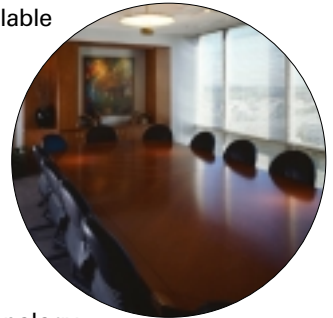# Polycom® **VS4000**™

Highest performance video communications system

BENEFITS

- **Brings together multiple meeting rooms**— integrated multi-point capability and new MP*Plus* feature, Mixed Protocol Dialing, enables up to four sites over IP and ISDN in the same call

- **Dial-In Calling**—another MP*Plus* feature, allows new sites to join a call already in progress by dialing into the host site

- **TV Quality, 60/50 fields video for NTSC/PAL**— at 512 Kbps and above

- **Four monitor support**—allows each of four end-points in a multipoint call to be seen on a separate monitor

- **High resolution (1024x768) live graphics support**— with Visual Concert™ FX

- **Second level cascading capabilities**—allow for up to 10 video sites and 4 audio sites to be connected in a single call

- **Streaming capability**—embedded streaming feature allows the ViewStation FX to multicast the Video Communication to viewers over IP

- **Clear 360 degree, full duplex digital audio**—with noise suppression, switchable echo cancellation and automatic gain control

- **Customized audio**—extended audio flexibility via dual microphone pods and line-level audio input for custom microphones/mixers

- **Continuous Presence**—a Polycom exclusive capability, allows viewing all multipoint participants at the same time and at full CIF resolution

- **Supports dual pan-tilt-zoom cameras, a VCR and document camera input**—including support for the new Visual Concert DC

- **Close Caption feature from the web UI**—allows users to communicate by typing text that appears at the near and far sites. An industry first!

- **Network flexibility**—for Quad BRI, PRI T1 and E1 as well as V.35 and LAN networks up to 2 Mbps

Top-of-the-line quality and innovation—now available for your custom installations. Now boardrooms, classrooms and auditoriums can experience industry-leading Polycom® quality with the VS4000™ system, delivering the most feature-rich, high-performance videoconferencing solution available for custom room deployments.

Housed in an easy-to-integrate, rack-mount chassis, the VS4000 delivers full-motion, broadcast-TV-mode, video quality with 60 fields-per-second coding for lifelike conferencing interaction, while fully supporting the H.263+ video standard. The VS4000 system includes Polycom's market-leading audio technology, and includes dual microphone pods, line-level audio input for custom MIC mixers, and software-based on/off and echo cancellation control.

Polycom ARENA™ API. To facilitate custom room integration, the VS4000 offers robust input/output and control ports that enable external RS-232 control, multiple cameras, display devices, microphone receivers, IR receivers, Visual Concert FX and data devices. With over 200 commands, developers can now easily control all features and functions of the VS4000 with remote devices such as touch screen panels. ARENA partners AMX and Crestron continue to develop and enhance VS4000 code modules that make custom boardroom integration seamless.

Broad connectivity. The VS4000 supports both public and private networks through ISDN, PRI & QBRI, V.35 and Ethernet networks. The embedded 10/100 Mbps Ethernet ports and V.35, QBRI or PRI option promotes networking and conferencing flexibility for H.320 and H.323 calls. Embedded Web capabilities and remote management are just two ways IT managers can perform diagnostics and software upgrades. Users can also push updates and address books to another user.

Make the right choice with your custom room system. Step up to the VS4000 for powerful performance and flexibility in an easy-to-implement rack-mount codec.

POLYCOM®

VS4000™ Technical Specifications

Standards Supported
- ITU-T H.320 (px64); H.323

Video Standards
- H.261, Annex D; H.263 + Annexes: L,F,T,I,J,U,u
- ITU - 60 fields/second

Polycom Enhanced Technology
- TV-quality letterbox video 60 fields/sec NTSC
- TV-quality letterbox video 50 fields/sec PAL
- PVEC - Polycom Video Error Concealment

Other ITU Supported Standards
- H.221 communications
- BONDING, Mode 1
- H.281 far-end camera control
- H.225, H.245

Video Resolution
- QCIF, FCIF, 4CIF TV-quality wide screen

Graphics Resolution
Slide Transmission Format
- H.261 Mode: 4 x FCIF
- H.263 Mode: 16 x FCIF

