

# Polycom® MGC Video Multipoint Control Unit (MCU)

## Video Conferencing

### BENEFITS

- **Unique Multimedia Solution** Video, voice and data conferencing in one platform with integrated web collaboration
- **Multi-Way Transcoding** Endpoints connect at their optimal capabilities and conference connectivity is improved
- **Full Audio Transcoding** Improved audio quality that comes standard with your system
- **Advanced Continuous Presence** Customize your meetings with 23 layouts to choose from
- **Virtual Conference Suite** Reservationless/Adhoc conferencing capabilities
- **Data Collaboration Support** For mixed networks (ISDN and IP) conferences
- **Comprehensive Management Suite** Browser-based and desktop-based applications tailored to meet all your scheduling and management requirements

## Unified Conferencing

A simplified approach to video, voice, web and data conferencing.

Polycom redefines multipoint video conferencing with a premier multi-network, reliable and easy-to-use video conferencing bridge and gateway. Polycom's Video MCU is built on the industry-leading MGC platform, the only solution to provide video, voice, web and data conferencing over multiple networks – IP and ISDN – using one platform.

This single platform approach provides customers with investment protection, cost effective resources, and a single management solution for unified conferencing.



## MGC Video Multipoint Control Unit (MCU)

### Multipoint Video Solutions just for IP

Today, many video conferencing users are migrating to IP or new users are implementing IP only video networks. Polycom has developed video multipoint features specifically for

IP networks. Features such as IP Continuous Presence and QoS are included with Polycom's multipoint IP solutions and deliver enhanced support for IP conferencing.

Also to ensure interoperability with Cisco Networks, Polycom's Video MCU is certified on the IP video conferencing solutions track for the Cisco AVVID Partner Program.

#### **Leading Solutions for IP:**

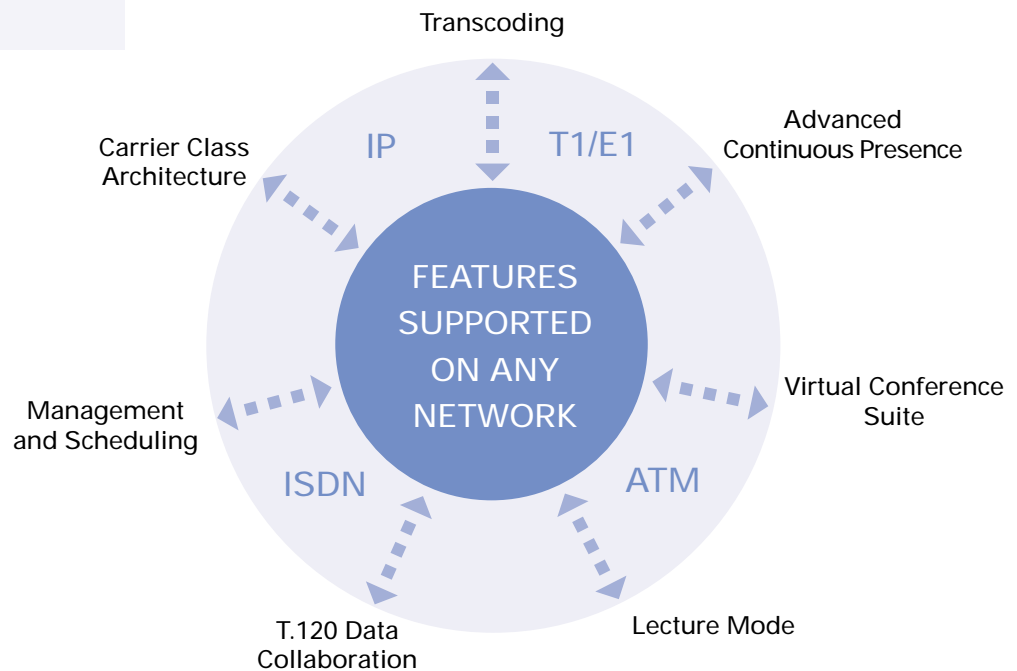
- QoS Support for IP Networks
- IP Continuous Presence
- T.120 functionality for IP sites
- Cisco AVVID Certified

### Advanced Multipoint Features Available for Every Network – IP and ISDN

The MGC platform provides enhanced conferencing features regardless of the network you are using. The multi-network capability of the MGC platform also enables a similar feature set across all networks, providing better utilization of resources, investment protection and ease of use for the end user.

#### **MGC Platform Benefits**

- Same feature set across all networks
- Cost effective and easy migration from ISDN to IP
- Support of video, voice, web and data from one platform
- Flexible
  - IP Only
  - ISDN Only
  - Mixed
- Scalable
- Feature-Rich
- Easy to Support



Polycom's Video MCU - Taking Advantage of the MGC Platform and Providing the Unified Conferencing Experience

# MGC Video Multipoint Control Unit (MCU) Specifications

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## Transcoding

### Polycom Transcoding Benefits:

- Simplifies Calling
- Shortens Call Set-Up Time
- Improves Call Connectivity Rates
- Provides Optimum Conference Quality
- Eliminates the Need for Endpoint Pre-Certification
- Improves Connectivity for Adhoc Video Conference Calls

### End users can focus on the meeting content not meeting setup

The Polycom Video MCU provides complete Transcoding. Transcoding is a unique core technology of the Polycom Video MCU that enables the MCU to intelligently recognize all the inherent capabilities of endpoints and connect them at their OPTIMAL capability.

