

Cisco TelePresence Server



Product Overview

The Cisco TelePresence® Server is an innovative software solution enabling high-quality standards-based conferencing for the mobile or desktop user and the immersive room meeting participant. Compatible with a range of hardware platforms, the Cisco TelePresence Server is a versatile, highly scalable solution, with flexible licensing options, for midmarket and larger enterprise customers.

The Cisco TelePresence Server is a key component of the Cisco® Pervasive Conferencing architecture, and is deployed with Cisco TelePresence Conductor in order to provide full flexibility and scale. It provides high-quality, flexible, 360p to full high-definition (FullHD) multiparty conferencing and collaboration. Specifically engineered to deliver the best user experience for any device, the Cisco TelePresence Server provides predictable, reliable, high-quality video and content-sharing capabilities.

With views optimized for meeting rooms and desktop and mobile devices using the Cisco Jabber™ messaging integration platform, the Cisco TelePresence Server delivers any-to-any multiparty conferencing.

The Cisco ActivePresence® capability of Cisco TelePresence Server, a leading patent-pending feature, enables the delivery of next-generation multiparty conferencing, offering a view of all attendees in a meeting while giving prominence to the active speaker. While the active speaker occupies most of the screen, an overlay of others in the call appears in the lower third of the screen, giving participants a natural view of everyone sitting around the virtual table (Figure 1).

Cisco TelePresence Server in conjunction with WebEx® enabled TelePresence, allows more participants to join meetings by extending meetings to TelePresence and WebEx users.

Flexible licensing options are offered to enable you to deploy Pervasive Conferencing capabilities in the way that best suits your needs. Cisco TelePresence Server can be licensed in conjunction with Cisco TelePresence Conductor on a per-user basis for high quality small group ad-hoc conferencing, with Cisco Personal Multiparty licensing (visit Cisco.com/go/personalmultiparty), or on a concurrent call (screen) basis to enable the whole enterprise without restrictions. For further information about ordering and licensing, please refer to Table 7.

Figure 1. Examples of Cisco TelePresence Server Supported Modes



A critical requirement for all customers is ensuring a high return on investment (ROI). The Cisco TelePresence Server has a software upgrade path that enables you to deploy new features as required, and with a cost-effective licensing model, you can closely manage your investment while reaping the rewards of lower travel expenses and increased employee productivity.

Designed to meet the needs of organizations from small businesses to global multinationals, the Cisco TelePresence Server has a scalable architecture, enabling you to start small and increase the scale of your solutions as your business grows.

It is compatible with a range of hardware platforms, enabling you to select the solution most suited to your needs:

- The Cisco TelePresence Server on Virtual Machine, which runs on the Cisco Unified Computing System™ (Cisco UCS®) or third-party specification-based server platforms, offers a virtualized solution.
- The Cisco TelePresence Server on the Cisco TelePresence Server on Multiparty Media 310 and Multiparty Media 320 entry-level appliance solutions can be stacked to grow with your business video usage over the long term.
- The Cisco TelePresence Server on MSE 8710 (Cisco MSE 8710) is a chassis-based platform that is ideal for large enterprises and service providers requiring a high-availability and highly scalable solution. Scalability is achieved through clustering up to four Cisco MSE 8710 blades as a single unit.
- The Cisco TelePresence Server can also run on the Cisco MSE 8510 and Cisco TelePresence MCU 5300 (MCU 5300) platforms.

Benefits of Cisco TelePresence Server

- WebEx Enabled TelePresence allows you to join a conference from WebEx or telepresence endpoints, enabling highly scalable conferencing from any location using any device.
- Cisco TelePresence Server works in conjunction with Cisco TelePresence Conductor, providing scalable ad hoc conferencing and enabling increased efficiency.
 - Dynamic optimization: Make full use of the conferencing capacity of Cisco TelePresence Server through the dynamic allocation of resources.
 - Conference service levels range from 360p video with composited content through to FullHD video with FullHD content.
 - Mixed conference types (ad hoc and rendezvous) and mixed resolutions (360p to FullHD) are supported.
- Improved productivity: All users enjoy a high-quality experience, accessible from mobile devices running the Jabber® application through to desktop or immersive systems. Thus remote and home workers can collaborate more effectively and decrease travel costs.

