHS compliant</li> </ul>	

 Table 3.
 Video and Audio Specifications

Bandwidth	Up to 4 Mbps with both H.263 and H.264, for each screen in all conference modes
Video standards	<ul> <li>H.261</li> <li>H.263</li> <li>H.263+</li> <li>H.263++</li> <li>H.264</li> </ul>
Video resolution	<ul> <li>From QCIF up to 1080p (1920x1080) including interlaced iCIF and iSIF</li> <li>Aspect ratios: 4:3 and 16:9</li> </ul>
Frame rates	• 30 frames or 60 fields per second
Audio standards	<ul> <li>G.711</li> <li>G.722</li> <li>G.722.1</li> <li>G.723.1</li> <li>G.728</li> <li>G.729</li> <li>MPEG-4 AAC-LC</li> <li>MPEG-4 AAC-LD</li> <li>Polycom Siren14/G.722.1 Annex C</li> </ul>
Audio features	<ul><li>Wideband audio mixing</li><li>Ability to adjust endpoint audio gain through web interface</li></ul>

 Table 4.
 Network, Security, and Management Specifications

Protocols	• H.323
	Session Initiation Protocol (SIP)
	<ul> <li>Telepresence Interoperability Protocol Version 7 (TIPv7)</li> </ul>
	• H.235 (AES)
	• H.239 (dual video)
	• FTP
	Real-Time Transfer Protocol (RTP)
	Real Time Streaming Protocol (RTSP)
	• HTTP
	Secure HTTP (HTTPS)
	Dynamic Host Configuration Protocol (DHCP)
Security features	Secure non-PC hardware and operating system
•	• AES encryption, 128 bit key, H.235
System management	XML management application programming interface (API)
	Management through embedded web server
	RS-232 for local control and diagnostics
	<ul> <li>Configurable event logs and full H.323 and SIP decoding</li> </ul>
	Configuration backup to network
	Secure upgrades through Ethernet
Quality of service (QoS)	Configurable differentiated services code point (DSCP) or type of service (ToS)/IP Precedence
Network resilience	<ul> <li>Cisco TelePresence PacketSafe technology, which provides intelligent downspeeding, packet pacing, and packet-loss concealment to ensure optimum video and audio quality</li> <li>Dynamic jitter buffering</li> </ul>
Interfaces	<ul> <li>R45 Ethernet, 10/100/1000Mbps full and half duplex, manual or auto sensing</li> <li>RJ45 serial port</li> </ul>

Room-Switching
CiscoTelePresence
TelePresence Server
Third-party
Telepresence Systems
(Contact) Cisco for list of TelePresence systems supported

Audio
Endpoints

Figure 3. Cisco TelePresence Server Interoperability Solution

### Warranty Information

Find warranty information on Cisco.com at the **Product Warranties** page.

#### **Ordering Information**

To place an order, visit the <u>Cisco Ordering Home Page</u> or contact your Cisco sales representative. To download software, visit the <u>Cisco Software Center</u>.

 Table 5.
 Ordering Information

Product Name	Part Number
Cisco TelePresence Server MSE 8710	CTI-8710-TS-K9
Cisco TelePresence Server MSE 8710 Screen Licence	L-8710-1SL
Cisco TelePresence Server MSE 8710 3rd Party multi-screen interop key	L-8710-TPI

# Cisco Services

Cisco and our partners provide a broad portfolio of smart, 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 by harnessing the network as a powerful business platform. For more information about these services, please visit: <a href="http://www.cisco.com/go/telepresenceservices">http://www.cisco.com/go/telepresenceservices</a>.

#### For More Information

For more information about the Cisco TelePresence Server MSE 8710, please visit <a href="http://www.cisco.com/go/telepresence">http://www.cisco.com/go/telepresence</a> or contact your local Cisco account representative or authorized Cisco partner.



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