

# Polycom® ViewStation® FX

*High-performance video conferencing for the most demanding applications*



## Highlights

**The industry leader** – The most popular and widely deployed group video conferencing platform in the world

**Superior video quality** – With ITU standard, 60 fields per second, letterbox near TV-quality video, and Polycom Video Error Concealment (PVEC) designed to counter real-world network packet loss

**Clear 360-degree, full duplex digital audio** – With noise suppression, echo cancellation, and automatic gain control

**Maximum call flexibility** – Support multipoint conferences with up to 14 video and audio sites through the embedded MCUs when cascading (10 sites on any mix of IP or ISDN, plus four regular telephone connections)

**See presenter and live, high-resolution multimedia presentation** – People+Content™ displays video of the presenter along with live, high-resolution XGA PC graphics and sound between ViewStation FX, ViewStation 4000, iPower™, and MGC bridges

**Built-in automatic MPPlus presentation modes** – Display modes automatically switch between presenter and continuous presence – like a live TV news show

**Security you can trust** – Independently verified and tested for secure use in corporate and classified environments

**ViewStation FX is the highest performance, most feature-rich set-top group video conferencing system in the Polycom ViewStation product line.** ViewStation FX delivers near TV-quality video and superior audio to meet the most demanding video communications needs for conference rooms, boardrooms, and classrooms.

Polycom video conferencing and collaboration systems provide advanced technology specifically designed for video conferencing, including superior audio pickup with 360-degree microphone that enables meeting participants to be heard from anywhere in the room. Polycom's interface is easy to use with on-screen graphics, and easy to navigate with color-coded remote controls. Going beyond face-to-face meetings, laptops can be quickly connected to Polycom video systems with dedicated devices that make sharing content as easy as pushing a button. These high-quality Polycom systems are all part of The Polycom Office.

## High-quality video communications for The Polycom Office™

With integrated video, voice, data, and Web capabilities, The Polycom Office is the only solution that offers you an easy way to 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 better with the ViewStation FX and The Polycom Office.



Video

*Connect. Any Way You Want.*

# Polycom ViewStation FX Specifications

Polycom video conferencing and collaboration systems support Polycom network infrastructure and management systems. With the Polycom MGC, Polycom video systems can participate in large multipoint conferences. Polycom PathNavigator™, among many other features, enables easy dialing from Polycom video systems with OneDial™. Video systems can be centrally managed and controlled with Polycom Global Management System™, and the Global Address Book enables easy access to directory services. Polycom video conferencing and collaboration deliver high-quality video and integrated solutions for The Polycom Office.