- Best-in-class experience for the user device: Highly scalable conferencing is available to users with mobile, meeting room, or immersive endpoints.
- Maximized reach: Optimized views and standards-based interoperability allow any-to-any conferencing, helping ensure conferences are effective and support a wide range of participant endpoints.

Features

Table 1 lists the features of Cisco TelePresence Server.

Table 1. Cisco TelePresence Server Features

Feature	Description
Design features	<ul style="list-style-type: none"> • The server is standards-based and compatible with major vendors' videoconferencing endpoints. • It is highly scalable to meet current and future organizational needs. • It provides participants with the best possible view for their endpoint. • The server provides an easy-to-use and versatile management interface. • It is designed to carrier-class levels of reliability and availability. • The server is compatible with a range of dedicated hardware platforms or Cisco UCS servers.
Application features	<ul style="list-style-type: none"> • Cisco TelePresence ActivePresence capability supports a full-screen immersive view of the primary speakers with an overlay of others in the call; it is designed to maximize the large-scale immersive experience and is available on all ports. • Cisco TelePresence ActiveControl allows you to see the participant lists and control conferences and layouts. • It supports single and multiscreen standards-based telepresence systems. • The server interworks with Polycom RPX and TPX telepresence systems while preserving the full Cisco ActivePresence view (requires feature key). • It integrates with Cisco TelePresence Management Suite (Cisco TMS), Cisco TelePresence Conductor. • The Cisco TelePresence Server on Cisco MSE 8710 or Cisco TelePresence Server 7010 can be locally managed or remotely managed (by Cisco TelePresence Conductor). All other versions can be run only in remotely managed mode. • Four layout families are provided for single-screen endpoints including panel-switched Cisco ActivePresence capability. • Participants can dial in or can be called from the web interface.
Performance features	<ul style="list-style-type: none"> • Automatic Gain Control (AGC) is supported to adjust audio controls to help ensure a consistent experience. • Cisco ClearPath is supported, providing improved media resilience with lossy networks. • Up to FullHD transcoding for both video and content is supported for every participant. • Cisco TelePresence Universal Port technology is supported. • Video resolutions of 360p to FullHD are supported (up to 1080p30 or 720p60 frames per second [fps] at up to 6 Mbps per screen including content with H.264). • Comprehensive HD audio is supported. • Additional wideband audio ports are available. • Advanced Encryption Standard (AES) encryption is supported. • Integrated Cisco TelePresence ClearVision technology provides resolution enhancement. • OneTable and Room-Switched configurations are supported.

Product Specifications

Tables 2 through 4 list the technical; video, network, and audio; and network, management, and security specifications, respectively, of Cisco TelePresence Server.

Table 2. Technical Specifications

Feature	Description
Product compatibility	<ul style="list-style-type: none"> • The server is standards-based and compatible with major vendors' endpoints.
Universal transcoding and transrating	<ul style="list-style-type: none"> • The server can combine immersive, HD, standard-definition (SD), and 360p endpoints within the same virtual meeting. • The server provides automatic audio and video transcoding along with transrating on all calls. • Each endpoint has its own decode and encode.

Feature	Description
Content features	<ul style="list-style-type: none"> • Automatic content handover is supported. • The Cisco TelePresence Server supports standard (4:3) and widescreen (16:9) content. • Dual video is supported with H.239, Binary Floor Control Protocol (BFCP), or Auto Collaborate. • Picture in Picture: Video and content are composed into the video stream. • Participants can have their own content transcoded at up to 1080p30 or WUXGA (1920 x 1200) @ 27 fps.
Language support	<ul style="list-style-type: none"> • English is the standard language.

