

## Cisco TelePresence System 1000

Cisco TelePresence™ solutions create 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 solution can provide great productivity benefits and transform your business. Many organizations are already using this solution to control costs, make decisions faster, improve customer intimacy, scale scarce resources, and speed products to market.

The Cisco TelePresence meeting solution comprises several endpoint models to meet many types of meeting needs:

- The Cisco TelePresence System 500 is designed for 1 or 2 users, bringing the Cisco TelePresence virtual in-person experience directly into the private office.
- The Cisco TelePresence System 1000 is for small group meetings and one-on-one conversations.
- The Cisco TelePresence System 1300 Series is designed for group meetings in multipurpose conference rooms.
- The Cisco TelePresence System 3000 is for business meetings with up to 6 participants per room.
- The Cisco TelePresence System 3200 is for large group meetings of up to 18 participants per room.

These endpoints work with the complete Cisco TelePresence solution for easy call scheduling and setup; scalable, zero-latency multipoint calls; secure intercompany communications; and a host of compelling collaboration applications that scale a variety of meeting types, high-definition (HD) broadcasting, and industrial applications.

This data sheet discusses the Cisco TelePresence System 1000 (Figure 1).

**Figure 1.** Cisco TelePresence System 1000



### **Product Overview**

Cisco TelePresence combines life-size, true high-definition video (1080p), CD-quality audio, a specially designed environment, and interactive elements to create the feeling of being “in person” with participants in remote locations. This simple, easy-to-use solution allows you and other participants to communicate naturally and effectively.

With “in-person” virtual experiences, you now have the potential to transform your business by getting closer to customers, suppliers, and partners; improving communications between remote groups or individuals; and gaining time-to-market advantages. These benefits span all industries, including banking, manufacturing, retail, technology, telecommunications, healthcare, government, and education.

The Cisco TelePresence System 1000 accommodates seating for 1 or 2 participants on each side around a virtual table for up to 4 participants in a point-to-point meeting, or up to 48 locations in a multipoint meeting. Integrated equipment for an optimized user experience includes one 65-inch plasma screen, a speaker and microphone with echo cancellation, lighting, and an ultra-high-definition codec and camera that have been specially tuned to the small-group environment.

The Cisco TelePresence Manager software integrates with enterprise groupware and Cisco® Unified Communications Manager, so scheduling is as easy as sending a calendar invitation, and you can launch both point-to-point and multipoint calls with the push of a button on the meeting-room phone.

### **Applications**

The Cisco TelePresence System 1000 is ideal for small group meetings, such as customer engagements, supply-chain dealings, negotiations, job interviews, engineering reviews, or one-on-one or team meetings.

The life-size images and remarkable clarity allow you to see every expression, and the rich, CD-quality audio helps you hear every word. The ease of use and integrated, optimized environmental features make it easy to schedule and launch calls by pushing one button. Integration with the

highly available Cisco network offers reliability, quality of service (QoS), and security, giving you the confidence to use it for both internal and external meetings.

## Features and Benefits

The Cisco TelePresence System 1000 offers the following features and benefits:

- A 65-inch high-definition plasma display shows life-size images at 720p and 1080p resolutions.
- Specially designed, high-definition cameras provide high-quality, high-definition images, with excellent eye contact and no user operation required.
- Full-duplex, CD-quality audio facilitates a full, natural conversation with no perceivable latency. The clarity of the audio allows you and other participants to talk in relaxed or soft voices and still be heard as if you were all in the same room. The microphone electronics are carefully designed to eliminate interference from mobile devices and cell phones.
- The specially designed, optimized environment offers high-quality lighting and sound treatment that works well with normal conference-room lighting, and provides comfortable seating for 2 participants in the same room and up to 368 participants for multipoint meetings.
- Like the other Cisco TelePresence endpoints, the Cisco TelePresence System 1000 integrates with common calendaring software for easy and automated call start and controls; you just push a button. Both point-to-point and multipoint meetings are equally easy to schedule and launch.
- The solution offers any-to-any interoperability with standards-based standard- and high-definition video endpoints and collaboration with many other technologies such as Cisco WebEx<sup>®</sup> meeting applications and the Cisco Digital Media System.
- With this solution you can expect secure and reliable inter- and intracompany calling between your organization and any other, including with public Cisco TelePresence facilities.
- Integration with the network helps ensure reliability with high availability, security, and QoS for an optimal experience with every call. Highly secure communications are achieved through encryption of both video and call signaling.

