Polycom® RealPresence® Collaboration Server

Universal video collaboration at the highest quality for the lowest cost

From your CEO to the intern, people use video collaboration to share the next great idea from wherever they are at anytime. The rise of the video-enabled workforce creates a need for a dynamic, scalable and reliable platform, a platform that is interoperable with your existing and future collaboration investments. Polycom® RealPresence® Collaboration Server platforms meet these needs, connecting the most people with the highest quality.

Reduce cost and complexity through innovative design
The unique, innovative architecture of Polycom Collaboration Servers reduces costs and complexity. Only Polycom RealPresence Collaboration Server provides support for AVC and SVC protocols without expensive gateways, extra boxes or added risk. With Polycom RealPresence Collaboration Servers, dynamic resource allocation provides the right amount of resources per AVC call to reduce costs by eliminating wasted HD resources.

Protect your investments and prepare for the future
Polycom RealPresence Collaboration Server breaks down barriers to video collaboration with broad support for existing and emerging standards, protocols, applications, devices and interoperability between unified communications (UC) environments. Only Polycom RealPresence Collaboration Server platform solutions provide native integration with leading UC applications and support for IP, H.323/SIP, PSTN and ISDN, AVC and SVC, all within a single conference platform.

Transform your office into a high-performance workplace
RealPresence Collaboration Server helps thousands of companies get business done faster no matter where their people are. Simple as clicking a link from a calendar or social business application or making a phone call, organizations can connect face-to-face over video intuitively. Customizable virtual meeting rooms become the new boundaryless conference rooms, used securely and easily by individuals and set up in minutes by IT to match existing phone extensions—“let’s meet at my number” will become the new norm. Organizations can see, hear and share with crystaline clarity through RealPresence Collaboration Server innovative technology including Lost Packet Recovery for high-definition visuals even over the public internet and Polycom NoiseBlock audio technology eliminates unwanted background noise. For IT, RealPresence Collaboration Server software provides flexibility and control to administrators through user profiles. Its straightforward administrator interface helps enable consistent, in-person communication experiences without cumbersome technology, speeding the rate of video collaboration adoption and increasing productivity.

Benefits
- **Lowest TCO**—Achieved through highest port density, enhanced bandwidth utilization, integrated multi-protocol support without need for expensive external gateways that add cost and complexity
- **Integration with leading UC platforms**—Deep integration with leading UC vendors provides seamless workflows and user experience for video, audio and content collaboration
- **Highest resiliency**—Hot swap of media cards, network interface fail-over, and full system level redundancy when integrated with RealPresence DMA
- **Enterprise quality collaboration**—Experience life-like collaboration through 1080p60 video, Polycom® NoiseBlock™, Polycom® Lost Packet Recovery™ (LPR™), video and audio upscaling, and Polycom® UltimateHD™ technologies
- **Universal collaboration**—Remove barriers to interoperability with broad support for existing and emerging standards, leading UC applications, protocols and devices for seamless worldwide collaboration
### Polycom RealPresence Collaboration Server

