Polycom® VSX™ 6000

Video conferencing system offering excellent price performance and flexibility

Compact, set-top video conferencing system with built-in IP connectivity, ideal for small group applications.

The Polycom VSX 6000 offers all of the features you'd expect in a high-end group video system with all the key features, but with a smaller footprint. Designed for organisations with an IP network infrastructure, the VSX 6000 is well-suited for small group video conferencing with a high-quality pan-tilt-zoom (PTZ) camera and advanced data sharing capabilities.

Because video quality is important for productive communications, the VSX 6000's integrated PTZ camera allows users to easily manipulate the camera with the remote control to capture the audience, on both the far and near end of the call. The system is smart enough to determine the best video quality for the call, automatically choosing H.264 by default, or auto switching to H.263 if necessary. Either way, users are assured of the best quality video experience.

Each VSX 6000 product ships with an integrated mid-range speaker that includes 14 kHz audio with crisp, clear Polycom Siren™ 14 audio, eliminating the need to rely on mediocre television speakers. Add an auxiliary Stereo Speaker Kit and experience conversational stereo with Polycom StereoSurround™. The single digital tabletop microphone array included with every system accommodates either audio arrangement.

For a truly integrated voice and video experience in a small group setting, a SoundStation VTX 1000® can be linked to the VSX 6000 and used as the microphone and as the dialing interface. From the conference phone keypad, users can dial an IP video call and then add a voice-only participant to the conference, all in wideband audio.

For a complete solution, match the VSX 6000 with any of Polycom's stylish carts and displays, all of which provide the flexibility of a transportable room system. For environments that have minimal space requirements Polycom offers a wall mount solution with either single or dual 32" LCD displays.

Make Great Things Happen with the VSX 6000 Video Conferencing System

In today's Internet driven world, the ability to conduct real time communication and collaboration has become critical to an organisation's survival. As the market leader in voice, video, data and web solutions, our award-winning conference technology makes it easy for people to interact and maximise productivity over any network, in just about any environment, anywhere around the globe. That's why more organisations worldwide use and prefer Polycom conferencing solutions. Because when people work together, great things happen. See how you, too, can achieve great things with Polycom VSX 6000 video conferencing system.

- ▶ Superior, natural sound – Polycom StereoSurround™ delivers crisp, natural voice clarity - even when multiple parties are speaking simultaneously – by using dual channel, Siren 14 technology

- ▶ Outstanding video – Premium quality video at any bandwidth with smooth natural motion and sharp, clear images. Employs standard-based H.264 compression and Pro-Motion™ video for optimal viewing

- ▶ Multimedia made easy – Show high-res images, movies or presentations in your meetings while in a video call. And, you can share PC content cable-free using Polycom's unique People+Content™ IP technology

- ▶ Simplified dialing and enhanced performance – Integrate the SoundStation VTX 1000 to launch video calls, capture soft voices clearly from across the entire room in StereoSurround and eliminate the need for microphones and wires

- ▶ Network friendly – Features include video and audio error concealment, UPnP, NAT, Closed Captioning support and embedded encryption

- ▶ The Polycom Solution – Everything you need to deploy and manage a complete video conferencing network with Polycom ReadiManager SE 200, Polycom Global Management System™, Polycom PathNavigator™, Polycom Conference Suite™ and the Polycom MGC™

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Polycom VSX 6000 Specifications

H.323 and SIP compliant

VSX 6000 Bundled Solutions
- VSX 6000 VTX: VSX 6000 with SoundStation VTX 1000 instead of microphone array
- VSX 6400 Presenter: VSX 6000, Visual Concert™ VSX, People+Content IP
- VSX 6400 Presenter VTX: VSX 6000 with SoundStation VTX 1000 instead of microphone array

Bandwidth
- Maximum Data Rate: 768 kbps

Video Standards & Protocols
- H.261
- H.263+ Annexes: F, I, J, L, N, T
- H.263++ Annexes: W
- H.264

Frame Rates (Point-to-Point)
- Intelligently selects frame rate for best performance video
- 30 fps from 56 kbps up to 768 kbps

Video Inputs: Main Camera + 1 Connector
- Integrated main camera
- 1 x S-video; 4-pin Mini-DIN (Document camera, VCR)

RS-232 Data Port: 1 x 8-pin mini DIN
- Control port for custom integration with remote devices such as Crestron® and A M X® control systems
- Connectivity for closed captioning teletype device
- Communication port for transmission of serial data (i.e. medical devices)

