



TECHNICAL SPECIFICATIONS

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# Polycom® RealPresence Immersive Studio™ Flex Technical Specifications



## Solution Components:

<b>Displays</b>	(3) 65" 4K UHD displays Aspect Ratio 16:9
<b>Codec</b>	(3) RealPresence® Group Series: (1) Group 700, (2) Group 500
<b>Cameras</b>	(3) HD EagleEye IV cameras (1080p60)
<b>Audio</b>	<ul style="list-style-type: none"> <li>(3) Polycom Digital Ceiling Microphone Arrays</li> <li>3-channel audio (5 speaker spatial audio + subwoofer)</li> <li>(1) SoundStructure C16 audio processor</li> </ul>
<b>Lighting</b>	Optional LED lighting fixtures (NA & EU only)
<b>Touch Control Interface</b>	10.1" Polycom® RealPresence Touch™
<b>Content Display</b>	<ul style="list-style-type: none"> <li>55" 1080p display above people displays</li> <li>Optional 70" Polycom Touch Display optimized for VisualBoard software</li> </ul>
<b>Design Elements</b>	Media Wall – includes system electronics and stand (can be ordered stand-alone) Wall façade (behind Media Wall) Main Table Back Wall (optional) Rear Table (optional)
<b>Chairs</b> (ordered separately)	6 15 with Rear Table

## Room Design Elements

RealPresence Immersive Studio Flex is available in a 6-seat or 15-seat configuration with three color options: walnut, apple, and white. The standard system configuration includes a free-standing media wall, wall façade and main table.



## Rear Wall Dimensions

	6-Seat	15-Seat
Rear Wall Height	7 ft 7¼ in	7 ft 7¼ in
	2.31 m	2.31 m
Rear Wall Width	19 ft 4¼ in	25 ft 9 5/8 in
	5.89 m	7.89 m
Rear Wall Depth	4 ft 1/8 in	4 ft 11 3/4 in
	1.22 m	1.51 m
Rear Wall Weight	275 lbs	374.5 lbs



### Seating flexibility to maximize room usage

Table geometry designed to support 6 participants in a call or up to 13 participants out of an immersive telepresence call

Optionally add an extra rear table to support an additional 9 participants



### Optional Optimized LED Lighting (for NA & EU only)

To further improve the video quality, this specially-designed lighting configuration optimizes participant illumination in a comfortable diffused manner, further enabling the immersive experience with matched near end and far end illumination. If you are providing your own lighting, Polycom recommends using a lighting designer and having the lighting professionally installed. Lighting specifications are included in the Room Preparation Guide.



### Optional Seating

Chairs are to be supplied by the customer or can be purchased through Polycom. The chairs Polycom offers to accompany RealPresence Immersive Studio Flex are:

- Herman Miller Eames Executive
- Steelcase Amia Task Chair

These chairs were chosen to complement the décor of the system in both style and size. It is recommended that chairs are the same size, color and shape to maintain cohesiveness of the suite.

For customers choosing to supply their own chairs, the dimensions must NOT exceed:

- Arm span: 24.5" [62.23 cm]
- Wheel base: 27" [68.58 cm]

### Media Wall Façade



### Wall façade for decorative purpose

Used for improved aesthetics. Included in standard configuration. Not included in Media Wall-only purchase.

## Minimum Room Dimensions

	Width	Depth	Height
Without Rear Wall	21 ft. (6.40 m)	15 ft. 3 in. (4.65 m)	8 ft. (2.44 m)
With Rear Wall	21 ft. 10 in. (6.65 m)	16 ft. 1 in. (4.90 m)	8 ft. (2.44 m)
With Rear Table	26 ft. 4 <sup>7</sup> / <sub>8</sub> in. (8.05 m)	21 ft. 3 in. (6.48 m)	8 ft. (2.44 m)