## Technical specifications

- ITU H.323 and H.320 compliant
  - Cisco AAVID certified
  - People+Content allows dual display of video and PC graphics
  - Conference on Demand initiates unscheduled MGC calls from the endpoint
  - Call Detail Records enables billing of calls and tracking with Global Management System
  - Polycom Video Error Concealment (PVEC) for improved video quality on networks with packet loss
  - Global Management System for centralized management
  - Global Directory Server for live global address book
  - PathNavigator for easier call placement and network cost optimization
  - MGC Click&View integration for individual screen layouts
- ### User interface
- User-friendly graphical user interface that is easy to read from a distance
  - Handheld, ergonomic remote control
  - Custom logo on home screen with speed dial numbers
  - Web interface (Internet Explorer 5.5 & 6.0; Netscape Navigator 6.0 & 6.1)
- ### Bandwidth
- Max data rate H.320: up to 2 Mbps
  - Max data rate H.323: up to 2 Mbps
- ### Video standards
- H.261, Annex D
  - H.263+ Annexes: L, F, T, I, J, U, U
  - H.263+ Annex D
  - ITU 60 fields per second letterbox
- ### Video features
- 4-monitor support to simultaneously display full-screen video from up to 4 endpoints, plus PC content on a separate XGA projector
  - Automatic VCR recording of all endpoints based on the person who is talking
  - Automatic Picture-in-Picture (PIP)
- ### Video inputs (3 inputs plus camera)
- Integrated main camera
  - 1 x MiniDin S-Video (document camera)
  - 1 x RCA/Phono, composite (VCR)
  - 1 x MiniDin connector (2nd camera with PTZ camera control)
- ### Video outputs (7 outputs)
- 4 x MiniDin S-Video (Support for 4 independent monitors)
  - 1 x RCA/Phono, composite (monitor)
  - 1 x RCA/Phono, composite (VCR)
  - 1 x XGA (projector)
- ### Video formats
- NTSC, PAL, XGA, SVGA, VGA
- ### Integrated main camera
- Ultra-quiet, ultra-fast 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
  - 20 camera presets (10 local and 10 far end)
  - Voice tracking to presets
  - Far end camera control
- ### People+Content
- Dual images (transmits people and high-resolution content simultaneously)
  - Dual audio (transmits audio from room microphones and PC simultaneously)
  - Available on IP and ISDN
  - Works from any endpoint with embedded MCU (not just host site)
- ### Live people video resolution
- 4CIF (704 x 576)
  - CIF (352 x 288)
  - QCIF (176 x 144)
- ### Live PC content resolution
- XGA (1024 x 768)
  - SVGA (800 x 600)
  - VGA (640 x 480)
  - 4CIF or CIF for S-Video and composite inputs
- ### Still image transfer
- CIF, 4CIF (H.261 Annex D), 16 CIF high resolution (H.263)
- ### Optional Visual Concert™ FX
- Tabletop device (for audio and video input from PC or Macintosh)
  - Input: up to 1280 x 1024, 60 Hz
  - Output: up to 1024 x 768, 60 Hz

- 1 x audio input for PC
  - 1 x video input for PC up to 1280 x 1024, 60 Hz
  - 1 x video out for projector up to 1024 x 768, 60 Hz
  - 3 x 10/100 Ethernet hub
- ### Other content input options
- pc Presents for Microsoft PowerPoint presentations from your desktop
  - Polycom SNAP for high-resolution graphics capture of PC content

### Audio standards

- 7 kHz G.722, G.722.1
- 3.4 kHz with G.711, G.728

### Audio features

- Instant adaptation echo cancellation
- Automatic Gain Control (AGC) – voice activated
- Automatic Noise Suppression (ANS)
- Built-in tonal speaker test
- Audio level meter
- Audio mixer
- Telephone POTS support
- Ability to talk over VCR audio

### Digital tabletop microphone

- 360° voice pickup, unidirectional performance
- Automatic room noise reduction
- Gated mixer built into microphone
- 3 hyper-cardioid digital microphones in each microphone pod
- Button on each microphone pod
- Includes 2 microphone pods
- Can be mounted to ceiling or walls

### Audio inputs (4 inputs)

- RJ-9 to microphone (daisy chain up to 2 microphone pods)
- 2 x RCA / phono line level (VCR)
- 1x RCA / phono line level (mixer/auxiliary)

### Audio outputs (4 outputs)

- 2 x RCA / phono line level (main audio)
- 2 x RCA / phono line level (VCR)

### Frame rates (point-to-point)

- 15 fps – 30 fps
- Intelligently selects frame rate for best video performance
- Near TV-quality letterbox 60/50 fields video for NTSC/PAL at 512 kbps and above

### Embedded MPPIus

- Supports mixed combinations of IP, ISDN, and analog telephone calls
- Supports IP telephones
- Supports normal analog telephones
- Automatic IP and ISDN downspeeding
- Dial-in and dial-out during MPPIus calls
- Continuous presence or voice switched
- Automatic MPPIus Presentation modes to automatically switch between presenter and continuous presence modes
- Chair control from endpoints or host system on IP
- Chair control from endpoints or host system on ISDN
- Embedded MPPIus for 5 sites (4 IP/ISDN sites + 1 POTS audio)
- Cascade up to 14 sites (10 IP/ISDN sites + 4 POTS audio)
- Mixed network cascading
- Password protection for incoming calls
- Supports People+Content dual streams from any endpoint (not just host site)

