



VidyoPanorama

The World's Most Inclusive and Affordable Telepresence



While traditional Telepresence solutions provide immersive interactions among participants, they are rather limited, static, and costly:

- **Limited** - supporting mostly point-to-point, 3-screen to 3-screen symmetric meetings, otherwise risking the disappearance of previously-speaking participants whenever the number of remote cameras exceeds the number of local screens (usually 3).
- **Static** - requiring participants travel to certain Telepresence sites with custom-built rooms and furniture, otherwise suffering from high transcoding latency among diverse endpoints (rooms, PCs, mobile devices).
- **Costly** - requiring CapEx in the range of \$300,000 to \$700,000 per room and MPLS bandwidth OpEx in the range of \$6,000 to \$10,000 per month.

Immersive Video Quality

- 1080p 60fps sending and receiving
- Imperceptible latency without transcoding on any endpoint—room system, desktop or mobile device

Flexible and Scalable

- Up to 9 screen configuration
- Easily customizable video and content layout management

Affordable

- Up to 90% CapEx reduction: runs on off-the-shelf hardware systems
- Up to 60% monthly OpEx savings: connects via general-purpose IP networks requiring no QoS or overlay

Based on Vidyo's award winning, patented Adaptive Video Layering™ technology, VidyoPanorama is designed to provide immersive telepresence with exceptional scalability, flexibility and affordability:

- **Exceptional scalability** - Up to 9-screen configuration allows hundreds of people from up to 36 distributed locations to be seen simultaneously in HD-quality. Plus, they can join via any endpoint - including telepresence systems, room systems, laptops and desktops (Windows, Linux, Mac® computers), and mobile devices (iOS and Android).
- **Unprecedented flexibility** - Allows the system administrator to easily customize the way video and content are placed onto multiple screens: Full-screen participant video, Continuous Presence (CP) participant video, and full-screen content video on any display.
- **Mass market affordability** - Reduces CapEx and OpEx by up to 90% using off-the-shelf hardware systems and general-purpose IP networks with no QoS required.





You and your conference participants will enjoy the natural, same-room feel and interactivity made possible by crisp, full HD, 60 FPS video with imperceptible latency.

Features and Functions:

Industry's First 2-way 1080p 60fps Capable Telepresence

- Sending and receiving: up to 1080p 60fps or 720p 60fps

Industry's Most Flexible 9-Screen Telepresence

- Up to 36 simultaneously displayed meeting locations with immersive interactions – 18x more than traditional site-to-site telepresence solutions
- Easily customizable video and content layout management – allowing any display to be easily re-configured via software to show full-screen participant video, Continuous Presence (CP) participant video, and full-screen content video on any display.

Native Integration with Diverse Endpoints

- VidyoMobile: iOS and Android devices.
- VidyoDesktop.
- VidyoRoom: HD-220, HD-100, HD-50.
- H.264 AVC-based H.323 and SIP legacy endpoints: Polycom and Cisco.

VidyoRemote Tablet Interface

- 1-click call initiation and entry into Private Meeting Room.
- Swivel keyboard for convenient directory searches.
- Full and automatic integration with the VidyoPortal user's database.

Performance:

- Imperceptible glass to glass multi-point latency.
- Network error concealment - optimal performance without QoS.
- Individually optimized stream for each endpoint.

Data Sharing

- Participants can toggle between other users' shared windows (users can share concurrently)
- Laptop screen sharing through the optional VGA input device
- Auto Share mode begins immediately when PC content is detected

Audio Controls

- Speakers volume adjustment and mute/unmute
- Microphone gain adjustment and mute/unmute

Camera Control

- Video privacy mode
- Local camera pan, tilt, zoom via remote control
- Advanced Far-End-Camera-Control during a conference

Security & Network

- Media Encryption: Optional 128bit AES
- Optional HTTPS signaling encryption
- Signal Encryption: Optional HTTPS
- SNMP (MIB II) enabled elements

Administration & Maintenance

- Web-based administration for remote access and configuration
- Automatic software updates, downloadable from VidyoPortal
- Conference moderation via VidyoPortal



Delivered across 9 large HD screens, you'll be able to choose between multiple full-screen video and/or content, continuous presence video and/or content, and self-view.

