

## Cisco TelePresence System 3200

### Overview of the Cisco TelePresence 3200

The Cisco TelePresence 3200 brings the power of Cisco TelePresence technology to large room venues. Satisfying the need for large team meetings, cross-functional team meetings, training and distanced learning, the Cisco TelePresence 3200 provides seating for up to 18 active meeting participants in the room while delivering the superior video and audio quality offered across the Cisco TelePresence portfolio.

Perfect for headquarters sites or large regional offices, the Cisco TelePresence 3200 allows large teams to meet and collaborate when much of the team is in one physical location. Based on the proven, market-leading Cisco TelePresence 3000 design, the 3200 system extends the reach of the Cisco TelePresence portfolio from one-on-one or small meetings to team meetings, and now to large meeting-room venues, spanning the wide range of needs for your organization today and into the future.

#### **Q. What is the Cisco TelePresence 3200?**

**A.** The Cisco TelePresence 3200 is a Cisco TelePresence endpoint designed for large room venues and large meetings with more than six participants in the room. Based on Cisco TelePresence 3000 technology, it adds an additional row of tables with full audio and video meeting participation capabilities to accommodate up to 18 participants in the room.

#### **Q. What types of customers would typically use a Cisco TelePresence 3200?**

**A.** The Cisco TelePresence 3200 works well for organizations or corporations that have large headquarters or regional sites and other sites spread throughout the state, country, or world. Based on the size and population at these large headquarters or regional offices, groups and departments may frequently need to meet with and collaborate virtually with people from other sites, offices, or even other companies.

#### **Q. What are the typical uses for a Cisco TelePresence 3200 system?**

**A.** The Cisco TelePresence 3200 is a perfect fit for large team meetings, cross-functional team meetings, and corporate training or classroom events. It is ideal for any situation where a large group at a single site needs to meet or work with a team from one or more other locations.

#### **Q. How many participants will a Cisco TelePresence 3200 accommodate?**

**A.** The Cisco TelePresence 3200 is designed for up to 18 participants, with 6 people in the front row (same as the existing 3000 system) and 12 people in the second row.

#### **Q. What if I need more than 18 people in a room? Can I add more seats along the back?**

**A.** For cases where you need more than 18 people in the room, you can add more seating along the back wall, assuming the physical size of the room allows it. These additional seats are on camera and audible on audio, but the video and audio systems of the Cisco TelePresence 3200 are not optimized for these extra participants, so the quality of the audio-video experience is slightly reduced.

**Q. Is the Cisco TelePresence 3200 just a Cisco TelePresence 3000 with another row of tables?**

**A.** The Cisco TelePresence 3200 is based on the core Cisco TelePresence 3000 system technology but has been optimized so the participants on the second row have equal seating at the table. For example, new camera lenses use a focal depth to pick up both rows of participants while a redesigned audio subsystem balances and echo cancels all microphones to ensure all participants are heard clearly. The Cisco TelePresence 3200 is a very carefully planned evolution of the Cisco TelePresence 3000 design to solve the challenge of bringing Telepresence technology to larger rooms.

**Q. Is the second row of tables raised to provide “stadium-style” seating?**

**A.** Many people assume that the Cisco TelePresence 3200 does have a raised platform for the back row of seats when they see it on video for the first time, but that is not the case. The cameras in a Cisco TelePresence 3200 are mounted slightly above head level (same place as for a Cisco TelePresence 3000) and this gives the camera a slightly elevated perspective when looking at the 2nd row. Actually, we have chosen to keep the second row of tables on the same level as the front row for several important reasons:

- This configuration minimizes installation time, complexity, and cost.
- This configuration allows for Cisco TelePresence 3200 installation in more rooms with less facility renovation or remodeling.
- This configuration keeps the camera angles, display positioning, and aspect ratios the same as those for the Cisco TelePresence 3000, helping ensure seamless call interoperability between the Cisco TelePresence 3200 and other Cisco TelePresence endpoints.
- Most large conference rooms today do not offer stadium-style seating. Because the Cisco TelePresence 3200 brings the large conference room into the “virtual” meeting space, we wanted it to feel as much as possible like a normal large conference room. Raised stadium seating does not feel “normal” in a business conference-room environment.

**Q. Can I provide my own table for the back row?**

**A.** No. The table is an integral part of the Cisco TelePresence 3200. It is designed to keep participants at the correct location and depth based on camera angles and to keep microphones correctly positioned to pick up conversation without adding echo or reverberation.