Table 3. Video, Network, and Audio Specifications

Bandwidth	<ul style="list-style-type: none"> • Up to 6 Mbps with both H.263 and H.264, for each screen in all conference modes
Video standards	<ul style="list-style-type: none"> • H.261 • H.263 • H.263+ • H.263++ • H.264
Video resolution	<ul style="list-style-type: none"> • From QCIF up to 1080p (1920 x 1080) including interlaced iCIF and iSIF • Aspect ratios: 4:3 and 16:9
Frame rates	<ul style="list-style-type: none"> • Up to 60 fps
Audio standards	<ul style="list-style-type: none"> • G.711 • G.722 • G.722.1 • G.723.1[*] (supported only on Cisco MSE 8710 and Cisco TelePresence Server 7010 platforms) • G.728 • G.729 • MPEG-4 AAC-LC • MPEG-4 AAC-LD • Polycom Siren14/G.722.1 Annex C
Audio features	<ul style="list-style-type: none"> • Wideband audio mixing • Ability to adjust endpoint audio gain through web interface

Table 4. Network, Management, and Security Specifications

Protocols	<ul style="list-style-type: none"> • H.323[*] • BFCP • Network Time Protocol (NTP) • Session Initiation Protocol (SIP) • Telepresence Interoperability Protocol Version 8 (TIPv8) • H.235 (AES)[*] • H.239 (dual video)[*] • FTP[*] • Real-Time Transfer Protocol (RTP) • HTTP • Secure HTTP (HTTPS) • Dynamic Host Configuration Protocol (DHCP) (supported only on Cisco MSE 8710, Multiparty Media 310 and 320, and Cisco TelePresence Server 7010 platforms) <p>[*] Supported only on Cisco MSE 8710 and Cisco TelePresence Server 7010 platforms</p>
Security features	<ul style="list-style-type: none"> • Personal Identification Number (PIN)-protected conferences • Conference locking • Secure non-PC hardware and operating system • Transport Layer Security (TLS) • Secure Real-Time Transport Protocol (SRTP) • AES encryption, 128-bit key, and H.235 (H.235 only on Cisco MSE 8710 and Cisco TelePresence Server 7010 platforms)

System management	<ul style="list-style-type: none"> • An XML management application programming interface (API) is available. • Cisco TelePresence Server 7010 and 8710 models can be managed through an embedded web server or remotely using Cisco TelePresence Conductor. All other platforms can be managed only remotely, using Cisco TelePresence Conductor.¹ • The server offers full H.323* (supported directly on Cisco MSE 8710 and Cisco TelePresence Server 7010 platforms; other Cisco TelePresence Server platforms require Cisco TelePresence Video Communication Server [Cisco VCS] to interwork H.323) and SIP decoding, which is supported on all platforms. • The server offers configurable event logs. • The server offers configuration backup to network. • The server offers the ability to perform secure upgrades through Ethernet.
Quality of service (QoS)	<ul style="list-style-type: none"> • The server provides configurable differentiated-services-code-point (DSCP) or type-of-service (ToS)/IP Precedence.
Network resilience	<ul style="list-style-type: none"> • Cisco TelePresence PacketSafe technology provides intelligent downspeeding, packet pacing, and packet-loss concealment to help ensure optimum video and audio quality. • The server supports dynamic jitter buffering.

Table 5 gives physical specifications of Cisco TelePresence Server platforms.

Table 5. Physical Specifications of Cisco TelePresence Server Platforms

	Cisco TelePresence MSE 8710
Physical dimensions	<ul style="list-style-type: none"> • (H x W x D): 33.25 x 17.2 x 20.5 in. (842 x 437 x 520 mm) (19 rack units [19RUs]) • 19-inch rack-mountable (kit supplied)
Weight	<ul style="list-style-type: none"> • 14.6 lb (6.6 kg)
Power	<ul style="list-style-type: none"> • Power: -8 VDC • 100-40 VAC, 50-60 Hz
Environmental data	<ul style="list-style-type: none"> • Ambient operating temperature: 32 to 95°F (0 to 35° C) • Relative humidity: Below 95% (noncondensing)
Approvals and compliance	<ul style="list-style-type: none"> • European safety: EN 60950-1 • USA/Canada Safety: UL 60950-1 • CB Scheme Safety, IEC 60950-1 • EMC: EN55022 class A, EN61000-3-2, EN61000-3-3, EN55024, EN61000-4-2,-3,-4,-5,-6,-11, FCC Part 15 Class A, VCCI Class A, AS/NZS CISPR 22, CCC: GB4943, GB9254, YD/T993EN61000-3-3, EN55024: EN61000-4-2,-3,-4,-5,-6,-11 • RoHS compliant, WEEE: http://cisco-returns.com