Video Outputs: 3 Connectors
- 2 x S-Video; 4-pin mini DIN
- 1 x VGA HD15

Video Formats
- NTSC/PAL
- XGA, SVGA, VGA

Integrated Main Camera
- Ultra-quiet, ultra-fast action pan/tilt/zoom (PTZ)
- 65˚ field of view
- Tilt Range: +/- 25° (Up/Down)
- Pan Range: +/- 100° (Left/Right)
- Total Field of View: 265°
- 12x Zoom; f-4.2 to 42mm
- F=1.85 to 2.9 mm
- Auto focus
- Automatic white balance
- Camera presets - local and far-end (up to 99)
- Standards-based, far-end camera control (FECC)

People Video Resolution
- 4SIF (704 x 480)
- 4CIF (704 x 576)
- SIF (352 x 240)
- CIF (352 x 288)
- QSIF (176 x 120)
- QCIF (176 x 144)
- Choice of 4:3 or 16:9 display aspect ratios
- Display People on VGA Second Monitor

Content Video Resolution
- XGA (1024 x 768), SVGA (800 x 600), VGA (640 x 480) for graphic displays
- People video support for 4CIF and 4SIF on second VGA display
- Up to 4CIF / 4SIF for NTSC/PAL displays

Audio Standards and Protocols
- Polycom StereoSurround ready
- 14 kHz bandwidth with Polycom Siren 14 (G.722.1 Annex C)
- 7 kHz bandwidth with G.722, G.722.1
- 3.4 kHz bandwidth with G.711, G.728, G.729A

Audio Features
- Audio add-in over SoundStation VTX 1000 conference phone
- Full-duplex digital audio
- Instant Adaptation Echo Cancellation

- Automatic Gain Control (AGC) – Voice activated
- Automatic Noise Suppression (ANS)
- Audio Mixer (Mic, VCR, line-in)
- Built-in tonal speaker test
- Real-time audio level meter for local and far-end microphones
- Microphone and VCR input audio mixing
- Ability to talk over VCR audio
- Ability to turn off Echo Cancellation when external audio equipment is used

Audio Inputs: 3 Connectors
- 1 x Conference Link
  - Supports single microphone
  - Supports SoundStation VTX 1000 conference phone
- 1 x RCA input for stereo or mono input from external mixer

Audio Outputs: 2 Connectors
- Main Audio Out (RCA stereo)

Polycom VSX Microphone Array
- 360° voice pick up
- Three cardioid elements per microphone
- Flotation feet reduce transmission of tabletop noise
- Integrated mute button
- Optional Polycom Ceiling Microphone Array is available

Integrated Mid-range Speaker
- Frequency response: 180 Hz to 22 kHz
- Total Output Power: 20 Watts (RMS)
- Customise audio for user environment
- Master volume control
- Mid-range speaker on/off
- User-tuned treble and bass controls

Other ITU-Supported Standards
- H.221 communications
- H.224/H.281 far-end camera control
- H.323 Annex Q far-end camera control
- H.225, H.245, H.241
- H.239 People+Content
- H.235V3 encryption standard
- H.460 NAT/Firewall Traversal

Network Interfaces Supported
- Single 10/100 Ethernet port (10 Mbps/100Mbps/Auto)
- Optional wireless LAN support via Ethernet port

SIP Support (Sessions Initiation Protocol)
- Register and authenticate with:
  - Microsoft® LCS
  - Nortel® MCS
  - Standards-based SIP servers
- FECC
- H.261, H.263, H.264
- G.711, G.722, G.722.1, G.728, G.729A, Siren 14 (G.722.1 Annex C)
- Microsoft LCS Buddy list support
- Microsoft LCS presence support
- Interoperable with Microsoft Office® Communicator

Network Features
- Integration with Cisco Systems® CallManager Version 4.0
- Automatic IP calling
- Downspeeding over IP
- Audio & Video Error Concealment over IP
- IP address conflict warning
- Fast Connect IP for quick video connections
- Maximum call length digital timer
- MGC Click&View™ for individual screen layouts
- Polycom PathNavigator support for easy call placement and network cost optimisation
- TCP/IP, UDP/IP, RTP, DNS, WINS, DHCP, ARP, HTTP, FTP, Telnet

Conference on Demand
- Initiates unscheduled MGC calls from the endpoint
- Utilises Polycom Office™ (PathNavigator and MGC)

Security
- Independently validated to operate with

approved government encryption technologies
- Secure web (HTTPS)
- Secure Telnet, FTP
- Security mode
- Enhanced integration for independently certified, classified encryption devices
- Account validation number entry
- SNMP trap notification of all failed login attempts from HTTP, FTP or Telnet
- Secure password authentication
- Administrator password – in-room and remote access
- Dial-in meeting password
- Ability to disable remote interfaces (FTP, Telnet, HTTP, SNMP)
- Auto-Answer (On/Off)
- Allow access to user settings (On/Off)

