

Cisco TelePresence System 3000

The Cisco TelePresence™ solution 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 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.

Cisco TelePresence 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 type of meetings, HD broadcasting and vertical applications.

This data sheet discusses the Cisco TelePresence System 3000 (Figure 1).

Figure 1. Cisco TelePresence System 3000



Product Overview

Cisco TelePresence combines life-size, ultra-high-definition video (1080p), spatial 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.

By meeting “in person” with remote participants, 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 3000 provides a boardroom-style table that seats 6 participants on each side, providing a “virtual” table for 12 participants in a point-to-point meeting, or up to 372 participants in a multipoint session. The system provides an optimized experience through integrated equipment, including three 65-inch plasma screens; spatial audio; microphones; lighting; integrated Ethernet and power; and multiple ultra-high-definition codecs and cameras, all of which have been specially tuned to the large-group environment to optimize your experience.

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 3000 is ideal for large group meetings, comfortably seating participants around a virtual table for applications such as customer engagements, presentations to groups, supply-chain dealings, press briefings, operational or engineering reviews, negotiations, or regular team meetings.

The life-size images and remarkable clarity allow you to see every expression, and the rich, CD-quality audio allows you to hear every word. The ease of use and integrated, optimized environmentals 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 3000 offers the following features and benefits:

- The system integrates three 65-inch high-definition plasma displays for 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 are all in the same room. The microphone electronics have been 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 up to 6 participants in the room and up to 372 participants for multipoint meetings.
- Simplicity in scheduling and call launch through integration with enterprise groupware and Cisco Unified Communications makes scheduling Cisco TelePresence meetings as easy as sending a calendar invitation. Launching calls is as easy as the touch of a button. Both point-to-point and multipoint meetings are equally easy to schedule and launch.
- Integration with the network helps ensure reliability with high availability, security, and QoS for an optimal experience with every call. Highly secure communications are enabled through encryption of both video and call signaling.

Table 1 lists the features and benefits of the Cisco TelePresence System 3000.

Table 1. Cisco TelePresence System 3000 Features and Benefits

Feature	Description
Interoperability support	Cisco TelePresence System 3000 can interoperate with standards-based H.323 video conferencing systems and other high-definition (HD) 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.
Cisco TelePresence Expert on Demand support	Cisco TelePresence System 3000 can be integrated with Cisco Unified Communications and Cisco Unified Contact Center to deliver high-touch customer service and point-of-sale services.
Cisco TelePresence Recording Studio	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.
Network-Adaptive Bandwidth Usage	Support for 720p or 1080p resolutions with three quality levels to optimize network bandwidth consumption. Enables Cisco TelePresence solution to operate at several different bandwidth levels ranging from 2-5M bps for configurable, variable bandwidth consumption. This maximizes the Cisco TelePresence experience while preserving frame rate and low latency, and reducing packet loss. Supported by all existing install, deployment and operation services.
Cisco TelePresence Extended Reach	Optimized 720p Cisco TelePresence mode for wide area bandwidth connections as low as 1.5M bps (T1/E1) speeds. Maintains latency and packet loss while providing constrained bandwidth options for remote office or telecommuter deployments.
Directories	Integration into the Cisco Unified Communications Manager general directory service provides a search function for thousands of directory entries.
Speed dial	The Cisco TelePresence solution allows up to 40 favorites entries for convenient speed dialing.
Settings	The web-based interface allows administrators to securely log in to the system to make configuration changes to the Cisco TelePresence systems.
Scheduling services	The Cisco TelePresence System 3000 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.
Mute and hold	The Cisco TelePresence System 3000 supports mute and hold functions.
Gigabit Ethernet switch	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.
Volume control	The convenient Volume Control button on the phone provides for easy volume adjustments.
Audio mute	The mute feature has an on-screen mute indicator to alert participants that the mute feature was activated on the Cisco TelePresence microphone, causing all microphones to be simultaneously muted in remote rooms.
Video mute	The hold/resume button toggles the video and audio mute features and allows you to place Cisco TelePresence systems on hold for privacy.

Cisco TelePresence Auto Collaborate	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.
High-frame rate Cisco TelePresence Auto Collaborate	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.
Document camera controls	Software controls for the optional document camera have been 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.)
Dialing buttons	These buttons allow for convenient manual or address-book dialing.
Multipoint support	Cisco TelePresence System 3000 can participate in multipoint meetings by using the Cisco TelePresence Multipoint Switch or the Cisco Unified Conferencing for TelePresence platform.
Encryption	The Cisco TelePresence solution 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.
Power over Ethernet (PoE) power for high-definition cameras and Cisco Unified IP Phone 7970G and 7975G models	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.
Americans with Disabilities Act (ADA) features	The dial pad is ADA-compliant on the Cisco Unified IP Phone 7970G and 7975G models.
U.S. Section 508 features	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: http://www.cisco.com/go/accessibility .
Signaling protocol support	The Cisco TelePresence System 3000 supports Session Initiation Protocol (SIP) on Cisco Unified Communications Manager 5.1 or later.
Audio codec support	G.711 and advanced audio coding with low-delay (AAC-LD) audio compression codecs are available.
Configuration options	You can configure IP address assignment statically or through the Cisco TelePresence administrator web interface.
System lighting	The solution includes an integrated lighting assembly to eliminate facial shadows and provide natural-looking video without harsh studio lighting or makeup.
System lighting controls	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 3000.