	Cisco Multiparty Media 310 and Cisco Multiparty Media 320
Physical dimensions	<ul style="list-style-type: none"> • (H x W x D): 1.75 x 17.4 x 16.7 in. (44.5 x 442 x 423 mm) (1RU) • 19-in. rack-mountable (kit supplied) or standalone
Weight	<ul style="list-style-type: none"> • 17.6 lb (8 kg)
Power	<ul style="list-style-type: none"> • 100-40 VAC, 50-60 Hz • 1177 BTU/hr (345W) maximum heat dissipation
Environmental data	<ul style="list-style-type: none"> • Ambient operating temperature: 32 to 95°F (0 to 35° C) ambient • Relative humidity below 95% (noncondensing)
Approvals and compliance	<ul style="list-style-type: none"> • European Safety: EN 60950-1 • USA/Canada Safety: UL 60950-1 • CB Scheme Safety: IEC 60950-1 • EMC: EN55022 class A, EN61000-3-2, EN61000-3-3, EN55024, EN61000-4-2,-3,-4,-5,-6,-11, FCC Part 15 Class A, VCCI Class A, AS/NZS CISPR 22, CCC: GB4943, GB9254, YD/T993 • RoHS compliant, WEEE: http://cisco-returns.com • Regulatory Approval Certification completed under Compliance Model Number: AD1A

¹ Cisco TelePresence Server on the Media 310, Media 320, and Cisco TelePresence Server on Virtual Machine support only remotely managed mode, which requires an additional external application such as the Cisco TelePresence Conductor.

	Cisco TelePresence Server 7010
Chassis physical dimensions (H x W x D)	<ul style="list-style-type: none"> • (H x W x D): 3.43 x 17.25 x 19.1 in. (87 x 436 x 511 mm) (2RU) • 19-in. rack-mountable (kit supplied) or standalone
Weight	<ul style="list-style-type: none"> • 33 lb (15kg)
Power	<ul style="list-style-type: none"> • 100-40 VAC, 50/60 Hz; maximum power consumption 650W
Environmental data	<ul style="list-style-type: none"> • Ambient operating temperature: 32 to 95°F (0 to 35° C) • Relative humidity: Below 95% (noncondensing)
Approvals and compliance	<ul style="list-style-type: none"> • European safety: EN 60950-1 • USA/Canada safety: UL 60950-1 • CB Scheme Safety, IEC 60950-1 • EMC: EN55022 class A, EN61000-3-2, EN61000-3-3, EN55024, EN61000-4-2,-3,-4,-5,-6,-11, FCC Part 15 Class A, VCCI Class A, AS/NZS CISPR 22, CCC: GB4943, GB9254, YD/T993 • RoHS compliant, WEEE: http://cisco-returns.com • Regulatory Approval Certification completed under Compliance Model Number: TR1A

Figure 2 shows a graphic of the Cisco TelePresence Server interoperability solution.

Figure 2. Cisco TelePresence Server Interoperability

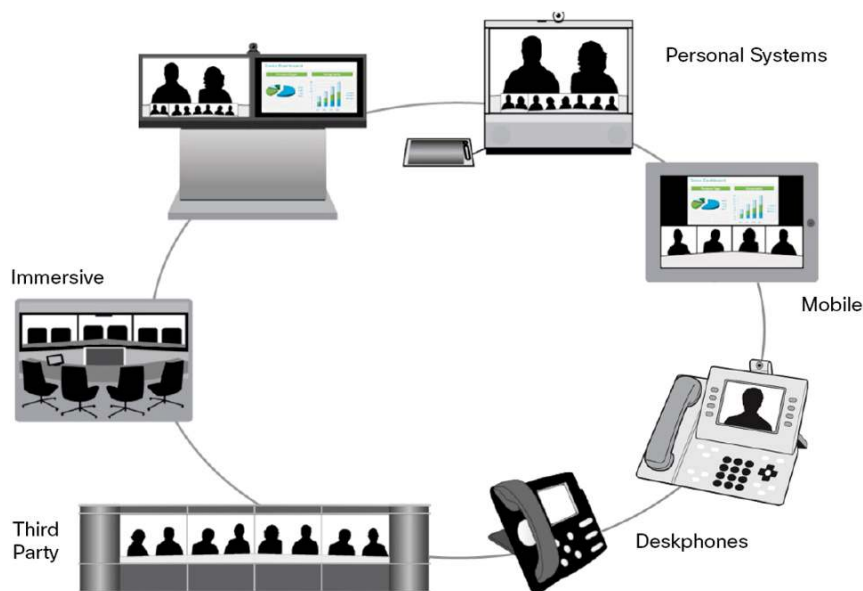


Table 6 gives the scale parameters of Cisco TelePresence Server.