Local Display Format
- 1280 x 1024 graphics resolution

Frame Rate
- 15fps @ 56–320 Kbps
- 30fps @ 384 Kbps–2 Mbps

Transmission Speed
- Max data rate H.320: 2 Mbps
- Max data rate H.323: 2 Mbps

Multi-Point Calling over BRI, PRI or Ethernet (H.320 or H.323)
- Local plus three sites @ 384 Kbps
- Local plus two sites @ 512 Kbps
- Cascade (H.320 only) up to 10 sites up to 384 Kbps plus up to 4 audio sites

MP*Plus* Calling
Mixed Protocol Dialing
- Connect four endpoints (H.320 and/or H.323) through the internal MCU

Dial-In Calling
- H.320 and/or H.323 sites can dial into existing call

Video Inputs (NTCS or PAL)
1st Camera
- S-Video & Composite

2nd Camera
- S-Video & Composite

Document Camera
- S-Video & Composite

VCR In (for playback)
- Composite

Video Outputs (NTSC or PAL)
Main Display
- S-Video or composite

2nd, 3rd, 4th Displays
- S-Video or composite

VCR Out (recording)
- Composite

SXGA Out
- Up to 1280 x 1024

Main Monitor Auto-PIP System
- Auto-on, auto-swap, auto-off

Camera Presets
- External Sony EVI-D30 camera
- 10 presets local camera or far end camera

Audio Standards
- G.728, G.722, G.711, G.722.1

Full-Duplex Digital Audio
- Instant adaptation echo cancellation
- Automatic gain control
- Automatic noise suppression

Audio Inputs/Outputs
Polycom Mic Pod
- RJ-9

Line Level Input
- RCA

Main Audio Out, VCR In and Out
- RCA L&R

Digital Microphone Pod
- Coverage 360°
- Microphones have 3 hypercardioid elements
- Omni-directional coverage

Integrated Speakerphone (where approved)
- Third-party audio add-in
- Point-to-point or multipoint calls

Diagnostics and Remote Management
- Extensive diagnostics and software upgrades via PC, LAN or in a video call
- Integrated Web interface for direct management
- Supports Polycom Global Management System,™ Global Address Book and SNMP
- Supports Polycom OneDial™
- Supports PathNavigator

Ethernet/Internet/Intranet Connectivity
- Supports—TCP/IP, DNS, WINS, SNMP, DHCP, ARP, WWW, ftp, telnet
- (2) 10/100 Mbps Ethernet ports
- T.120 interface with ShowStation® IP, WebStation™ and Microsoft® NetMeeting

Collaboration Solutions
- PC Presents™ for Microsoft® PowerPoint®
- Polycom SNAP for high resolution graphics capture
- Visual Concert FX
- Visual Concert DC

User Interface
- Hand-held, ergonomically designed remote control
- Infrared onscreen graphical user interface

ARENA™ API
- Enables custom integration w/remote devices such as touch screen panels through RS-323 or Telnet

Telnet

Web Browser Interface
- Microsoft Internet Explorer or Netscape Navigator
- Closed Caption, three lines of text

Streaming Capabilities
- Live video stream multicast to Apple® Quicktime
- Control start and stop of video stream through Polycom Web Browser

Data Port
- RS-232 Control port/data communications port (1200 baud to 115K baud asynchronous)

Network Interfaces (optional)
- PRI (Primary Rate Interface) T1
- PRI E1
- V.35/RS449; supports direct connect or RS-366 dialing
- Supports H.331 broadcast mode
- Quad BRI (Basic Rate Interface)

Global Management System

is an optional, complete web-based management system for your video communication network. It will greatly enhance the experience of video communication users by increasing their first call success rate. It will do this with a much smaller support organization than would otherwise be possible.

The key features are:
- Manage and monitor all your video endpoints with server initiated remote alerts
- Provide a global dialing directory for all Polycom endpoint users
- Keep ViewStation settings and software updated remotely from a server
- Track all calls through CDR history and use for billing or department charge-back

Electrical
- Auto-sense power supply
- Operating voltage/power: 90–260 VAC, 47–63 Hz/40 watts
- Operating temperature: 0°C to 40°C
- Humidity: 10% to 85% R.H. non-condensing

Physical
Dimensions
- 18.38in x 17.25in x 3.47in (L x W x H)
- (46.7cm x 43.8cm x 8.8cm)
- **Weight**
- 4.7kg (10lbs)

Languages Supported
- English, French, German, Spanish, Italian, Portuguese, Norwegian, Chinese and Japanese

Warranty
- Three year parts and labor

Certification
- AAVID certification

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