**Q. How does the video on a Cisco TelePresence 3200 system work?**

**A.** The Cisco TelePresence 3200 uses the same camera as the 3000 system, but uses a lens with greater focal depth to provide clear video images of both rows of participants. It uses the same 65-inch plasma displays at 1080p resolution as the 3000 system. The net result is that it provides the same excellent video quality as a Cisco TelePresence 3000 system for both rows of participants.

**Q. Are all the participants still life-size?**

**A.** Yes. The front-row participants appear life-size, like in a Cisco TelePresence 3000 meeting. The images of the second-row participants are smaller, but that is because they are farther away from the camera. The visual perspective is thus very natural. Your eyes expect the second-row participants to appear smaller because you expect them to be farther away, and that is exactly what you see.

**Q. How does the audio on a Cisco TelePresence 3200 system work?**

**A.** The Cisco TelePresence 3200 uses the same microphone layout in the front row as the Cisco TelePresence 3000 system, but adds 6 additional microphones for the back row. This configuration ensures all participants have a microphone close by, whether they are in the front row or the back. That way, every participant in the room can be heard with the same level of clarity. Each two back-row microphones are grouped with the corresponding front row microphone to maintain three channels (left, center, and right) of spatial audio.

**Q. What are the similarities between the Cisco TelePresence 3200 and 3000 systems?**

**A.** The Cisco TelePresence 3200 is built on the same core technology as the 3000 system. It uses the same 65-inch 1080p displays, camera cluster (with different lenses), front-row table, front-row microphones, and even the same secondary codecs. A primary design goal was to base the Cisco TelePresence 3200 on the Cisco TelePresence 3000 system technology to help ensure seamless interoperability with other Cisco TelePresence endpoint models and to offer an easy upgrade path for customers who need more seats at the table.

**Q. What are the primary differences between the Cisco TelePresence 3200 and 3000 systems?**

**A.** Although much of the fundamental core technology is the same between the two systems, there are some important differences:

- The Cisco TelePresence 3200 provides a second row of tables for 12 additional participants, bringing the room total to 18.
- The 3200 system provides six microphones on the second-row table for superior audio for all participants.
- The Cisco TelePresence 3200 has a new primary codec to incorporate the new audio system.
- The Cisco TelePresence 3200 has an audio-video expansion chassis for the additional microphone inputs and HDMI outputs for additional data displays.
- The 3200 system has a new camera lens with greater focal depth to capture both rows of participants equally.

**Q. Will the Cisco TelePresence 3200 interoperate with other Cisco TelePresence endpoints?**

**A.** Of course. All Cisco TelePresence endpoints are built to seamlessly interoperate for a consistent Telepresence experience no matter what endpoint you use. Cisco also supports standards-based interoperability with videoconferencing.

**Q. Can you describe the meeting experience for people in a Cisco TelePresence 3200 room?**

**A.** Participants in a Cisco TelePresence 3200 room have the same high-quality video and audio Telepresence experience that any other Telepresence participant has. They see life-size images of other meeting-room participants and hear three channels of CD-quality spatial audio.

**Q. What do people in a Cisco TelePresence 3000 or 1000 system experience when they call a Cisco TelePresence 3200 room?**

- A.** When participants in a Cisco TelePresence 3000 call a Cisco TelePresence 3200 room, they see life-size images. They simply see more people on the screen. With the Cisco TelePresence 3200 room fully populated, they see 6 people per display, with 2 in front-row seats and 4 in second-row seats. The front-row participants are life size, just like in a Cisco TelePresence 3000 meeting. The second-row participants appear smaller than life size, as they would appear in the same room. This scenario provides a very natural visual perspective when seeing the Cisco TelePresence 3200 room on a Cisco TelePresence system. From an audio perspective, the participants' voices in the front and second rows are mixed into left, center, and right audio channels to maintain the same spatial audio experience as across all other Cisco Telepresence endpoints. All participants have a microphone mounted close by so that they are heard at consistent audio levels, no matter where they are seated.

When participants in a Cisco TelePresence 1000 call a Cisco TelePresence 3200 room, their experience is the same, but with one screen for video and one speaker for audio. The Cisco TelePresence 1000 room participants talking with the participants in a Cisco TelePresence 3200 meeting use voice-activated switching to determine the active speaker and show that active segment on video. This scenario works the same as when a Cisco TelePresence 1000 meeting participant talks with a Cisco TelePresence 3000 meeting participant today.

**Q. Does the Cisco TelePresence 3200 work with multipoint calls?**

- A.** Yes. With the front- and second-row microphones mixed into left, center, and right channels, the Cisco TelePresence 3200 can join multipoint calls just like any other Cisco TelePresence endpoint.