Table 1 lists the features and benefits of the Cisco TelePresence System 1000.

**Table 1.** Cisco TelePresence Features and Benefits

Feature	Description
<b>Interoperability support</b>	Cisco TelePresence systems can interoperate with standards-based H.323 video conferencing systems and other high-definition endpoints, both video conferencing and competitive TelePresence products. In addition to protecting existing investments, interoperability expands dramatically the number of video conferencing endpoints that can communicate with a Cisco TelePresence system.
<b>Cisco TelePresence Expert on Demand support</b>	You can integrate Cisco TelePresence systems with Cisco Unified Communications and Cisco Unified Contact Center to deliver high-touch customer service and point-of-sale services.
<b>Cisco TelePresence Recording Studio</b>	Cisco TelePresence Recording Studio transforms Cisco TelePresence units into high-definition recording studios. Using an intuitive user interface on your existing Cisco TelePresence IP Phone, you can record high-quality video to deliver rich, immersive messages for internal and external communications, training, crisis management, etc. Viewing and distributing video content is easy; you can replay recordings on Cisco TelePresence endpoints or on standard browser-based players.

<b>Network-adaptive bandwidth usage</b>	The solution supports 720p or 1080p resolutions with three quality levels to optimize network bandwidth consumption. Cisco TelePresence meetings can operate at several different bandwidth levels ranging from 2 to 5 Mbps for configurable, variable bandwidth consumption, maximizing the Cisco TelePresence experience while preserving frame rate and low latency, and reducing packet loss. The solution is supported by all existing install, deployment, and operation services.
<b>Extended Reach Cisco TelePresence</b>	An optimized 720p Cisco TelePresence mode provides for wide-area bandwidth connections as low as 1.5-Mbps (T1/E1) speeds. The system maintains latency and packet loss while providing constrained bandwidth options for remote-office or telecommuter deployments.
<b>Directories</b>	Integration into the Cisco Unified Communications Manager general directory service provides a search function for thousands of directory entries.
<b>Speed dial</b>	The Cisco TelePresence meeting application allows up to 40 favorites entries for convenient speed dialing.
<b>Settings</b>	The web-based interface allows administrators to securely log in to the system to make configuration changes to the Cisco TelePresence systems.
<b>Scheduling services</b>	The Cisco TelePresence system allows for TelePresence call scheduling from enterprise calendaring applications such as Microsoft Outlook and Lotus Notes. To use this feature you must install and configure the Cisco TelePresence Manager server to work with your calendar and email applications.
<b>Mute and hold</b>	The Cisco TelePresence System 1000 supports mute and hold functions.
<b>Gigabit Ethernet switch</b>	The internal Cisco Gigabit Ethernet switch allows for a direct connection to a 10/100/1000BASE-T Ethernet network through an RJ-45 interface with single LAN connectivity for both the Cisco TelePresence system and a co-located Cisco Unified IP Phone 7970G or 7975G model and Ethernet-attached PC. The system administrator can designate separate VLANs (802.1Q) for the PC and Cisco IP Phones, providing improved security and reliability of voice and data traffic.
<b>Volume control</b>	The convenient Volume Control button on the phone provides for easy volume adjustments.
<b>Audio mute</b>	The mute feature has an on-screen mute indicator to alert participants that the mute feature was activated on the Cisco TelePresence microphone, causing the microphone to be simultaneously muted in remote rooms.
<b>Video mute</b>	The hold/resume button toggles the video and audio mute features and allows you to place Cisco TelePresence systems on hold for privacy.
<b>Cisco TelePresence Auto Collaborate</b>	This Cisco innovation allows people in all rooms to instantly see and share information or objects with others by simply plugging in a device such as a laptop computer or the integrated, optional high-definition document camera.
<b>High-frame rate Cisco TelePresence Auto Collaborate</b>	An optional presentation codec is dedicated to the data channel to provide full-motion (30-fps) graphics and multimedia content on the Cisco TelePresence Auto Collaborate data channel.
<b>Document camera controls</b>	Software controls for the optional document camera are incorporated into the Cisco TelePresence user interface on the Cisco IP Phone, providing for a more tightly integrated solution and more natural user controls. (This feature requires Cisco TelePresence Software Version 1.2 or later.)
<b>Dialing buttons</b>	These buttons allow for convenient manual or address-book dialing.
<b>Multipoint support</b>	Cisco TelePresence System 1000 can participate in multipoint meetings by using the Cisco TelePresence Multipoint Switch or the Cisco Unified Conferencing for TelePresence platform.
<b>Encryption</b>	Cisco TelePresence supports full media and signaling encryption with no discernable latency to the Cisco TelePresence call for up to 48 segments. In addition, Cisco TelePresence meetings can be designated as nonsecure, secure best effort, and always secure. Meeting encryption status is indicated on-screen at the start of a call or when it changes, and on the phone at all times.
<b>Power over Ethernet (PoE) power for high-definition cameras and Cisco Unified IP Phone 7970G and 7975G models</b>	The Cisco high-definition cameras and Cisco Unified IP Phone 7970G and 7975G models receive power down the LAN from the Cisco IEEE 803.3af PoE switch incorporated into the Cisco TelePresence codec.
<b>Americans with Disabilities Act (ADA) features</b>	The dial pad is ADA-compliant on the Cisco Unified IP Phone 7970G and 7975G models.
<b>U.S. Section 508 features</b>	The dial pad on the Cisco Unified IP Phone 7970G and 7975G models conforms to U.S. Section 508 guidelines. The 5 key has a raised nib that provides a tactilely discernible home key. To access more accessibility features, you can obtain the U.S. 508 Voluntary Product Accessibility Template (VPAT) at the following URL: <a href="http://www.cisco.com/go/accessibility">http://www.cisco.com/go/accessibility</a> .
<b>Signaling protocol support</b>	Cisco TelePresence System 1000 supports Session Initiation Protocol (SIP) on Cisco Unified Communications Manager 5.1 and later.
<b>Audio codec support</b>	G.711 and advanced audio coding with low-delay (AAC-LD) audio compression codecs are available.
<b>Configuration options</b>	You can configure IP address assignment statically or through the Cisco TelePresence

