



# Polycom® VSX™ 6000



## Benefits

**Designed for IP networks** – Built-in IP network connectivity allows for seamless integration of group video conferencing into existing networks

**Outstanding video** – Premium quality video with standards based H.264 for the most realistic video conferencing experience

**Astounding audio** – Polycom Siren 14 audio, the new industry standard for 14 kHz audio, is delivered from the integrated sound system for unmatched audio clarity from a set-top system

**Media cart option** – Stylish, lockable cart with LCD displays, and VSX 6000 combination offers a complete solution, ideal for small to medium sized meeting rooms

**Wideband Audio Integration** – Polycom offers the world's only truly integrated Voice and Video solution for the conference room. Connect a SoundStation VTX 1000 conference phone to the VSX 6000 for voice-only and video call dialing, call hang-up and redial from the keypad

**The Polycom Solution** – Everything you need to deploy and manage a complete video conferencing network with Polycom integrated Voice products, Global Management System™, Polycom PathNavigator™, Polycom Conference Suite and the Polycom MGC™

## Compact, entry-level 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. Well suited for organizations with an IP network infrastructure and the need for a small group video conferencing product with a high-quality pan-tilt-zoom (PTZ) camera, the VSX 6000 is the answer.

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 the industry standard in 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 patent pending 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 medium-size rooms, match the VSX 6000 with the Media Cart solution, including LCD displays. For environments that have minimal space requirements and require the flexibility of a transportable room system, the VSX 6000 Video Cart Solution is ideal with a single 32" display and a sturdy roll-about cart for easy mobility.

### The value of Polycom VSX 6000. Access to the power of Polycom unified collaborative communications solutions.

With the greatest breadth and depth of integrated video, voice, and Web solutions, only Polycom delivers the ultimate communications experience. Our market-leading conferencing and collaboration technologies, supported by world-class service, enable people and organizations to maximize their effectiveness and productivity. Add to that the most experience and proven best-practices in the industry, and it's clear why Polycom has become the smart choice for organizations seeking a strategic advantage in a real-time world.



Connect. Any Way You Want.

# Polycom VSX 6000 Specifications

ITU H.323 compliant

## Bandwidth

- Maximum Data Rate IP Up to 768 kbps

## Video Standards & Protocols

- H.261, Annex D
- 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 at 56 kbps up to 768 kbps

## Video Inputs: Main Camera + 1 Connector

- Integrated main camera
- 1 x Composite; RCA/Photo (Document camera, VCR)

## Video Outputs: 4 Connectors

- 1 x S-Video; 4-pin mini DIN (Main monitor)
- 1 x Composite; RCA/Phono (Main monitor)
- 1 x S-Video (Second monitor)
- 1 x VGA (Second graphics display)

## Video Formats

- NTSC/PAL
- Graphics: 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)
- 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 for NTSC/PAL displays

## Audio Standards & Protocols

- Polycom StereoSurround ready
- 14 kHz bandwidth with G.722.1 Annex C (Siren 14)
- 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 VCR
- 1 x RCA input for stereo or mono input from external mixer

## Audio Outputs: 2 Connectors

- 2 x RCA for stereo VCR record (or stereo for auxiliary speakers)

## Polycom Digital Tabletop Microphone

- 360° voice pick up, 4.8 dB less reverberant than omni microphone
- 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 16 kHz
- Total Output Power: 20 Watts (RMS)
- Customize 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
- Annex Q standard for FECC in H.323 calls
- H.225, H.245, H.241
- H.239 People+Content™
- H.235V3 encryption standard

## Network Interfaces Supported

- IP (LAN, DSL, cable modem)
- Single 10/100 Ethernet port (10 Mbps/100Mbps/Auto)
- Optional wireless LAN support via Ethernet port

## Network Features

- SIP Support (Session Initiation Protocol)
- 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 optimization
- TCP/IP, UDP/IP, RTP, DNS, WINS, DHCP, ARP, HTTP, FTP, Telnet

## Conference on Demand

- Initiates unscheduled MGC calls from the endpoint
- Utilizes Polycom Office™ (PathNavigator & MGC)

## Security

- Independently validated to operate with approved government encryption technologies
- 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
- Unique factory default passwords
- Administrator password
- Dial-in meeting password
- Encrypted password for VSX Web access
- Ability to disable remote interfaces (FTP, Telnet, HTTP, SNMP)
- Auto-Answer (On/Off)
- Allow access to user settings (On/Off)

## Embedded Encryption

- Advanced Encryption Standard (AES)
- FIPS validated by National Institute of Standards & Technology (NIST) certified agency
- 128-bit key length
- AES software encryption on IP calls up to 768 kbps
- Automatic key generation and exchange
- Supported in People+Content
- Supported in Point-to-Point IP calls

## User Interface

- User-friendly graphical interface
- Customizable home screen and color 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
- Numerical menu navigation (Similar to mobile phone)
- Date, Time Server accessibility
- Calendar and Conference scheduling
- Alert Signal on home page
- Do Not Disturb (On/Off)
- VSX Web for remote monitoring

## Directory Services

- 4,000 number global directory
- 1,000+ number local directory
- 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 – Records 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
- Complete support for The Polycom Office including:
  - Polycom Global Management System
  - Polycom OneDial™
  - Polycom PathNavigator
  - Polycom Conference Suite
  - Polycom MGC
  - Polycom SoundStation VTX 1000

## Quality of Service and Experience – iPriority™

- 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
- Network Address Translation (NAT) support
- Automatic NAT discovery
- Asymmetric speed control
- Alternate Gatekeeper Support
- TCP/UDP fixed-port firewall support
- Lip synchronization
- 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
  - No resolution adjustment required on presenter's laptop/PC
  - Supports CIF, SIF, 4CIF, 4SIF, VGA, SVGA, XGA display resolutions
  - Zoom control
  - Supports Windows® 2000 and Windows XP
- Closed captioning support
- Web Streaming in and out of a call, RTP based, suitable with QuickTime® Players

## Furniture Solutions

- Media Center with audio system
- Media Center
- Media Cart
- Video Cart
- Wall Mount Solution

## Language Support (12 languages)

- Chinese (Simplified), Chinese (Traditional), English, French, German, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish
  - Documentation translations in all languages
  - User interface translations in all languages
  - Keypad audio dialing confirmation in all languages
  - VSX Web translations in all languages
  - Remote controls labeled in all languages

## Electrical

- Auto sensing power supply
- Operating voltage/power: 100-240 VAC, 50-60 Hz, 60 watts

## 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): 11.82"/5.83"/9.63"
- 300.3mm/148mm/244.5mm
- Video Base Unit Weight: 6.0 lbs/2.8 kg

## Warranty

- One-year return to factory parts and labor
- One-year software updates and upgrades

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