Table 2. Product Specifications

Specification	Description
Product compatibility	<ul style="list-style-type: none"> • Cisco TelePresence System 500 with Cisco TelePresence System Software 1.4 or later • Cisco TelePresence System 1000 with Cisco TelePresence System Software 1.4 or later • Cisco TelePresence System 1300 Series with Cisco TelePresence System Software 1.5 or later • Cisco TelePresence System 3200 with Cisco TelePresence System Software 1.4 or later • Cisco Unified Communications Manager 5.1 or later • Cisco TelePresence Multipoint Switch 1.0 or later • Cisco TelePresence Manager 1.0 or later
Software compatibility	Cisco TelePresence System Software 1.4 or later
Protocols	Cisco Discovery Protocol, SIP, IP, Dynamic Host Configuration Protocol (DHCP), Secure Shell (SSH) Protocol, 802.1p/q, and Real-Time Transport Protocol (RTP)
Connectivity	Ethernet (1 LAN, RJ-45 connection - 100/1000m), internal 4-port Ethernet switch, and high-definition video connector

Programming interfaces	Web-based user interface; IP address assignment can be statically configured or configured through the Cisco TelePresence administrator web interface
Physical dimensions (H x W x D)	8 x 15 x 19 feet of space is required at minimum
Weight	2020 lb (freight weight)
Power	Maximum: 5292W (44.1A @ 120V to 22A @ 240V) Typical: 4410W (36.8A @ 120V to 18.4A @ 240V)
Total typical heat dissipation*	3.3kW 11,200 BTU/Hr

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

Table 3. Video and Audio Specifications

Specification	Description
Bandwidth consumption	3–9 Mbps (720p) or 9–12 Mbps (1080p) for IP QoS connections recommended; on average, a Cisco TelePresence System 3000 uses 6–8 Mbps (1080p)
Video standards	H.264
Frame rates	30 frames per second using H.264
Data and graphics frame rate	Graphics sharing at 5 frames per second (standard configuration) Optional graphics sharing at 30 frames per second using a dedicated presentation codec
Native National Television Standards Committee (NTSC)	720p and 1080p
Resolution	1920 x 1080 native
Audio standards	G.711 and AAC-LD (22 kHz)
Audio features	Cisco Dynamic Echo Cancellation for spatial audio
Cisco TelePresence High-Definition Camera	<ul style="list-style-type: none"> • CMOS 2- to 3-inch sensor • C Mount Lens • 1080p 30 • Minimum illumination 300 Lux • Manual focus

Table 4. Additional Specifications

Specification	Description
Firmware upgrades	Downloadable from Cisco Unified Communications Manager
Video network features	Intelligent packet loss recovery of video transmission
Network interface	<ul style="list-style-type: none"> • 1 LAN or Ethernet (RJ-45); 100/1000 Mbps • Internal 4-port Ethernet switch with 2 PoE (IEEE 802.3af) ports on codec

Table 5. Temperature Ratings

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

Table 6. Regulatory Compliance

Regulatory Compliance
<ul style="list-style-type: none"> • CE marking • UL/CSA/IEC/EN/AS/NZS/ 60950 • FCC Part 15 Class A • CISPR22/EN55022 Class A • EN55024

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
Cisco TelePresence System 3000	CTS-3000
Ordering Options for the Cisco TelePresence System 3000	
Power cords	Select the appropriate power cord option to plug into the wall outlets in the country where the Cisco TelePresence system will be deployed.
Laptop connectivity modules	Select the appropriate connectivity modules based on the country where the Cisco TelePresence system will be deployed. These modules allow participants to plug their laptop PCs or other portable electronic devices into power outlets integrated into the system table legs.
Lighting fixtures	Select the appropriate system lighting fixture based on the region where the Cisco TelePresence system will be deployed. Special lighting fixtures are required for Europe and Japan.
Auxiliary control unit	The optional auxiliary control unit (part number CTS-LIGHT-CTRL) is used to turn off system lighting when not in a meeting; it is not required for Cisco TelePresence System 3000 operation.
Projectors	Projector options are offered to meet country-specific regulatory requirements. Select from standard, Chinese, or none.
Presentation codec	This is a chargeable option to add a dedicated presentation codec (part number CTS-HFR-COLLAB) to enable high-frame rate Cisco TelePresence Auto Collaborate.

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 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 3000, please visit:

<http://www.cisco.com/go/telepresence> or contact your local Cisco account representative or authorized Cisco partner.



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