Polycom® ViewStation® FX

Performance video communications for any conference or board room



Benefits

Superior video quality – Premium video from low bandwidth to high with support for standards-based H.264 and ITU 60 fields

Extensive viewing options – Simultaneously supports up to four video monitors for near and multiple far side views plus a fifth XGA video output for high-resolution monitor or data projector

Maximum calling capability – Embedded MP*Plus* connects up to four video sites (IP, ISDN or mixed) plus an additional universal analogue telephone line; cascading support up to 14 sites (10 IP, ISDN or mixed video plus 4 audio)

See presenter and live, high-resolution multimedia presentation – Add high resolution XGA content and audio while still seeing live presenter

Security you can trust – Optional internal encryption provides security via standard-based, NIST/FIPS validated AES support - up to 2 Mbps for point-to-point or multipoint calls

Choice of single or dual high resolution displays – For a natural meeting environment. Coupled with the high fidelity audio system which delivers 270W of total power, with a powerful amplifier, subwoofer, and two (2) satellite speakers

ViewStation FX is the highest performance, set-top video conferencing system in the Polycom ViewStation product line.

With integrated MP*Plus*, multipoint functionality for IP, ISDN and mixed networks, 2 Mbps support over IP and ISDN, and extensive feature support for auxiliary cameras, VCR's and audio-add over analogue telephone, the ViewStation FX is ideal for conference rooms, boardrooms, and classrooms planning multipoint conferences. Polycom video conferencing and collaboration solutions provide superior audio pickup with 360-degree microphone arrays that enable meeting participants to be heard from anywhere in the room. With an RS-232 control/ data port, optional network support for ISDN and private networks (V.35 RS-530, RS-449, with RS-366 dialling), and standard-based AES encryption (NIST/FIPS validated), the FX can be configured to meet your every demand.

With multiple monitor and projector support, the FX offers and unmatched experience for lifelike multipoint conferencing. For going beyond face to face meetings, laptops can be quickly connected to the FX to make sharing high resolution (XGA) content and PC audio as easy as pushing a button.

The ViewStation FX is available with the flexible Polycom Media Centre, which offers high-end performance, large displays and precision audio – create a quality video meeting environment, anywhere you need it, quickly and easily. Choose dual displays (XGA/TV grade) for sharing high quality video and high-resolution meeting data from remote or local viewers

The performance of the ViewStation FX. The power of Polycom conferencing and collaboration solutions.

With integrated video, voice, data, and Web capabilities, only Polycom solutions let you connect, conference, and collaborate any way you want. It's our commitment to making distance communications as natural and interactive as being there. Work faster, smarter, and more efficiently with the Polycom ViewStation FX and other Polycom conferencing and collaboration solutions.

POLYCOM®

Polycom ViewStation FX Specifications

User Interface
- User-friendly graphical interface
- Customisable home screen
- Custom logo on main screen
- Administrator controlled speed dial numbers accessible from custom logo
- Kiosk mode for custom applications
- Speed Dial List
- Alert Signal on home page
- Keypad audio dialling confirmation
- Do Not Disturb (On/Off)
- Web interface
- Picture-in-Picture (PIP) On/Off, Automatic

Remote Control
- Enhanced, grip-sensitive remote control
- Quick buttons for most common tasks
- Colour-coded buttons grouped by functionality

Video Features
- Intelligently selects frame rate and video algorithm for best performance video
  - Up to 30 fps and 60 fields per second
- Automatic VCR recording of all endpoints based on the person who is talking
- Automatic Picture-in-Picture (PIP)
- See graphics content and far video on a single monitor
- MGC™ Click & View™ for individual screen layouts in MGC bridge calls

Video Standards & Annexes
- H.261: D
- H.263+: F, I, J, L, N, T
- H.263++: U, W
- H.264**
- ITU 60 fields per second: Letterbox

Video Inputs: Main Camera + 3 Connectors
- 1 x S-Video; 4-pin mini DIN (Second camera with PTZ control)
- 1 x S-Video; 4-pin mini DIN (Document camera)
- 1 x Composite; RCA/Phono (VCR)

Video Outputs: 7 Connectors
- 4 x S-Video; 4-pin mini DIN (Support for 4 independent monitors)
- 1 x Composite; RCA/Phono (Main monitor)
- 1 x Composite; RCA/Phono (VCR)
- 1 x XGA (Graphics display)