## Interoperability

Video	Description
H.264 AVC, H.264 High Profile, RTV	Video codec- Baseline, High Profile (HiP)
H.263 & H.264	Video Error Concealment
H.239	Polycom People + Content
Binary Floor Control Protocol (BFCP)	Content sharing via SIP
LPR (Lost Packet Recovery)	Video Error Concealment to preserve video quality during packet loss events
AES Media Encryption	For secure video/audio and content
Audio	Description
G.719 (3-channel audio)	22kHz bandwidth
Siren™ 22	22kHz bandwidth with StereoSurround™
Siren™ LPR (Lost Packet Recovery)	Siren LPR preserves audio quality during high packet loss
G722.1 Annex C	14kHz bandwidth with Polycom Siren 14
G.722, G.722.1	7kHz bandwidth
G.711	3.4kHz bandwidth
Network Interoperability	

Dual Stack H.323/SIP	Allows for flexibility for UC environments with H.323 video based networks and the SIP call control platform
Native integration with Microsoft Skype for Business and Lync 2013	Unified communication platform (presence, IM, voice and video). RDP support for Skype for Business content receive.
TIP Support	Allows for interoperability with legacy Cisco telepresence

## Content

Display	<ul style="list-style-type: none"> <li>(1) 55" 1080p HD LCD w/LED backlight</li> </ul>
Display resolution	<ul style="list-style-type: none"> <li>People Displays – 1080p upscaled to 4K UHD</li> <li>Content Display: Full HD (1920x1080)</li> </ul>
Input Sources	<ul style="list-style-type: none"> <li>(1) Analog laptop interface - VGA with 3.5 mm audio connector (main table)</li> <li>(1) Digital laptop interface - HDMI with audio embedded (main table) (DisplayPort available with customer supplied adapter)</li> <li>Wireless: People+Content IP, Polycom® RealPresence® Desktop or Polycom® RealPresence® Mobile</li> </ul>
People/Content Swap	<ul style="list-style-type: none"> <li>Place content on the people displays, either one or all. Also supports moving people to content screen (55" display) while people display is used for content.</li> </ul>
Content Frame Rate	<ul style="list-style-type: none"> <li>5–60 fps (up to 1080p resolution at 60 fps)</li> </ul>
Content Input formats	<ul style="list-style-type: none"> <li>HD (1920 x 1080i)</li> <li>HD (1920 x 1080p)</li> <li>WSXGA+ (1680 x 1050)</li> <li>UXGA (1600 x 1200)</li> <li>SXGA (1280 x 1024)</li> <li>WXGA (1280 x 768)</li> <li>HD (1280 x 720p), XGA (1024 x 768)</li> <li>SVGA (800 x 600)</li> </ul>
Content Output formats	<ul style="list-style-type: none"> <li>HD (1920 x 1080)</li> <li>WSXGA+ (1680 x 1050)</li> <li>SXGA+ (1400 x 1050)</li> <li>SXGA (1280 x 1024)</li> <li>HD (1280 x 720)</li> <li>XGA (1024 x 768)</li> <li>VGA (640 x 480)</li> </ul>

## Directory and Management Support

Local Directory	Configure local directory for sites without RealPresence® Resource Manager directory integration or for situations where entry on the RealPresence Resource Manager directory is not utilized. Create up to 2,000 contacts in Favorites locally.
Polycom RealPresence Resource Manager LDAP/H.350	Directory Services, provisioning, soft updates and system monitoring
LDAP by a Polycom CMA System	Directory Services, device monitoring and provisioning
Polycom RealPresence® Distributed Media Application™ (DMA®)	Call Management, Call Server and Gatekeeper functionality
Microsoft Lync Server 2013 and Skype for Business	Support for up to 200 contacts with presence

## Multipoint Conferencing

The RealPresence Immersive Studio Flex solution provides three methods for viewing participants in a multipoint conference. In order to conduct multipoint calls, you will need a multipoint server, such as Polycom RealPresence Clariti™ or RealPresence® Collaboration Server (RMX®) with the telepresence option enabled and applicable licensing as well as Polycom's Multipoint Layout Application (MLA). The RealPresence® Distributed Media Application™ (DMA®) (included with RealPresence Clariti) for dialing is also a requirement.