<table>
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<tr>
<th>Model</th>
<th>Description</th>
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| **Polycom RealPresence Collaboration Server 1800** | - Operating temperature: 50–95°F (10–35°C)  
- Storage temperature: -40–158°F (-40–70°C)  
- Relative humidity: 20–90% (non-condensing)  
- Physical (H x W x D): 17.36 x 2 x 19.13 in (44.1 x 8.9 x 48.59 cm)  
- Weight: Up to 31.97 lbs (14.5 kg)  
- Power supply: AC Input/Range, BTU Voltage: 100-240 VAC 50–60 Hz.  
- Current: 10–3.5 AMP  
- Maximum power output: 740 watts  
- Power consumption: AC maximum 350 watts  
- Dynamic Resource Allocation supports up to:  
  - 25 HD 1080p60 endpoints in CP  
  - 50 HD 1080p30 endpoints in CP  
  - 100 HD 720p30 endpoints in CP  
  - 200 SD (4CIF) endpoints in CP  
  - 200 CIF endpoints in CP  
  - 300 SVC Only endpoints in CP  
  - 300 VoIP  
  - ISDN (Optional): 30 x ISDN/CIFp30 (256k)  
  - 120 x ISDN/audio (64k)  
  - Fixed Resource Capacity sets RealPresence Collaboration Server 1800 resources for constant capacity no matter what the call type  
  - Supports a single conference without cascading of up to 300 audio or 200 video participants  
  - Integration with Polycom DMA support up to 25,000 concurrent calls and 75,000 active registrations in a supercluster mode, for high-scale, redundant conferencing  
- Maximum BTU output: 1,195 per hour  
- Operating altitude: Up to 656 ft (2 km)  
- Operating ESD: 4 KV  
- Transit/Storage Sea level and up to 50,000 ft (15 km) |
| **Polycom RealPresence Collaboration Server 2000** | - Operating temperature: 5.22” H x 19” W x 15” D, 3U (13.28 x 48.26 x 40 cm)  
- Weight: Up to 36.38 lbs (16.5 kg)  
- Two slot media processing modules (MPMRx cards)  
- Two slot application server (one for MCU management)  
- Power supply drawer  
- Fan drawer  
- Power: 100-240 VAC ±10%, 50-60 Hz; 800 W max power consumption  
- Advanced Telecom Computing Architecture (AdvancedTCA)  
- High bandwidth backplane for seamless connection between all cards  
- Dynamic Resource Allocation supports up to:  
  - 50 HD 1080p60 endpoints in CP  
  - 100 HD 1080p30 endpoints in CP  
  - 200 HD 720p endpoints in CP  
  - 400 SD endpoints in CP  
  - 400 CIF (H264) endpoints in CP  
  - 600 SVC endpoints in CP  
  - 600 VOIP  
  - 100 x ISDN/CIFp30 (256k)  
  - 400 x ISDN/audio (64k)  
  - Fixed Resource Capacity sets RealPresence Collaboration Server 2000 resources for constant capacity no matter what the call type  
  - Supports a single conference without cascading of up to 600 audio or 200 video participants  
  - Integration with Polycom DMA support up to 25,000 concurrent calls and 75,000 active registrations in a supercluster mode, for high-scale, redundant conferencing  
- Maximum BTU output: 2,390 per hour  
- Operating altitude: Up to 656 ft (2 km)  
- Operating ESD: 4 KV  
- Transit/Storage Sea level and up to 50,000 ft (15 km) |
| **Polycom RealPresence Collaboration Server 4000** | - Operating temperature: 10.5” H x 19” W x 15.74” D, 6U (26.56 x 48.26 x 40 cm)  
- Weight: Up to 88 lbs (40 kg)  
- Four slot media processing modules (MPMRx cards)  
- Two slot application server (one for MCU management)  
- Configurable power entry setup: AC or DC  
- AC option: Three AC power supplies with three power cords (at least one redundant and hot swappable)  
- DC option: Two DC inputs (main and battery)  
- DC Power: Voltage range: -40.5–60 V DC SELV, with circuit breaker  
- Power: 1400 W max power consumption AC and DC  
- High bandwidth backplane for seamless connection between all cards  
- Fan drawer  
- Advanced Telecom Computing Architecture (AdvancedTCA)  
- Dynamic Resource Allocation supports up to:  
  - 100HD 1080p60 endpoints in CP  
  - 200 HD 1080p30 endpoints in CP  
  - 400 HD 720p endpoints in CP  
  - 800 SD endpoints in CP  
  - 800 CIF (H264) endpoints in CP  
  - 1200 SVC endpoints in CP  
  - 1200 VOIP  
  - 100 x ISDN/CIFp30 (256k)  
  - 400 x ISDN/audio (64k)  
  - Fixed Resource Capacity sets RealPresence Collaboration Server 4000 resources for constant capacity no matter what the call type  
  - Supports a single conference without cascading of up to 1200 audio or 200 video participants  
  - Integration with Polycom DMA support up to 25,000 concurrent calls and 75,000 active registrations in a supercluster mode, for high-scale, redundant conferencing  
- Maximum BTU output: 5,120 per hour  
- Operating altitude: 1,200 ft (260 m)  
- Transit/Storage Sea level and up to 6,562 ft (2000 m)  
- Transit/Storage Sea level and up to 50,000 ft (15 km) |
Product specifications

Video support
• Native Microsoft RTV support
• Native Telepresence Interoperability Protocol (TIP) support
• Native IBM® Sametime® integration via Polycom RealPresence Collaboration Server conference add-in for IBM Sametime
• H.261, H.263 (H.263++), H.264, H.264 High Profile (AVC & SVC)
• Up to 60 frames per second
• From QCIF to HD1080p including wide range of intermediate resolutions
• Up to HD1080p 60 fps and 720p 60fps in continuous presence (CP) transcoding
• 16:9 and 4:3 aspect ratio
• H.239 and RDP (Microsoft) content sharing resolution (H.263/H.264): VGA, SVGA, XGA 1080p and 720p
• Polycom® People+Content™ technology

Audio support
• G.711a/u, G.722, G.722.1C, G.722.1, G.723.1, Add G.719 G.729A, and Polycom® Siren™ 14 and Siren 22 (in mono or stereo)
• IVR prompts for auto attendance
• User and managed mute control
• DTMF support
• Echo and keyboard noise suppression
• Audio clarity to sharpen and upscale audio