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

Video Resolution
- Interlaced video (60/50 fields full-screen video for NTSC/PAL): Letterbox
- 4CIF (704 x 576)
- CIF (352 x 288)
- QCIF (176 x 144)
- SQCIF (128 x 96)
- Display aspect ratios: 4:3

Main Camera
- Ultra-quiet, ultra-fast action pan/tilt/zoom (PTZ)
- Tilt Range: +/- 25° (Up/Down)
- Pan Range: +/- 100° (Left/Right)
- Zoom: 12x Zoom (10x optical & 1.2x digital); f=4.2 to 42mm
- Horizontal field of view: 65°
- Total horizontal field of view: 265°
- Auto focus
- Automatic white balance
- Camera presets: 20 Local camera 10; Far-end camera 10
- Voice activated camera positioning to 10 presets

Audio Features
- Full-duplex audio
- Instant Adaptation Echo Cancellation
- Automatic Gain Control (AGC) – voice activated
- Automatic Noise Suppression (ANS)
- Built-in tonal speaker test
- Real-time audio level meter
- Audio mixer: Mike, VCR, telephone, line-in
- Ability to talk over VCR audio

Audio Protocols
- 7 kHz bandwidth with G.722.1, G.722 on IP/ISDN
- 3.4 kHz bandwidth with G.711, G.728 on IP/ISDN

Audio Inputs: 5 Connectors
- 1 x RJ-9 to microphone arrays
- 2 x RCA input for VCR
- 1 x RCA input for mixer
- 1 x RJ-11 for analogue speaker telephone
- Integrates with Polycom Vortex® installed voice products

Audio Outputs: 5 Connectors
- 2 x RCA for main audio
- 2 x RCA for VCR record
- 1 x RJ-11 for analogue speaker telephone
- Integrates with Polycom Vortex installed voice products

Digital Tabletop Microphone Array
- 360-degree voice pick-up
- Cardioid elements per microphone array: 3
- Integrated mute button
- Can be mounted to ceiling or wall
- Number of microphone arrays in base unit: 2

People+Content™ Collaboration
- Receive or Transmit dual images (View/Send people and high-resolution content simultaneously)
- Dual audio (Transmits audio from room microphones and laptop simultaneously)
- Supports IP, ISDN and Serial calls
- Supports People+Content dual streams from any endpoint (not just host site)
- Maximum graphics resolution: 1280 x 1024, 60 Hz Input 1280 x 1024, 60 Hz Output
- Table-top audio input for laptop*
- Second table-top projector output*
- Triple 10/100 table-top Ethernet hub*

Other Collaboration Solutions
- PC Presents™ for Microsoft® PowerPoint®
- Polycom SNAP™
- T.120 Microsoft NetMeeting® support over ISDN calls
- Streaming in and out of a call compatible with Apple® QuickTime®, Cisco® IP/TV

Content Resolutions
- SXGA (1280 x 1023), XGA (1024 x 768), SVGA (800 x 600), VGA (640 x 480)
- Up to 4CIF with motion
- Up to 16CIF still images (H.263)
- Up to 4CIF H.261 Annex D still images

Network Features
- Automatic IP/ISDN calling
- Polycom OneDial™ intelligent call management attempts call on preferred network (IP or ISDN) and automatically rolls over to secondary network if needed
- Down speeding over IP and ISDN
- IP address conflict warning
- Maximum call length digital timer
- Auto SPID detection and configuration
- Software upgradeable Inverse Multiplexer (IMUX)
- PathNavigator™ support for easy call placement and network cost optimisation
- TCP/IP, DNS, WINS, DHCP, ARP, HTTP, FTP, Telnet
- SNMP for enterprise management
- T120 interface for Microsoft NetMeeting
- Chair control from endpoints or host systems on IP and ISDN

Bandwidth
- Maximum Data Rate IP or Serial: Up to 2 Mbps
- Maximum Data Rate ISDN: Up to 2 Mbps

Network Interfaces Supported
- Ethernet port: Dual (10/100 Mbps)
- Integrated analogue speakerphone for audio add-in
- ISDN BRI (Basic Rate Interface) Quad BRI*
- ISDN PRI (Primary Rate Interface) T1/E: PRI*
- Serial Network Interface (V.35/RS-530/RS-449 with RS-366 dialling)
- Wireless LAN support via Ethernet port*
  - Compliant with IEEE 802.11b or 802.11g
  - Support for 64-bit to128-bit encryption (WEP)
  - Infrastructure or ad hoc mode