	administrator web interface.
<b>System lighting</b>	The solution includes an integrated lighting assembly to eliminate facial shadows and provide natural-looking video without harsh studio lighting or makeup.
<b>System lighting controls</b>	You can configure the integrated lighting assembly of the Cisco TelePresence system to turn on or off with a Cisco TelePresence call or with normal working hours. This feature reduces power consumption and provides a "greener" overall solution. (It requires Cisco TelePresence Software Version 1.4 or later.)

## Product Specifications

Tables 2 through 4 list specifications for the Cisco TelePresence System 1000.

**Table 2.** Product Specifications

Specification	Description
<b>Product compatibility</b>	<ul style="list-style-type: none"> <li>• Cisco TelePresence System 500 with Cisco TelePresence System Software 1.4 or later</li> <li>• Cisco TelePresence System 1300 Series with Cisco TelePresence System Software 1.5 or later</li> <li>• Cisco TelePresence System 3000 with Cisco TelePresence System Software 1.4 or later</li> <li>• Cisco TelePresence System 3200 with Cisco TelePresence System Software 1.4 or later</li> <li>• Cisco Unified Communications Manager 5.1 or later</li> <li>• Cisco TelePresence Multipoint Switch 1.0 or later</li> <li>• Cisco TelePresence Manager 1.0 or later</li> </ul>
<b>Software compatibility</b>	Cisco TelePresence System Software 1.1 or later
<b>Protocols</b>	Cisco Discovery Protocol, SIP, IP, Dynamic Host Configuration Protocol (DHCP), Secure Shell (SSH) Protocol, 802.1p/q, and Real-Time Transport Protocol (RTP)
<b>Connectivity</b>	Ethernet (1 LAN, RJ-45 connection - 100/1000m), internal 4-port Ethernet switch, and high-definition video connector (socket and cable)
<b>Programming interfaces</b>	Web-based user interface; IP address assignment can be statically configured or configured through the Cisco TelePresence web interface
<b>Physical dimensions (H x W x D)</b>	61 x 62 x 14 in. (1.55 x 1.57 x 0.35m) Designed for small conference room or office
<b>Power</b>	Maximum: 1160W (9.7A @ 120V to 4.8A @ 240V) Typical: 1079W (9A @ 120V to 4.5A @ 240V)
<b>Topical heat dissipation*</b>	1.44kW 3,700 BTU/Hr

\* Typical accounts for a diversity of power consumption at 75% of max.