Embedded Encryption
- FIPS validated by National Institute of Standards & Technology (NIST) certified agency
- 128-bit key length
- AES software encryption
- Automatic key generation and exchange
- Supported in People+Content
- Supported in Point-to-Point IP calls

User Interface
- User-friendly graphical interface
- Customisable home screen and colour themes
- Kiosk mode with scrolling marquee
- User-selectable camera icons and ring tones
- Speed Dial List on home page
- Persistent Preview (Far-site PIP) on all screens
- Picture In Picture (PIP) (On/Off, Moveable)
- Dual Monitor Emulation
- Calendar and Conference scheduling
- Alert Signal on home page
- Do Not Disturb (On/Off)
- Closed captioning support

Directory Services
- 4,000 number global directory
- 1,000+ number local directory
- Speed dial list displaying video buddy list
- Live address book with Polycom Global Directory Services automatically and quickly updates directory with address changes or new endpoints
- Live address book with Polycom Global Directory Services automatically and quickly removes endpoints from directory if they are turned off
- Polycom Global Directory Services integrates with Active Directory/LDAP
- Directory Server backup in the event Polycom Global Directory is not accessible

System Management
- SNMP for enterprise management
- Diagnostics and software upgrades via PC, LAN
- Integrated VSX Web management tool
- Web Director: Remote administrator video monitoring and control from VSX Web (enabled/ disabled from endpoint for security)
- Out-of-box setup from VSX Web
- Place a call from VSX Web
- Language independence between set-top interface and VSX Web
- System configuration from VSX Web
- Recent Calls Log – last 99 incoming and outgoing calls
- Call Detail Record (CDR) - Reports all incoming and outgoing calls along with call statistics
- CDR Feature On/Off
- Downloadable CDR data for processing requires no external management system
- Account number validation at call initiation integrated with Polycom Global Management System for billing purposes
- Administrator-configurable dialing speeds

iPriority™ – Quality of Service Features
- Video Error Concealment
- Audio Error Concealment
- Universal Plug and Play (UPnP)
- IP Precedence (ToS)
  - Configurable video/audio/FECC service value
- DiffServ (DSCP) (COS)

- Dynamic Bandwidth Allocation
- Proactive Network Monitoring
- Packet and jitter control
- Adjustable Packet Size
- NAT/Firewall traversal (H.460)
- Network Address Translation (NAT) support
- Automatic NAT discovery
- Asymmetric speed control
- Alternate Gatekeeper Support
- TCP/UDP fixed-port firewall support
- Lip synchronisation
- Echo cancellation
- Echo suppression
- Auto gatekeeper discovery
- Automatic gateway dialing profiles
- Specify outbound call routing for gateway

Collaboration Solutions
- Visual Concert™ VSX (Audio and video input from PC or Macintosh®) (Optional)
  - 1 x audio input for laptop
  - 1 x VGA output for projector
  - 3 x 10/100 Ethernet hub
  - Content Input: 1280 x 1024, 60 Hz
  - Content Output: Up to 1024 x 768
- People+Content™ IP (Optional)
  - Show content from laptop/PC over IP network connection
  - Content shown in native resolution
  - Supports Windows® 2000 and Windows XP
- QSX™ (Optional)
  - Connect to Visual Concert to show content from laptop/PC
  - Content displayed in native resolution
  - Up to 10 voice participants can view content being shared
- Web Streaming in and out of a call, RTP based, suitable with QuickTime® Players
- Adjustable Bandwidth for Content
  - 10% content, 90% people
  - 50% content, 50% people
  - 90% content, 10% people

Furniture Solutions
- Media Centre with audio system
- Media Centre
- Media Cart
- Video Cart
- Wall Mount Solution

Language Support (15 languages)
- Chinese (Simplified), Chinese (Traditional), English (American), English (British), French, German, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish
- Translated items include:
  - Documentation (no Hungarian/Polish)
  - User interface
  - Audio dialing confirmation
  - VSX web
  - Remote control (no Hungarian/Polish)

Electrical
- Auto sensing power supply
- Operating voltage/power: 100-240 VAC, 50-60 Hz, 60 watts
- Max 74 VA @ 115v60Hz, 87 VA @ 220v50Hz
- Max Heat Dissipation: 205 BTU/hour

Environmental Specifications
- Operating Temperature: 0-40°C
- Operating Humidity: 15-80%
- Non-Operating Temperature: -40-70°C
- Non-Operating Humidity (Non-condensing): 10-90%

Physical Characteristics
- Video Base Unit (W/H/D): 300.3mm x 148mm x 244.5mm (11.82" x 5.83" x 9.63")
- Video Base Unit Weight: 2.8 kg x (6.0 lbs)

Warranty
- One-year return to factory parts and labour
- 90-day Software Warranty

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