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

Embedded MultiPoint
- Embedded MultiPoint Capacity: 5 sites (4 IP/ISDN sites + 1 telephone)
- Supports mixed multipoint calls: IP, ISDN, analogue telephone
- Supports IP and analogue telephones
- Automatic IP and ISDN MP down speeding
- Automatic mixed IP/ISDN down speeding
- Dial-in and Dial-out during MP calls
- Continuous presence - see all locations
- Voice switched - view current speaker
- Automatic MPPlus presentation modes to automatically switch between presenter and continuous presences modes
- Cascading up to 14 sites (10 IP, ISDN and mixed sites + 4 telephones)
- Password protection for incoming calls
- Audio bridge: 5 sites (4 IP + analogue)

Quality of Service and Experience – iPriority™
- Video and Audio Error Concealment
- IP Precedence (ToS)
- Diffserv DSCP (CoS)
- Dynamic Bandwidth Allocation
- Proactive Network Monitoring
- Packet and jitter control
- Network Address Translation (NAT) support
- Automatic NAT discovery
- Configurable video/audio/FECC service value
- Asymmetric speed control
- TCP/UDP fixed-port firewall support
- Lip synchronisation
- Echo cancellation and suppression
- Auto gatekeeper discovery
- Automatic gateway dialling profiles
- Specify outbound call routing for gateway/ISDN
- Closed captioning and text chat support both in and out of calls

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 dialling
- Account validation number entry
- Secure password authentication
- Unique factory default passwords
- Administrator password
- H.243 MCU password
- Do not disturb control for point-to-point calls
- Auto-Answer Point-to-Point (On/Off)
- Password protect individual menu screens
- SNMP security alerts for failed and successful password authentication attempts
- Ability to disable remote interfaces: FTP, Telnet, HTTP, SNMP
- Ability to disable mixed network calls

Embedded Encryption*
- Advanced Encryption Standard (AES)
- FIPS validated by National Institute of Standards & Technology (NIST) certified agency
- 128-bit key length
- Standard-based AES H.325 version 3 (IP)
- Standard-based AES H.233/H.234 (ISDN/Serial)
- Maximum Encrypted bandwidth: 2 Mbps
  - IP, ISDN, Serial
- Automatic key generation and exchange
- Supported in People+Content
- Supported in point-to-point and multipoint calls

Directory Services
- 10,000+ number global directory*
- 1,000+ number local directory
- Limitless multipoint entries
- Live address book with Polycom Global Directory Services automatically and quickly updates directory with address changes, new endpoints, or systems being turned off*
- Polycom Global Directory Services integrates with Active Directory/LDAP*
- Automatic ISDN localisation of calls

System Management
- SNMP management
- Diagnostics and software upgrades via PC, LAN
- Software upgrades via ISDN call
- Integrated remote Web management
- Remote administrator video-only monitoring of room or calls from integrated Web server (enabled/ disabled from endpoint for security)
- Place a call from Web interface
- System configuration from Web interface
- Call Detail Record (CDR) – Reports calls made from the system along with call statistics
- Web interface for viewing CDR data
- Downloadable CDR files for processing
- Account number validation at call initiation integrated with Polycom Global Management System™ for billing purposes*
- Administrator-configurable dialling speeds
- Complete support for The Polycom Office:
  - Polycom Global Management System*
  - Polycom OneDial*
  - Polycom PathNavigator*
  - Polycom Conference Suite*
  - Polycom MGC*

RS-232 data port
- Control port for custom integration with remote devices such as Crestron and AMX control systems
- Communication port for transmission of serial data (e.g. medical devices) over ISDN calls

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.231 in multipoint calls
- H.331 broadcast over Serial Network Interface*
- Bonding, Mode 1

Language Support
- Number of Languages Supported: 9
  - Chinese, English, French, German, Italian, Japanese, Norwegian, Portuguese, Spanish
- Translated documentation
- Translated user interface
- Translated keypad audio dialling confirmation
- Translated web interface
- Translated remote control

Electrical
- Auto sensing power supply
- Operating voltage/power: 90-260 VAC, 47-63 Hz/40 watts

Environmental Specifications
- Operating Temperature: 0 to 40° C
- Operating Humidity: 10 to 85% R.H. non-condensing
- Non-Operating Temperature: -40 to 70° C
- Non-Operating Humidity (Non-condensing): 10 to 90%

Physical Characteristics
- Base Unit Dimensions (WxHxD): 33 x 15 x 23 cm
- Base Unit Weight: 2.7 kg / 6.0 lbs

Warranty
- Parts and labour: Three-year

* Optional
** Planned for Release 6.0 in Q1 2004

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