Table 6. Cisco TelePresence Server Platform Scale

Platform	Scale Parameters
Cisco TelePresence Server MSE 8710	<ul style="list-style-type: none"> • The Cisco TelePresence Server on the Cisco MSE 8710 supports up to 48 FullHD (1080p30) or 96 HD (720p30) screens per conference when four blades are clustered. • In locally managed mode the maximum capacity is achieved with 12 screen licenses per blade, giving 12 x FullHD (1080p30) or 24 x HD (720p30) screens. • In remotely managed mode the maximum capacity per blade is still achieved with 12 screen licenses giving 12 x FullHD or 24 x HD or 48 x SD (w448p/480p30) or 97 x 360p resources, although the resources can be used more flexibly; please refer to Table 9 for further details. • Up to 104 calls are supported in one cluster of blades.

Platform	Scale Parameters
Cisco Multiparty Media 310	<ul style="list-style-type: none"> The Cisco TelePresence Server on the Media 310 supports up to 5 x FullHD (1080p30) or 10 x HD (720p30), or 20 x SD, or 41 x 360p screens per unit, although the resources can be used more flexibly; please refer to Table 9 for further details. Maximum capacity is achieved with five screen licenses per unit. Up to two units of the Media 310/320 can be stacked together to increase capacity (optional stacking cable is required). Up to 104 calls are supported in a stack of 2 appliances.
Cisco Multiparty Media 320	<ul style="list-style-type: none"> The Cisco TelePresence Server on the Media 320 supports up to 10 x Full HD (1080p30) or 20 x HD (720p30), or 40 x SD, or 81 x 360p screens per unit, although the resources can be used more flexibly; please refer to Table 9 for further details. Maximum capacity is achieved with 10 screen licenses per unit. Up to two units of the Media 310/320 can be stacked together to increase capacity (optional stacking cable is required). Maximum capacity of two Media 320 platforms is 20 x FullHD screen licenses. Up to 104 calls are supported in a stack of 2 appliances.
Cisco TelePresence Server 7010	<ul style="list-style-type: none"> The Cisco TelePresence Server 7010 supports up to 12 x FullHD (1080p30), 24 x HD (720p30), 48 x SD, or 97 x 360p screens per appliance. In locally managed mode the maximum capacity is achieved with 12 screen licenses per appliance, giving 12 x FullHD (1080p30) or 24 x HD (720p30) screens. In remotely managed mode the maximum capacity per appliance is still achieved with 12 screen licenses giving 12 x FullHD or 24 x HD or 48 x SD (w448p/480p30) or 97 x 360p resources, although the resources can be used more flexibly; please refer to Table 9 for further details.
Cisco UCS platform	<ul style="list-style-type: none"> The Cisco TelePresence Server on Virtual Machine can run on a Cisco UCS C-Series Server or on other specifications-based hardware. A 10-core Virtual Machine supports up to 6 x FullHD, 12 x HD, 24 x SD, or 48 x 360p screens, although the resources can be used more flexibly; please refer to Table 9 for further details. Maximum capacity is achieved with 6 screen licenses per Virtual Machine. An 8-core Virtual Machine supports up to 4 x FullHD, 8 x HD, 16 x SD, or 32 x 360p screens, although the resources can be used more flexibly; please refer to Table 9 for further details. Maximum capacity is achieved with 4 screen licenses per Virtual Machine.

Note: Capacity figures represent capabilities of Cisco TelePresence Server 3.1 when used with Cisco TelePresence Conductor.