**Q. Can I upgrade my existing Cisco TelePresence 3000 to a Cisco TelePresence 3200?**

- A.** Yes. We offer an upgrade kit that includes the components you need to turn your Cisco TelePresence 3000 into a Cisco TelePresence 3200. You must update your software to Cisco TelePresence Version 1.4 or later. When planning an upgrade, you must ensure that your room space is large enough or can be expanded to fit the minimum room dimensions for a Cisco TelePresence 3200, and you must reevaluate room conditions such as lighting, acoustics, power, and air conditioning for other room changes required to support the additional size and capacity of a Cisco TelePresence 3200 system.

**Q. What is the minimum room size for a Cisco TelePresence 3200?**

- A.** The minimum room size for a Cisco TelePresence 3200 system is 8 x 31 x 23 feet (H x W x D). The room width (31 feet) is based on the physical dimensions of the second-row table plus 3 feet minimum on either side to allow for freedom of movement in the room. The room depth (23 feet) is based on the physical distance between the camera and the edge of the second-row table plus 4 feet minimum for chairs and push-back distance. Note that the minimum room height (8 feet) does not account for any alternate data-display options. Additional room height is required to mount a data display above the primary video displays.

**Q. What if I do not have enough physical space to fit a Cisco TelePresence 3200?**

- A.** In this case, usually the limiting factor is the room width (31 feet). To help provide some more flexibility, we have created an additional deployment option where you simply install two fewer table segments and supporting structure. This ends up with a 2nd row table that fits 8 people (14 total participants in the room) and will fit into a 24 foot width room. The other room dimensions (height and depth) are the same as those listed above. Overall, this provides the

flexibility to deploy the standard table configuration for maximum seating capacity (18 people in the room, 31 foot min room width) or to deploy a reduced table configuration for minimum room footprint (14 people in the room, 24 foot min room width).

**Q. How does data collaboration work in a Cisco TelePresence 3200 meeting? Can people in the back row share presentations?**

**A.** Data collaboration works the same way in a Cisco TelePresence 3200 meeting as it does across the rest of the Cisco TelePresence portfolio. The Auto Collaborate feature allows you to share data content by simply plugging your PC into the Cisco TelePresence room VGA cable or turning on the document camera. The VGA cable is accessible only by front-row seating positions, so a presenter must sit in the front row during a Cisco TelePresence 3200 meeting. Alternatively, you can schedule a Cisco MeetingPlace® or WebEx® session so second-row participants can present with Web collaboration tools.

**Q. How can people in the back row see shared collaboration data?**

**A.** The Cisco TelePresence 3200 comes with the standard Cisco TelePresence data projector, designed to project onto the white screen below the three primary video displays. Content on that screen is difficult for participants in the second row to see, so the system includes a 4-port HDMI splitter as part of the audio-video expansion chassis. This splitter allows you to add up to three additional data displays in the room so that second-row participants can easily view shared data. It gives you flexibility to choose the number, size, and location of the extra displays you need to fit the room configuration.

**Q. What other data displays can I use, and how do I get them?**

**A.** We have tested and qualified several sizes, vendors, and models of high-definition LCD displays for use as additional data displays in a Cisco TelePresence room (Cisco TelePresence 3200, 3000, and 1000 endpoints). We neither sell nor support these displays. Cisco TelePresence Advanced Technology Partners (ATPs) can assist you with source-appropriate displays, or you can purchase one of the approved models commercially. The data displays listed in Table 1 are qualified and tested for use with Cisco TelePresence systems.

**Table 1.** Data Displays Qualified for Use with Cisco TelePresence Systems

Model	Description
NEC: LCD1770NX	17-inch LCD monitor for use as an alternate graphics and data displays
NEC: LCD2070NX	20-inch LCD monitor for use as an alternate graphics and data displays
NEC: LCD4010 and LCD4020 Samsung: 400PX	40-inch LCD monitor for use as an alternate graphics and data displays
NEC: LCD4610 and LCD4620 Samsung: 460PX	46-inch LCD monitor for use as an alternate graphics and data displays
Sharp: PN-525U	52-inch LCD monitor for use as an alternate graphics and data displays
Samsung: 570DX	57-inch LCD monitor for use as an alternate graphics and data display

**Q. How do I mount these additional data displays in the room?**

**A.** You can mount the additional data displays from the ceiling, on walls, or even on floor stands. Cisco neither sells nor supports the mounts for these displays. Contact your Cisco TelePresence ATP or local audio-visual systems integrator for assistance in determining the optimal location and mounting type for additional data displays. Because this decision depends heavily on room dimensions, ceiling or wall construction, and local building codes, it

is important to engage your facilities team and local resources that understand these variables.

