# Polycom®VSX™ 5000

## Video conferencing system offering excellent price performance and flexibility

## Benefits

**Superior, natural sound**– Polycom StereoSurround™ delivers crisp, natural voice clarity - even when multiples 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 also sharing video. And, you can share PC content cable-free using Polycom's unique People+Content™ IP technology

**Reliability** – Integrated electronic Pan-Tilt-Zoom (PTZ) camera has fewer moving parts and therefore offers more reliability, while offering functionality similar to mechanical PTZ cameras

**Network friendly** – Features include video and audio error concealment, UPnP, NAT and Closed Captioning support, embedded encryption, plus Web streaming

**Complete solution packages**– Combine the VSX 5000 with any of Polycom's attractive furniture display options to create a total meeting room solution

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

## Introducing the Polycom VSX 5000, a compact and economical solution for small to medium-sized conference rooms.

Ideal for smaller conference spaces, the new entry-level Polycom VSX 5000 set-top system brings market-leading video and audio quality within an affordable price. A real space-saver, it sits conveniently on top of TVs, high-resolution plasma screens, or LCD displays. You can easily add a peripheral (document camera, or VCR/DVD), dual monitors, and audio-only callers through ISDN or the SoundStation VTX 1000. The VSX 5000 gives you multiple ways of dialing conference attendees and employing various types of content (for example, pictures, presentations, movies, audio files). Connection options encompass IP (H.323 and SIP) and ISDN dialing, so you can utilize the VSX 5000 in a variety of conference environments.

The VSX 5000 is also well-suited for educational resource rooms where smaller groups of students meet with a remote educational specialist, and remote medical clinics that deliver specialist care to patients hundreds of kilometers from home.

The VSX 5000 includes features and benefits such as a user interface in 13 languages, multiple ways to add content, and dual monitor emulation for single display solutions. Choose either a VGA display or a TV as your main display, whichever suits your conferencing environment. The ISDN option enables you to add ISDN conferencing capability as well, and the dual monitor option allows you to show people on one display and shared content on the other display.

When you're ready to upgrade your meeting room environment even further, you can take advantage of Polycom's SoundStation VTX 1000 integration, giving users the ability to dial a video conference from their conference phone. This also saves space on the conference table, since the SoundStation VTX 1000 also acts as the stereo microphone as well as a standalone conference phone. Plus, dedicated stereo audio outputs enable easy implementation of Polycom's StereoSurround™ technology, for sound that is as natural as being there.

In today's Internet driven world, the ability to conduct real time communication and collaboration has become critical to an organization'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 maximize productivity – over any network, in just about any environment, anywhere around the globe. That's why more organizations worldwide use and prefer Polycom conferencing solutions. Because when people work together, great things happen. To learn more, please visit the Polycom Experience Center at www.polycom.com/experience

POLYCOM®

ITU H.323 and H.320 compliant

### VSX 5000 Bundled Packages
- VSX 5000 VTX: VSX 5000 system with SoundStation VTX 1000 instead of the microphone array
- VSX 5400 Presenter: VSX 5000 system, Visual Concert™ VSX, People+Content IP
- VSX 5400 Presenter VTX: VSX 5000 system, Visual Concert VSX, People+Content IP, SoundStation VTX 1000 instead of microphone array

### Bandwidth
- Maximum Data Rate IP: Up to 768Kbps
- Maximum Data Rate ISDN: Up to 512Kbps

### Video Standards & Protocols
- H.261, Annex D
- H.263+ Annexes: F, I, J, L, N, T
- H.263++ Annexes: W (receive-only)
- 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

### Connectors
- Integrated main camera
- 1 x S-Video; 4-pin mini DIN Document camera, VCR/DVD or second camera)
- RS-232 Data Port: 1 Connector
  - 1 x 8-pin mini DIN
    - Control port for custom integration with remote devices such as Crestron® and AMX® control systems
    - Connectivity for closed captioning teletype device
    - Communication port for transmission of serial data (i.e. medical devices) over ISDN or IP calls

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

### Video Formats
- NTSC/PAL
- Graphics: XGA, SVGA, VGA

### Integrated Main Camera
- Noiseless, ultra-fast action electronic pan/tilt/zoom (PTZ)
- 65° field of view
- Electronic Tilt Range: +/- 24° (Up/Down)
- Electronic Pan Range: +/- 42.5° (Left/Right)
- 85 degrees Total Field of View
- 2x Zoom
- Lens F#: 2.8mm
- Focal length: 4.9mm
- Fixed 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)*2nd video only
- 4CIF (704 x 576)*2nd video only
- 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 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 only add-in over ISDN
- Full-duplex digital audio
- Instant Adaptation Echo Cancellation
- Automatic Gain Control (AGC) – Voice activated
- Automatic Noise Suppression (ANS)
- Audio Mixer (Mic, VCR, line-in)
- 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 1 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 Digital Tabletop Microphone
- 360° voice pick up, 4.8 dB less reverberat 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

### 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.331
- H.239 People+Content™
- H.231 in multipoint calls
- H.243 MCU password
- H.233, H.234, H.235V3 encryption standards
- Bonding, Mode 1

### Network Interfaces Supported
- IP (LAN, DSL, cable modem)
- Single 10/100 Ethernet port (10Mbps/100Mbps/Auto)
- Optional ISDN QBRI or SBRI (Basic Rate Interface) Module
- Optional wireless LAN support via Ethernet port

### Network Features
- SIP Support (Session Initiation Protocol)
- Integration with Cisco Systems™ CallManager Version 4.0
- Down speeding over IP and ISDN
- Audio & Video Error Concealment over IP, ISDN and mixed calls
- IP address conflict warning
- Fast Connect IP for quick video connections
- Maximum call length digital timer
- Auto SPID detection and line number configuration
- MGC™ Click&View™ for individual screen layouts
- Polycom OneDial™ intelligent call management attempts call on preferred network (IP or ISDN) and automatically rolls over to secondary network if needed
- Polycom PathNavigator™ support for easy call placement and network cost optimization
- TCP/IP, UDP/IP, RTP, DNS, WINS, DHCP, ARP, HTTP, FTP, Telnet
- Chair control through API command or Integrated Web Interface.
- Software Upgradeable Inverse Multiplexer (IMUX)

### Conference on Demand
- Initiates unscheduled MGC calls from the endpoint
- Utilizes Polycom Office™ (PathNavigator and MGC)
- Auto selects an external bridge
- Dials all participants simultaneously

### Security
- 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 ISDN, IP and Serial/V.35 up to 512 Kbps
- Standards-based H.235V3 (IP)
- Standards-based H.233/H.234 (ISDN/Serial)
- Automatic key generation and exchange
- Supported in People+Content

### 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
- 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
- Polycom Global Directory Services integrates with Active Directory/LDAP
- Directory Server backup in the event Polycom Global Directory is not accessible
- Automatic ISDN localization of calls

### System Management
- SNMP for enterprise management
- Baseline mode setting for legacy system interoperability
- 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)
- RSVP
- 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/ ISDN

### 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
- Adjustable bandwidth for content
  - 10% Content, 90% People
  - 50% Content, 50% People
  - 90% Content, 10% People
- 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 (13 languages)
Chinese (Simplified), Chinese (Traditional), English (American), English (British), 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
- Chinese address book entry
- Remote controls labeled in all languages

### Electrical
- Auto sensing power supply
- Operating voltage/power 90-260 VAC, 47-63 Hz/80 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): 11.83"/5.25"/10.02", 300.5mm/133.26mm/254.5mm
- Video Base Unit Weight: 4.4 lbs/1.94Kg

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