Ordering Information

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

Table 7. Ordering Information

Cisco TelePresence Server	Part Number
Cisco TelePresence Server software for UCS and standard based server based platforms*	R-VTS-K9
Cisco TelePresence Server running on MSE 8710	CTI-8710-TS-K9
Cisco TelePresence Server running on Cisco Multiparty Media 310	CTI-310-TS-K9
Cisco TelePresence Server running on Cisco Multiparty Media 320	CTI-320-TS-K9
Cisco TelePresence Server running on TS 7010	CTI-7010-TPSMK2-K9

* Cisco TelePresence Server software (R-VTS-K9) requires UCS or standard based server based platforms, for information on tested/recommended hardware, please see Cisco Virtualization http://www.cisco.com/en/US/docs/telepresence/infrastructure/ts/install_guide/vts_install.pdf.

Cisco TelePresence Server bundles with Cisco TelePresence Conductor:

	Organization Profile	Cisco TelePresence Server Configuration	PID
Bundle 1	Up to 5,000 HD users	MSE 8000 Chassis with <ul style="list-style-type: none"> 8* 8710 blades 96 screen licenses 	CTI-8710-8BFLIC-K9
Bundle 2	Up to 2,500 HD users	MSE 8000 Chassis with <ul style="list-style-type: none"> 4* 8710 blades 	CTI-8710-4BFLIC-K9

	Organization Profile	Cisco TelePresence Server Configuration	PID
Bundle 3	Up to 500 HD users	<ul style="list-style-type: none"> • 48 screen licenses TS 7010 Appliance <ul style="list-style-type: none"> • 12 screen licenses 	CTI-7010-FLIC-K9
Upgrade from Bundle 2 to Bundle 1		<ul style="list-style-type: none"> • 4* 8710 blades • 48 screen licenses 	CTI-8710-4BUPFL-K9

Configuration Options for Cisco TelePresence MSE 8710	Part Number
Cisco TelePresence Server MSE 8710 Screen License-initial purchase	LIC-8710-1SL
Cisco TelePresence Server MSE 8710 3 rd Party multi-screen interop key-initial purchase	LIC-8710-TPI
For upgrades after the initial purchase, Start with L-8000-BLADE-PAK in order to view the options listed below:	
Cisco TelePresence Server MSE 8710 3 rd Party multi-screen interop key-upgrade	L-8710-TPI
For upgrades after the initial purchase, Start with L-8000-CHLIC-PAK in order to view the options listed below:	
Cisco TelePresence Server MSE 8710 Screen License-upgrade	L-8710-1SL
Cisco TelePresence Screen Migration Option to run TelePresence Server software on MSE8510 platform	L-8000_TSMO

Configuration Options for Cisco TelePresence Server on Virtual Machine	Part Number
Cisco TelePresence Server 3 rd Party multi-screen interop key-initial purchase	LIC-VTS-TSINTOP
Cisco TelePresence Server Screen License-initial purchase	LIC-VTS-1SL
For upgrades after the initial purchase start with L-VTS-UPG-PAK in order to view the options listed below:	
Cisco TelePresence Server Screen License-upgrade	L-VTS-1SL
Cisco TelePresence Server 3 rd Party multi-screen interop key-upgrade	L-VTS-TSINTOP

Configuration Options for Cisco Multiparty Media 310 and 320	Part Number
Cisco Multiparty Media Screen License	LIC-300-1SL
Cisco TelePresence Server 3 rd Party multi-screen interop key	LIC-300-TPI
Cisco TelePresence MCU 5300 Series Stacking Cable	CTI-5300-CAB2MCU
Start with L-TS300-UPG-PAK in order to obtain post sales upgrades for the options listed below:	
Cisco Multiparty Media Screen License-upgrade	L-300-1SL
Cisco TelePresence Server 3 rd Party multi-screen interop key-upgrade	L-300-TPI
Cisco TelePresence MCU 5300 Series 1RU accessory kit spare. Comes with: spare DB9-RJ45 serial cable, rack mount ears and screws	CTI-KM1U-ACC-KIT=
Cisco TelePresence MCU 5300 Series Stacking Cable spare	CTI-5300-CAB2MCU =

Configuration Options for Cisco TelePresence Server TS 7010	Part Number
Cisco TelePresence Server TS 7010 Screen License	LIC-TPSRV-1SL
Cisco TelePresence Server TS 7010 3 rd Party Multi-Screen Interop Key	LIC-7010-TPSINTOP
Start with L-TS7000-UPG-PAK to view the options below:	
Cisco TelePresence Server TS 7010 Screen License-post sales upgrade	L-TPSRV-1SL
Cisco TelePresence Server TS 7010 3 rd Party Multi-Screen Interop Key-post sales upgrade	L-7010-TPSINTOP

- Note that Cisco TelePresence Server can also be ordered within the Cisco Personal Multiparty offering. Please refer to <http://www.cisco.com/go/personalmultiparty> for full ordering information.