VidyoPanorama Specifications:

APPLICATION SPECIFICATIONS

VIDEO STANDARDS

H.264 SVC
H.264 AVC, H.263+ via the VidyoGateway

H.264 SCALABLE VIDEO CODEC BANDWIDTH USAGE:

Minimum:

HD 1080p @ 60 fps @ 2Mbps
HD 1080p @ 30 fps @ 1Mbps
HD 720p @ 60 fps @ 1Mbps
HD 720p @ 30 fps @ 500kbps

Recommended:

HD 1080p @ 60 fps @ 4Mbps
HD 1080p @ 30 fps @ 2Mbps
HD 720p @ 60 fps @ 2Mbps
HD 720p @ 30 fps @ 1Mbps

Data sharing video resolution

Up to WXGA (fitted to screen resolution)

AUDIO STANDARDS

SPEEX Wideband 32KHz (16KHz audio)
G.711 (A-, μ -Law), G.722, via VidyoGateway

LANGUAGE SUPPORT

English
Finnish
French
German
Italian
Japanese
Korean
Polish
Portuguese
Simplified Chinese
Spanish

ULTIMATE FLEXIBILITY IN SCREEN LAYOUT

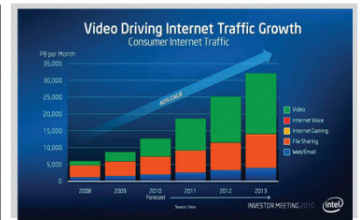
Full Screen Participant Video



Continuous Presence Video



Full Screen Shared Content



Easily re-configurable screen layout – the system administrator can easily re-purpose any screen via a few simple clicks:

- Three layout options supported
- Configure any screen for any layout
- Configurable auto-layout settings



The VidyoPanorama system is highly customizable, allowing flexibility in room layout, furniture, lighting, equipment concealment, power and cooling, and branding.

Specifications (Cont.):

BANDWIDTH REQUIREMENTS (NO QOS REQUIRED)

Transmitting to VidyoRouter:

- Minimum: 1Mbps for 720p 30fps or 2Mbps for 1x1080p 60fps
- Maximum: 6Mbps for 1x1080p 60fps

Receiving from VidyoRouter:

- Minimum: 1Mbps for 720p 30fps or 2Mbps for 1x1080p 60fps
- Maximum: 36Mbps in multiple video streams

VIDYO-SUPPLIED SYSTEM COMPONENTS

- 1x VidyoPanorama Controller/Encoder
- Up to 9x VidyoPanorama Decoders:
 - 1 for each display
- 1x Dell Inspirion Duo Tablet for VidyoRemote

CONTROLLER/ENCODER PHYSICAL INTERFACES

Camera In

- 1 x DVI

Camera Control

- 1 x RS-232

Audio In and Out

- 1 x USB

Network

- 2x Gigabit Ethernet - Supports 10BASE-T, 1000BASE-TX and 1000BASE-T, RJ45 outputs

Data Sharing

- 1x USB

DECODER PHYSICAL INTERFACES

Video out:

- 1 x DVI

Network

- 2x Gigabit Ethernet - Supports 10BASE-T, 1000BASE-TX and 1000BASE-T, RJ45 outputs

CUSTOMER OR 3RD PARTY SUPPLIED EQUIPMENT

- Sony EVI-HD7 Camera
- ClearOne Interact AT Bundle C Audio System
- LAN Switch: Vidyo Recommends HP Procurve 1810G 24 port Ethernet Switch or Cisco Catalyst 2960 Series Ethernet Switch
- Wi-Fi Router Providing Network Connectivity for Dell Inspiron Duo Tablet PC: Any modern good quality Wi-Fi router – Netgear or Cisco Linksys.
- Noise cancellation capable equipment rack

ENCODER & CONTROLLER PHYSICAL SPECIFICATIONS

- Form Factor: 1U Rackmount
- DIMENSIONS (without ear and bezel)
 - Height - 1.67" (42.6 mm)
 - Width - 15.5" (393.7 mm)
 - Depth - 17.1" (431 mm)

OPERATING ENVIRONMENT

- Operating temperature 50-95° F (10-35° C)
- Relative humidity 20% to 80% (non-condensing)

REGULATORY

- SAFETY: EN 60950-1:2006, A11:2009 / IEC 60950-1:2005 ed2
- EMC: EN 55022:2006 +A1:2007 / CISPR 22:2005 +A1:2005 +A2:2006
- EN 55024:1998 +A1:2001 +A2:2003 / CISPR 24:1997 +A1:2001 +A2:2002
- EN 61000-3-2:2006 +A1:2009 +A2:2009 / IEC 61000-3-2:2005 +A1:2008 +A2:2009
- EN 61000-3-3:2008 / IEC 61000-3-3:2008

Australia	C-TICK		Class A
Argentina	IRAM		
Canada	NRTL	ICES	Class A
China	CCC		Class A
Croatia	KONCAR		Class A
European Union	CE		Class A
Germany	TUV		
IECEE	IECEE CB		
Israel	SII		Class A
Japan	VCCI		Class A
Mexico	NOM		
Moldova	INSM		Class A
Nigeria	SONCAP		
Norway	NEMKO		Class A
Russia	GOST		Class A
South Africa	NRCS	SABS	Class A
South Korea	KC		Class A
Taiwan	BSMI		Class A
United States	NRTL	FCC	Class A
Vietnam	ICT		Class A

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