Polycom® VSX™ 7000s

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

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

Complete solution packages – Combine the VSX 7000s 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™

The world's most powerful set-top video conferencing system for medium sized groups and special applications.

The Polycom VSX 7000s offers flexibility, reliability and a robust architecture for virtually any meeting room, classroom, or medium group environment. With a unique integrated sound system, the Polycom VSX 7000s raises the bar for quality audio with patent pending Polycom StereoSurround™ audio. During a video conference, voices from far-end participants project in stereo. With dual speakers and dual microphones you'll hear each speaker clearly, easily decipher multiple simultaneous conversations and experience pure, rich sound.

In addition, the VSX 7000s offers truly exceptional video with H.264 and television-like quality Pro-Motion™, an easy-to-use customizable user interface, standard AES software encryption, touch panel integration capabilities and voice add-on capabilities. The VSX 7000s provides flexibility in any conferencing environment; you can choose between a VGA or TV monitor as your main display, choose your dialing method (IP/SIP/ISDN), and connect any second camera or VCR to display pictures, movies or presentations to all conference participants. Whenever Content is displayed, whether it is coming from a PC, a document camera or from a DVD, the conference participants always see both the speaker and the content, for a seamless meeting experience. For a complete conferencing solution, consider combining the VSX 7000s with the Polycom Media Center solution with a choice of single or dual LCD displays or plasmas, a quality cart and the world's best selling video conferencing system.

There are many optional features and components that can be added to the VSX 7000s to further enhance any video conference. Tremendous value is added to the VSX 7000s when combined with the SoundStation VTX 1000®, allowing the user to dial video calls right from their conference room as well as use the SoundStation VTX 1000 as the stereo microphone for the VSX 7000s. This combination saves conference table space (no mics or wires are needed) as well as provides double the range of microphone pickup so that all conference participants are clearly heard, even in large rooms.

Another option that can be added to the VSX 7000s is the presenter package, including Visual Concert™ and People+Content™ IP. Both of these allow users to display PC content during the meeting; Visual Concert is used to connect a laptop directly to the VSX 7000s, while People+Content IP is used to share PC content wirelessly. PC content can include PowerPoint presentations, movie files, audio files, pictures or documents. More options include ISDN capability, speaker kits, additional microphones and more – all designed to allow you to create the perfect conferencing environment for your meeting room.

The value of the Polycom VSX 7000s to access 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.

Polycom VSX 7000s Specifications

ITU H.323 and H.320 compliant

Bandwidth
- Maximum Data Rate IP and Serial/V.35: Up to 2 Mbps
- Maximum Data Rate ISDN: Up to 2 Mbps

Video Standards & Protocols
- H.261, Annex D
- H.263+ Annexes: F, I, J, L, N, T
- H.263++ Annexes: W
- H.264
- ITU 60-fps full screen – Pro-Motion

Frame Rates (Point-to-Point)
- Intelligently selects frame rate for best performance video
- 30 fps at 56 kbps up to 2 Mbps
- 60 fields per second up to 2 Mbps

Video Inputs: Main Camera + 2 Connectors
- Integrated main camera
- 1 x S-Video; 4-pin mini DIN (document camera or second camera)
- 1 x S-Video; 4-pin mini DIN (VCR)
- Dedicated connections for VCR/DVD-R playing and recording

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 or PTZ control for auxiliary PowerCam™
  - Communication port for transmission of serial data (i.e. medical devices) over ISDN calls

Video Outputs: 4 Connectors
- 1 x S-Video; 4-pin mini DIN (Main monitor)
- 1 x S-Video (Second monitor)
- 1 X VGA (main or second monitor display)
- 1 x S-video (VCR)

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
- Pro-Motion interlaced video (60/50 fields full-screen video for NTSC/PAL)
- 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 single XGA monitor or second XGA 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 SIF on second VGA display
- Up to 4CIF for NTSC/PAL displays

Audio Standards & Protocols
- Polycom StereoSurround ready
- 14 kHz bandwidth (Polycom 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
- Audio 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)
- 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 up to (3) microphones
  - 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/Phono, Line Level output for VCR record

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 Speaker and Subwoofer
- Frequency response: 80 Hz to 22 kHz
- Crossover frequency to subwoofer: 216 Hz
- Total Output Power: 20 Watts (RMS)
- Customize audio for user environment
- Master volume control
- Midrange and subwoofer speakers On/Off
- Subwoofer adjustable level
- 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.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 (10 Mbps/100Mbps/Auto)
- Optional ISDN QBRI (Basic Rate Interface) Module
- Optional ISDN PRI (Primary Rate Interface) Module T1/E1
- Optional Serial Module (V.35/RS-530/RS-449 with RS-366 dialing)
- 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)

Internal Multipoint Features (Optional)
- Mixed protocol dialing connects a total of four endpoints (IP/ISDN/Serial) through the internal MCU
- Dial-in/Dial-out Calling (IP/ISDN/Serial)
- Password protection for incoming calls
- Supports IP telephones
- Automatic IP/ISDN down speeding
- Supports People+Content™ from any endpoint (Not just the host site)
- Voice Activated Switching – view current speaker
- Continuous Presence – see all locations
- Automatic Presentation – switch between presenter and continuous presence mode
- MP key installation while in a call
- Audio add-in over ISDN
- Cascading for up to 10 conference participants (mix of IP/ISDN/Serial Video and ISDN Audio)

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

Security
- COMSEC tested by Titan Systems, Information Security Systems Division, and independently validated to operate with approved government encryption technologies
- KG-194/KIV-7 encryptor support with on screen and address book dialing
- 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)
- Ability to disable mixed protocol multipoint calls
- 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 2 Mbps
- Standards-based H.235V3 (IP)
- Standards-based H.233/H.234 (ISDN/Serial)
- Automatic key generation and exchange
- Supported in People+Content™
- Supported in Point-to-Point IP & ISDN & mixed multipoint 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
- Speed dial list displaying video buddy list
- Limitless multipoint entries
- 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
- Baseline mode setting for legacy system interoperability
- 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
  - Polycom Vortex®

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
- People and Content (PC, VCR/DVD, Doc cam) are always displayed simultaneously
- 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 (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 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): 11.82"/5.83"/9.63" 300.3mm/148mm/244.5mm
- Video Base Unit Weight: 6.0 lbs/2.8 kg
- Subwoofer (W/H/D): 6.9"/10.72"/8.67" 175.2mm/272.4mm/220mm
- Subwoofer Weight: 9.0 lbs/4.08 kg

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