Management tools
• RealPresence Collaboration Server Manager offers Web-based and application-based access
• Multi-RealPresence Collaboration Server Manager—View up to 10 RealPresence Collaboration Server platforms
• Administrator, operator, chairperson, and auditor views
• Onboard Shelf management monitors and maintains hardware elements
• Complete XML API kit for 3rd party application integration
• Up to 4000 address book entries
• Address book quick search
• Scheduling options
• Operator conference
• Internal reservation calendar
• Move participant between conferences
• Conference templates to easily save layouts for recurring meetings
• External database access (LDAP/AD)
• SNMP V3.0 for external monitoring

Language support
• English, Simplified Chinese, Traditional Chinese, Japanese, Russian, German, Korean, Spanish, French, Italian, Portuguese, Norwegian
• Double Byte (Unicode) site names

Network support
• Network Separation (multiple IPs)
• ICE and SRTP Support—video and content
• IP H.323 (AVC)
• IP SIP (AVC and SVC)
• PSTN and VoIP voice
• ISDN (H.320)
• IPv4 and IPv6
• 10/100/1000 Mb interface
• 64 kbps to 6 Mbps conference data rates
• Up to 768 kbps for content
• Gateway calls
• Direct dial-in from any network
• AS-SIP

Transcoding
• Audio algorithms
• Video algorithms
• Networks
• Resolution
• Frames rates
• Bit rates
• Content Transcode for H.263 and H.264 on the same conference

IP QOS
• Polycom® Lost Packet Recovery® (LPR®) technology
• DiffServ
• IP Precedence
• Dynamic jitter buffer
• Voice and video error concealment

Security
• UC APL
• Separation of management and media networks
• AES media encryption (IP and ISDN)
• Transport layer security (SIP and ISDN)
• Support of Polycom LPR technology on both H.323 & SIP protocols
• Support standard H.264 High Profile
• Advanced Polycom Click&View™ visual layout tool
• Customized resolution configuration
• Customized HD welcome slides
• Layout background (skin) options
• Lecture and presentation mode
• Roll call
• Closed caption
• Message overlay
• Conference profiles
• Conference templates
• Far-end camera control (FECC) H.224/H.281, H.323 annex Q and SIP FECC
• Conference dial out and dial in
• Up to 2000 virtual meeting rooms
• Advanced IVR flow
• Multilingual and transparent site name options
• H.239 support over H.323 cascaded links (between any Polycom bridges)

Approval and compliance
• JITC
• RoHS compliant
• EMC: FCC 47CFR PART 15, VCCI, C-Tick, ICES-003, EN55022, EN55024, EN 61000-3-2, EN 61000-3-3, EN 300-386*
• Safety: NRTL(C/US) UL 60950-1 (TUV), IEC 60950-1(CB), EN 60950-1(CE), AS/ NZS 60950-1, CCC, GoST-R, KC
• Telco (ISDN): IDA TS ISDN-PRA, A-Tick AS/ACIF 5038, MII, KC, TIA-968-A, CS-03 Issue 9 Part VI, Ordinance No. 31, TBR-4, PTC 100, PTC 216, TRA, TEC, MOC, SIRIM, GEN001, IT001

Conferencing highlights
• Solution level integration with Polycom RealPresence components including RealPresence Connect for Microsoft Lync, Web Suite and Video Content Management applications
• Support for Immersive Telepresence Rooms with Telepresence Speaker Priority Layout
• Unified conferencing (voice, video and data)
• Up to 35 different conference layouts
• Personal and auto layout options
• Layout range 1 x 1 to 4 x 4
• Support of Polycom LPR technology on both H.323 & SIP protocols
• Support standard H.264 High Profile
• Advanced Polycom Click&View™ visual layout tool
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Native integration

- Integration with leading UC vendors, including Microsoft, IBM, Siemens, Avaya and Cisco
- Native Video experience with the Polycom RealConnect for Skype for Business solution
- Office 365 support via federation with on-premises
- See Release Notes posted on www.support.polycom.com for complete integration and interoperability information

Warranty

One (1) year limited hardware warranty: unit returned to Polycom factory within 30 days after receipt; 90-day software warranty: bug fixes/minor releases. Please contact your Polycom reseller or a Polycom sales representative for more details.

1. RealPresence Collaboration Server 4000 only.
2. Encryption is not available in all areas. Please contact your local Polycom representative for more information.
3. Please consult the product specific hardware guide and release notes for latest capacity information - found on the Polycom support site.

About Polycom

Polycom helps organizations unleash the power of human collaboration. More than 400,000 companies and institutions worldwide defy distance with video, voice and content solutions from Polycom. Polycom and its global partner ecosystem provide flexible collaboration solutions for any environment that deliver the best user experience and unmatched investment protection.

Learn more

For more information on Polycom RealPresence Collaboration Server, visit www.polycom.com/collaboration-server