**Table 3.** Video and Audio Specifications

Specification	Description
<b>Bandwidth</b>	Recommended : 1–3 Mbps ( 720p) or 3–4 Mbps (1080p) for IP QoS connections
<b>Video standards</b>	H.264
<b>Frame rates</b>	30 frames per second using H.264
<b>Data and graphics frame rates</b>	Graphics sharing at 5 frames per second (standard configuration) Optional graphics sharing at 30 frames per second using a dedicated presentation codec
<b>Native National Television Standards Committee (NTSC)</b>	720p and 1080p
<b>Resolution</b>	1920 x 1080 native
<b>Audio standards</b>	G.711 and AAC-LD (22 kHz)
<b>Audio features</b>	Cisco Dynamic Echo Cancellation

<b>Cisco TelePresence High-Definition Camera</b>	<ul style="list-style-type: none"> <li>• CMOS 2- to 3-in. sensor</li> <li>• C Mount lens</li> <li>• 1080p 30</li> <li>• Minimum illumination 300 lux</li> <li>• Manual focus</li> </ul>
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**Table 4.** Additional Specifications

Specification	Description
<b>Firmware upgrades</b>	Downloadable from Cisco Unified Communications Manager
<b>Dimensions (H x W x D)</b>	61 x 62 x 14 in. (1.55 x 1.57 x 0.35m)
<b>Footprint</b>	Small conference room or executive office
<b>Weight</b>	690 lb ( 312.92 kg) (freight weight)
<b>Video network features</b>	Intelligent packet loss recovery of video transmission
<b>Network interface</b>	1 LAN or Ethernet (RJ-45); 100/1000 Mbps
<b>Ethernet, Internet, and intranet connectivity</b>	Cisco Discovery Protocol, 802.1p/q, TCP/IP, DHCP, and SSH

**Table 5.** Temperature Ratings

Temperature	Description
<b>Conference-room operating temperature</b>	41 to 86°F (5 to 30°C)
<b>Relative humidity</b>	10 to 95% (noncondensing)

**Table 6.** Regulatory Compliance

Regulatory Compliance
<ul style="list-style-type: none"> <li>• CE marking</li> <li>• UL/CSA/IEC/EN/AS/NZS/ 60950</li> <li>• FCC Part 15 Class A</li> <li>• CISPR22/EN55022 Class A</li> <li>• EN5502</li> </ul>

## Ordering Information

To place an order, visit the [Cisco Ordering Home Page](#) and refer to Table 7.

**Table 7.** Ordering Information

Product Name	Part Number
<b>Cisco TelePresence System 1000</b>	CTS-1000
<b>Ordering Options for the CTS-1000</b>	
<b>Power Cords</b>	Select the appropriate power cord option to plug into the wall outlets in the country where the TelePresence system will be deployed.
<b>Lighting Fixtures</b>	Select the appropriate system lighting fixture based on the region where the TelePresence system will be deployed. Special lighting fixtures are required for Europe and Japan.
<b>Auxiliary control unit</b>	CTS-LIGHT-CTRL This is an optional control unit that is used to turn off system lighting when not in a meeting and is not required for Cisco TelePresence 1000 operation.
<b>Presentation Codec</b>	CTS-HFR-COLLAB This is a chargeable option to add a dedicated presentation codec to enable high frame rate Auto Collaboration.

## Service and Support

Critical to delivering the innovative Cisco TelePresence experience are integrated lifecycle services delivered by Cisco and our certified partners. Designed specifically for multisite organizations, these services can accelerate a successful deployment and deliver a high-quality, reliable, “in-person” Cisco TelePresence experience.

Initial Prepare, Plan, and Design services prepare your network and organization to deliver the expected consistent quality level of the Cisco TelePresence experience. Operate services provide continued TelePresence experience in addition to peace of mind for your IT staff by increasing availability with critical day-2 maintenance support, remote monitoring and management, and remote assistance service. These services use a proven lifecycle services approach to deliver on a Cisco TelePresence experience. For more information, please visit <http://www.cisco.com/go/telepresenceservices>.

## For More Information

For more information about the Cisco TelePresence System 1000, please visit: <http://www.cisco.com/go/telepresence> or contact your local Cisco account representative or authorized Cisco partner.



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