**Q. Can I still use the standard Cisco TelePresence data projector if I use one of these other data displays?**

**A.** Yes. The Cisco TelePresence 3200 comes with the data projector as a standard item. The audio-video expansion chassis comes with 4 HDMI ports, so you can use the standard projector and still have three additional data displays. Note that if you connect the data projector to HDMI port 1 on the audio-video expansion chassis, the system still receives all of the necessary diagnostic information to show status of the projector on the Cisco TelePresence system administrator interface and provide alerts and warning messages if projector malfunctions occur.

**Q. Do people in the back row still have access to power and Ethernet ports?**

**A.** Yes. All table legs in the Cisco TelePresence 3200 provide power and Ethernet ports, just as in the 3000 system.

**Q. How do I route cables to the back-row tables?**

**A.** We recommend core drilling or trenching the floor to route cables below the floor from the front row to the second row of tables for microphone, power, and (possibly) Ethernet cabling. This scenario provides the cleanest and simplest solution. If you are unable to route the cables under the floor, you must consult local fire, building, and safety codes to ensure that cable routing does not create any hazards.

**Q. What is the recommended way to get Ethernet connectivity for participants in the room?**

**A.** Our best recommendation is to deploy wireless Ethernet in the room to provide the simplest and most secure solution. If you choose not to use wireless, then there are some less than optimal possibilities:

1. Deploy a switch in the room and connect all of the Ethernet ports on the TelePresence system table legs to the in-room switch. Keep in mind that since the Cisco TelePresence 3200 seats 18 participants, you will need a switch or multiple switches to provide at least 18 ports. Also note that placing a switch in the TelePresence room may lead to some physical security concerns for your network and may also add ambient noise to the TelePresence room, making it more difficult to pass CTX audio certification. If you do still choose to deploy a switch in the room, we recommend that you choose switches that have minimal noise (fanless) and heat signatures and we recommend that you test them in the room before deploying.
2. Route Ethernet cables from all table legs to wall jacks and terminate at a switch in your wiring closet. This option maintains the physical security of your network (since the switch can remain in a secure wiring closet) and keeps additional ambient noise out of the TelePresence room, but it requires quite a bit of cable routing.
3. In a worst case scenario, you may choose to simply not connect the Ethernet ports on the 2nd row tables and not offer Ethernet connectivity for participants in the 2nd row.

**Q. What are the bandwidth requirements for the Cisco TelePresence 3200?**

**A.** Because the camera and video systems on the primary codec are essentially the same as those used by the Cisco TelePresence 3000, the Cisco TelePresence 3200 system requires the same amount of bandwidth as a 3000 system. We recommend 15.3 Mbps of bandwidth for full 1080p resolution and best motion handling.

**Q. What are the room remediation requirements for a Cisco TelePresence 3200?**

**A.** The room for the Cisco TelePresence 3200 will need to be remediated to meet CTX certification standards to ensure a high-quality Telepresence experience. The actual CTX specifications for ambient noise levels and lighting are very similar to those for the 3000 system, but include additional recommendations and guidance about how to meet these specifications. These recommendations include types of ceiling lights and acoustic wall treatments. The room will also need additional power circuits to support the laptop power outlets in the second row, and additional air conditioning to support the additional people.

**Q. What about chairs?**

**A.** Cisco does not provide chairs for Cisco TelePresence endpoints. For the Cisco TelePresence 3200 room, we strongly recommend that you choose chairs for the back row that are less than or equal to 23 inches wide. This size provides sufficient room to move chairs between the table legs in the second-row tables.

**Q. What software version do I need on the Cisco TelePresence 3200?**

**A.** The Cisco TelePresence 3200 requires software Version 1.4 or later on the Cisco TelePresence codec.

**Q. With what versions of other Cisco products is the Cisco TelePresence 3200 compatible?**

**A.** The Cisco TelePresence 3200 is compatible with the following product versions:

- Cisco TelePresence 1000, software version 1.2 or later
- Cisco TelePresence 3000, software version 1.2 or later
- Cisco Unified Communications Manager 6.0 or later
- Cisco TelePresence Multipoint Switch (CTMS) 1.0
- Cisco TelePresence Manager (CTS-MAN) 1.4 or later

**More Information**

For more information, please visit: <http://www.cisco.com/go/telepresence>.



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