### Network features

- Automatic H.320/H.323 calling
- Downspeeding over IP and ISDN
- OneDial intelligent call management attempts call on preferred network (IP or ISDN) and automatically rolls over to secondary network if needed
- Maximum call length timer
- Auto SPD detection and configuration
- NATO standard KG-194/KV-7 encryptor support with on-screen and address book dialing
- Software upgradeable Inverse Multiplexer (IMUX)
- Dial ISDN lines separately or simultaneously

### Quality of service and experience - iPriority™

- Polycom Video Error Concealment (PVEC) for concealing packet loss
- IP Precedence (ToS)
- DiffServ DHCP (CoS)
- Dynamic bandwidth allocation
- Proactive network monitoring
- Packet and jitter control
- Network Address Translation (NAT) support
- Automatic NAT discovery
- Asymmetric speed control
- Fixed TCP/UDP port firewall support
- Lip synchronization
- Echo cancellation
- Echo suppression
- Auto gatekeeper discovery
- Automatic gateway dialing profiles
- Specify outbound call routing for gateway/ISDN
- Closed captioning and text chat support both in and out of calls
- Keypad audio confirmation – makes dialing easy

### Security features

- Independently tested for endpoint security
- Enhanced integration for independently certified corporate and classified encryption devices
- Secure password authentication
- Unique factory default passwords
- Administrator password
- Dial-in meeting password
- Do not disturb meeting feature for point-to-point

- Do not disturb meeting feature for MPPIus calls
- Select which menu screens to password protect
- SNMP security alerts for failed and successful password authentication attempts
- Option to disable remote interfaces (FTP, SNMP, Telnet, HTTP, streaming)
- Option to disable mixed protocol MPPIus calls

### Network interfaces supported

- 2 independent 10/100 Ethernet ports for IP (LAN, DSL, cable modem)
- Integrated Ethernet switch
- 1 x POTS for voice
- Optional Quad BRI (Basic Rate Interface)
- Optional PRI (Primary Rate Interface) T1/ E1
- Optional 2 port serial module (V.35/RS-530/RS-449 with RS-366 dialing)
- Optional wireless LAN support via Ethernet port

### Ethernet connectivity

- TCP/IP, HTTP, DNS, WINS, SNMP, DHCP, ARP, FTP, Telnet
- T.120 interface for Microsoft NetMeeting
- Internal live video unicast or multicast stream to Apple Quicktime, Cisco IP/TV

### Directory services

- 1000+ number local directory
- 10,000+ number global directory
- Unlimited MPPIus entries
- Live address book with Polycom Global Address Book automatically and quickly updates directory with address changes or new endpoints
- Live address book with Polycom Global Address Book automatically and quickly removes endpoints from directory if they are turned off
- Polycom Global Address Book integrates with Active Directory / LDAP
- Automatic ISDN localization of calls

### System management

- SNMP management
- Software upgrades via PC, IP, or in an ISDN video call
- Integrated Web server for remote management and Microsoft PowerPoint presentations
- Remote administrator video-only monitoring of room or calls from integrated Web server (enabled/disabled from endpoint for security)
- Built-in extensive Call Detail Records (CDR) that do not require separate 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 Global Address Book
  - Polycom OneDial
  - Polycom PathNavigator

### Other ITU supported standards

- H.221 communications
- Bonding, mode 1
- H.281 far-end camera control
- H.225, H.245
- Annex Q standard for FECC in H.323 calls

### Data port

- RS-232 control port/data communications port (1200 baud to 115k baud asynchronous)
- API for custom integration with remote devices such as Crestron™ and AMX™ control systems

### 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. noncondensing
- Nonoperating temperature: -40 to 70° C
- Nonoperating humidity (noncondensing): 10 to 90%

### Physical characteristics

- Dimensions (W/H/D): 33 cm x 15 cm x 23 cm
- Base unit weight: 2.7 kg (6 lbs)

### Language support

- Chinese, English, French, German, Italian, Japanese, Norwegian, Portuguese, Spanish

### Warranty

- Three year parts and labor



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*Specifications subject to change without notice.*



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