

Cisco TelePresence System 3000

The Cisco TelePresence™ portfolio 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 Cisco TelePresence portfolio has the potential to provide great productivity benefits and transform your business. Many organizations are already using it to control costs, make decisions faster, improve customer intimacy, scale scarce resources, and speed products to market.

The Cisco TelePresence portfolio comprises a complete family of endpoints 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 1100 is designed for small group meetings and one-on-one conversations in multipurpose conference rooms.
- The Cisco TelePresence System 1300 Series is designed for group meetings in multipurpose conference rooms.
- The Cisco TelePresence System 3010/3000 is for business meetings with up to 6 participants per room.
- The Cisco TelePresence System 3210/3200 is for large group meetings of up to 18 participants per room.

These endpoints work with the complete Cisco TelePresence portfolio 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 3000 (Figure 1).

Figure 1. Cisco TelePresence System 3000



Product Overview

Cisco TelePresence systems combine 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 integrates transparently with the rest of the Cisco TelePresence portfolio to offer the same high-quality Cisco TelePresence experience, including:

- High-quality video 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 provides a rich audio experience with no perceivable latency and no interference from mobile devices or cell phones.
- Optimized lighting and audio quality.
- Multipoint meetings with up to 48 locations in any combination of Cisco TelePresence endpoints are possible.
- Integration with common enterprise calendaring programs offers easy and automated call start and controls—you just push a button.
- Impromptu meetings allow you to meet “in person” anywhere there is a Cisco TelePresence endpoint at a moment’s notice—with just a phone call.
- Integration with the network helps ensure reliability with high availability, security, and QoS for an optimal experience. Highly secure communications are enabled through encryption of both video and call signaling.

- Any-to-any interoperability with standard- and high-definition video conferencing endpoints and collaboration with desktop video applications, such as Cisco WebEx™ meeting applications and the Cisco® Digital Media System.
- Secure and reliable intercompany and intracompany calling between your organization and any other, including with public Cisco TelePresence suites, is possible.

Table 1 lists the overall features and benefits of the Cisco TelePresence portfolio.

Table 1. Cisco TelePresence Portfolio Features and Benefits

Feature	Description
Any-to-any interoperability support	Cisco TelePresence systems can interoperate with standards-based H.323 video conferencing systems and other high-definition endpoints. In addition to protecting existing investments, interoperability dramatically expands the number of video conferencing endpoints that can communicate with a Cisco TelePresence system.
Audio codec support	G.711 and advanced audio coding with low delay (AAC-LD) audio compression codecs are available.
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. 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.
Cisco TelePresence Event Controls	Through a web interface, event managers can control the flow of an event produced with a Cisco TelePresence system—providing a cost-effective way to reach wide audiences with spectacular and compelling results.
Cisco TelePresence Expert on Demand support	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.
Cisco TelePresence Extended Reach	An optimized 720p Cisco TelePresence mode provides 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.
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.
Cisco TelePresence WebEx Engage	Cisco TelePresence WebEx Engage extends Cisco TelePresence meetings to Cisco WebEx users. This solution offers unified scheduling and one-button-to-push meeting start, and it combines audio- and data-sharing capabilities. Remote attendees join through the Cisco WebEx Meeting Center and receive video from the Cisco TelePresence system. This integration improves user experience, making meetings easier and more productive.
Configuration options	You can statically configure IP address assignment or configure it through the Cisco TelePresence administrator web interface.
Dialing buttons	These buttons allow for convenient manual or address-book dialing.
Directories	Integration into the Cisco Unified Communications Manager general directory service provides a search function for thousands of directory entries.
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.)
Encryption	The Cisco TelePresence system 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.
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 7975G 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.
Multipoint support	Cisco TelePresence systems can participate in multipoint meetings by using the Cisco TelePresence Multipoint Switch.
Mute and hold	The Cisco TelePresence system supports mute and hold functions. 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. The Hold/Resume button toggles the video and audio mute features and allows you to place Cisco TelePresence systems on hold for privacy.
Network-adaptive bandwidth usage	The solution supports 720p or 1080p resolutions with three quality levels to optimize network bandwidth consumption. Cisco TelePresence systems 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.

Power over Ethernet (PoE) power for high-definition cameras and Cisco Unified IP Phone 7975G	The Cisco high-definition cameras and Cisco Unified IP Phone 7975G receive power down the LAN from the Cisco IEEE 803.3af PoE switch incorporated into the Cisco TelePresence codec.
Settings	The web-based interface allows administrators to securely log in to the system to make configuration changes to the Cisco TelePresence systems.
Signaling protocol support	The Cisco TelePresence system supports Session Initiation Protocol (SIP) on Cisco Unified Communications Manager.
Speed dial	The Cisco TelePresence system allows up to 40 favorites entries for convenient speed dialing.
System lighting	The solution includes an integrated lighting assembly to eliminate facial shadows and provide natural-looking video without harsh studio lighting or makeup. 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.)
U.S. Section 508 features	The dial pad on the Cisco Unified IP Phone 7975G conforms to U.S. Section 508 guidelines. The 5-key dial pad 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 .
Volume control	The convenient Volume Control button on the phone softkey menu provides for easy volume adjustments.

Product Specifications

Tables 2 through 6 list specifications and compliance information 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 1100 with Cisco TelePresence System Software 1.5 or later • Cisco TelePresence System 1300 Series with Cisco TelePresence System Software 1.5 or later • Cisco TelePresence System 3010 with Cisco TelePresence System Software 1.6 or later • Cisco TelePresence System 3200 with Cisco TelePresence System Software 1.4 or later • Cisco TelePresence System 3210 with Cisco TelePresence System Software 1.6 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: 100/100m), 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 (2.4 x 4.6 x 5.8m)
Weight	2020 lb (freight weight) (916 kg)
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 percent of maximum

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)

Regulatory Compliance

- 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 6.

Table 6. 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 chargeable option adds a dedicated presentation codec (part number CTS-HFR-COLLAB) to enable high-frame rate Cisco TelePresence Auto Collaborate.

Service and Support

Cisco and our partners provide a broad portfolio of intelligent, 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 through a network-based collaboration platform that enables businesses to collaborate anywhere, any time. For more information about these services, visit:

<http://www.cisco.com/go/telepresenceservices>.



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Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
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Singapore

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