- **Room Continuous Presence:** In this standard mode, the multipoint layout will automatically be generated. All participants will be shown on the displays. The layout will be determined either by following the general principles of Polycom Immersive Telepresence multipoint or fit a custom-set view configured by the conference administrator.
- **Voice Activated Room Switching (VARS):** VARS is different from the standard Room Continuous Presence mode in that the speaker's site is the only site seen by others. The view of the speaker's site is sized to be as large as possible on all of the other participants' displays. The current speaker sees the previous speaker's site (i.e., the speaker's layout remains unchanged). Layouts used in VARS are not customizable.
- **Active Speaker Priority (ASP):** ASP mode allocates full screen real-estate to endpoints that have speaking participants. Non speaking endpoints are put in a "film-strip" in the bottom center of each display. Each film-strip can accommodate five endpoints. Note that Immersive Telepresence rooms require a frame for each codec.

## Bandwidth

The recommended bandwidth required depends on the customer's application, location, required resolution and other factors. Please refer to the RealPresence® Group Series Administrator's Guide for a detailed matrix of call speeds and resolutions. Numbers are for People and Content being shared simultaneously.

Frame Rate	Minimum *	Recommended **	Maximum
1080p60 High Profile	5.3 Mbps per suite	9 Mbps per suite	18 Mbps per suite
1080p30 High Profile	3.1 Mbps per suite	5.5 Mbps per suite	18 Mbps per suite
720p60 High Profile	2.5 Mbps per suite	4.5 Mbps per suite	18 Mbps per suite

\*Minimum network requirement may not provide an end-to-end max frame rate / highest resolution experience. \*\*Other network conditions may require additional bandwidth beyond what is recommended.

## LAN Connection Requirements

The customer must provide 10 sequential static IP addresses. These will be used for the Codecs, Content monitor, SoundStructure(s), Terminal Server, Display Matrix, and RealPresence Touch.

A 24-port unmanaged Ethernet switch is supplied with the system. This may be replaced with a customer-preferred device of the same capacity. If an in-room switch is used, only one LAN connection on the front wall is required.

## Environmental Conditions

- Conference room operating temperature: 41-82° F, 5-28° C
- Relative humidity: 20% to 90% (non-condensing)
- Ambient Noise Level: 40 dBA or lower
- Recommended NC rating: NC18 to NC25

## Weights and Dimensions

## REALPRESENCE IMMERSIVE STUDIO FLEX TECHNICAL SPECIFICATIONS

Item Number	Item Description	Qty	Dimensions (in)	Weight (lbs)
2215-84427-001	KIT,MECH/HRDWRE,MEDIA WALL,ISF	1	96x48x66	1255
2215-84429-001	KIT,FRT PNLS,WALNUT,MW,ISF	1	68x32x15	212
2215-84432-001	KIT,SIDE PANELS,BLK,MW,ISF	1	76x44x16	387
2215-84433-001	KIT,MECH/HRDWRE,FRONT WALL,ISF	1	98x23x11	240
2215-84435-001	KIT,FRT PNLS,WALNUT,FW,ISF	1	59x64x22	464
2215-84437-001	KIT,PANELS,SMALL,BLK,FW,ISF	1	52x19x9	38
2215-84438-001	KIT,MECH/HRDWRE,MAIN TABLE,ISF	1	63x32x22	316
2215-84441-001	KIT,TBL TOPS,WALNUT,M-TBL,ISF	1	74x53x16	437
2215-84483-001	ELEC/MISC,IS FLEX,ROW	1	66x43x34	263
2200-33160-001	ASSY,TOP,C16,NA	1	63x48x43	372
2215-26927-001	ASSY,CEILING,MIC3,WHITE	1		
2215-26928-001	ASSY,CEILING,MIC3,WHT,EXT	2		
2215-65088-001	P001 GROUP 500,BB,EE ACOU	2		
2215-67865-001	P002 GROUP 700,CODEC	1		
2583-52857-055	DSPLY,LED,55",1080P,PME55MA-V1	1		
2583-52875-065	DSPLY,65",LED,UHD,WW,65UH5PC	3		