Table 8. Personal Multiparty Ordering Information

Item	Part Number
Unified Workspace Licensing - Top Level for PRO - 9.x or later	CUWL-PRO-K9
Personal Multiparty Video for MSE8000 Platform	LIC-PM-8X-USR-UWL
Personal Multiparty Video for 300 Platform	LIC-PM-3X-USR-UWL
Personal Multiparty Video for Virtual Machine	LIC-PM-V-USR-UWL

Table 9 lists the maximum number of calls supported for each Cisco TelePresence Server hardware platform.

Table 9. TelePresence Server Conferencing Capacity on Various Platforms

Call Type Description			Screen Licenses Required Per Call	Maximum Calls by Hardware Type (with Licenses to Provide 100% of Capacity)							
Main Video	Audio	Content		8 core Virtual Machine	10 core Virtual Machine	Media 310 or MCU 5310	Media 320 or MCU 5320	7010	MSE 8710 or MCU MSE 8510	Biggest Appliance Cluster (Two Appliances)	Biggest Blade Cluster (Four Blades)
				4 Screen Licenses	6 Screen Licenses	5 Screen Licenses	10 Screen Licenses	12 Screen Licenses	12 Screen Licenses	20 Screen Licenses	48 Screen Licenses
-	Mono	-	1/52	104*	104*	104*	104*	104*	104*	104*	104*
360p30†	Mono	In main video	1/52	32	48	41	81	97	97	104*	104*
480p30	Mono	In main video	1/52	16	24	20	40	48	48	80	104*
480p30	Stereo	720p5	1/52	12	18	15	30	36	36	60	104*
720p30	Stereo	720p5	1/52	8	12	10	20	24	24	40	96
720p30	Stereo	720p30	1	4	6	5	10	12	12	20	48
1080p30	Stereo	720p15	1	4	6	5	10	12	12	20	48
720p60	Stereo	720p15	1	4	6	5	10	12	12	20	48
1080p30	Stereo	720p30	1 1/2	2	4	3	6	8	8	12	32
Three-screen† 720p30	Multichannel	720p5	1 1/2	2	4	3	6	8	8	13	32
Three-screen† 720p30	Multichannel	720p30	2	2	3	2	5	6	6	10	24
1080p30	Stereo	1080p30	2	2	3	2	4	6	6	8	24
Dual-screen† 1080p30	Stereo	720p30	2	2	3	2	4	6	6	8	24
Three-screen† 1080p	Multichannel	720p30	3	1	2	1	2	4	4	4	16
Three-screen† 1080p	Multichannel	1080p30	4	1	1	1	2	3	3	4	12
Four-screen† 1080p	Stereo	1080p30	4	1	1	1	2	3	3	4	12

* 104 is the maximum number of calls that is possible on a TelePresence Server.

[‡] The TelePresence Server needs the Third Party Interop feature key to host conferences with multi-screen endpoints that are not third party interoperable. This includes all multi-screen endpoints except the Cisco TelePresence System T3 and TIP-compatible endpoints.

[†] Requires TelePresence Conductor.

Note: The table above assumes that calls of one type are being used to reach these maximum values. To calculate the total number of licenses required for a variety of concurrent calls, sum the screen licenses required for each concurrent call.

Service and Support

Cisco offers a wide range of services programs to accelerate customer success. These innovative services programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco Services help you to protect your network investment, optimize network operations, and prepare your network for new applications to extend network intelligence and the power of your business. For more information about Cisco Services, visit [Cisco Technical Support Services](#) or [Cisco TelePresence Services](#) online.

For More Information

For more information about the Cisco TelePresence Server, please visit the [Cisco TelePresence Server](#) product page or contact your local Cisco account representative or authorized Cisco partner. Product specifications are estimates and subject to change without notice.



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