### Polycom Transcodes:

- Networks – IP/H.323, ISDN/H.320
- Network Speed – 128kbps up to 2Mbps
- Resolution - QCIF or CIF
- Video Algorithms – H.261 and H.263
- Frame Rate - 7.5fps - 30fps
- Data Rates - 6.4 - 46.4Kbps MLP, 64 - 128Kbps HMLP
- Audio Algorithms (Standard on all Systems)
  - G.711, G.722, G.722.1, G.723, G.728, Siren 7

## QoS for IP

Polycom's Video MCU provides Packet Commander, an inherent QoS service available with the MGC Platform. Packet Commander, IP precedence and IP DifSrv support are standard features that provide IP quality of service – a requirement for Network Managers implementing voice and video over IP networks.

### What does Packet Commander do?

- Reorders incoming packets if they arrive to the MCU out of order
- Intercepts any duplicate packets
- Optimizes audio and video packets by inserting a blank video frame to uphold the integrity of the video stream or inserting white noise to uphold the integrity of the voice stream
- Monitors the video and audio streams and synchronizes the video and audio packets

## Advanced Continuous Presence

Continuous Presence allows you to view multiple sites on the screen at the same time, making your video conference meetings seem more like face-to-face meetings. Polycom's advanced continuous presence is unique because Polycom provides the most Continuous Presence layouts and allows the user to dynamically modify their multipoint video call depending on the meeting.

### Polycom Advanced Continuous Presence Features:

- Available for any network type – IP or ISDN
- 23 different layouts available including self view layout and same view layout
- Landscape or portrait layouts
- Change layouts on the fly
- Modify each Continuous Presence window either fix a site into a certain window or allow the window to be voice-activated
- Supported in lecture mode
- Supports sites running up to 30 fps

## IP Continuous Presence

IP Continuous Presence comes standard with every IP Video MCU

- Two layouts available: 2-way and a traditional quad layout
- Flexible layouts – change layouts on the fly
- Flexible windows – Fixed windows or voice-activated windows
- High quality IP Continuous Presence with 30 fps support

## Lecture Mode

Lecture Mode provides the conference lecturer with more flexibility. Lecture Mode allows the lecturer to view all the participants of the conference while the participants only view the lecturer. This is another feature that makes video conference meetings more like face-to-face meetings.

### Lecture Mode Features:

- A lecturer can view participants in Continuous Presence or voice activated conference
- A lecturer can choose the time interval of switching between participants
- Available with Transcoding and Continuous Presence
- Suspend Lecture Mode when one of the participants begins to speak
- Activate or de-activate during the conference

# Polycom® MGC Video Multipoint Control Unit (MCU)

## Video Conferencing

### Virtual Conference Suite

Virtual Conference Suite is a set of features that simplify conferencing and provides users with reservationless conferencing capabilities.

#### Virtual Conference Suite Features:

- **Meeting Room** – Resources on the MCU are available to the user whenever they need to have a conference. This allows end users to have reservationless/adhoc meetings without reserving resources on the MCU in advance.
- **Single Number per Conference** – The MCU will set aside one number for the conference instead of giving each participant or site a different dial-in number.
- **Auto Detect** – Detect participant capabilities without predefining the conference.
- **Auto Extend** – If the sites in a conference have not disconnected from the call, the MCU will automatically extend the conference.
- **Auto Terminate** – If all the sites in the conference have disconnected, the MCU will disconnect the conference and free up the resources.

### T.120 Data Collaboration

T.120 Data Collaboration is an integrated solution within the MGC Platform, requiring no additional server. Data Collaboration with T.120 allows users to share applications and documents in real-time during your videoconference.

- Available for mixed network videoconferences (IP and ISDN)

### Management & Scheduling Options

The Polycom Video MCU provides a complete suite of management and scheduling solutions.

- **MGC Manager** – a windows-based management and scheduling package - Included with the MGC Platform.
- **WebCommander** – a web-based management and scheduling package
- The MGC platform includes a fully featured API for fast integration with third party applications

### Technical Specifications

#### Audio Support:

- G.711a, G.711u, G.722, G.722.1, G.723.1, G.728, Siren 7

#### Video Support:

- H.261, H.263, H.263+

#### Network Interface Support:

- 10/100 Mbps Ethernet
- 2 PRI Interface ISDN & Dedicated, T1/E1
- 4 PRI Interface ISDN & Dedicated, T1/E1
- 8 PRI Interface ISDN & Dedicated, T1/E1
- V.35/RS-449/EIA-530

#### 8-Slot Chassis:

- Height 40.8cm (16 inches)
- Width 38.1cm (15 inches)
- Depth 50.2cm (19 inches)
- Optional 19 inch rack mount kit
- Power – 120-230VAC, 50/60Hz

#### 16-Slot Chassis:

- Height 40.8cm (16 inches)
- Width 58.4cm (23 inches)
- Depth 50.2cm (19 inches)
- Weight 43Kg
- Power – 3 load sharing 110-240 VAC, 50/60 Hz, 48 DC
- NEBS Compliance

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Please consult your Polycom representative for specific feature availability

