



# Polycom® VoIP Products

The Power of a Network. The Simplicity of a Phone.

Polycom is a leading independent supplier of standards-based Voice over IP (VoIP) phones. Our phones are fully interoperable with leading IP PBX and Softswitch platforms<sup>1</sup>, hence our customers can have a variety of end-to-end, tightly integrated VoIP solutions to choose from. VoIP solutions that feature Polycom phones provide a high-quality, rich communications experience, deliver productivity-enhancing new applications, and offer significant cost savings through consolidation of network costs for voice and data, and elimination of costs of phone moves, adds, and changes.

#### Polycom Offers the Right VoIP Endpoints to Meet Your Business Communication Needs

Polycom provides a wide range of VoIP phone models plus a choice of supported protocols and call servers to match the unique requirements of your organization. The Polycom VoIP product portfolio includes the SoundPoint® IP family of desktop phones, an attendant console based on the SoundPoint IP 601/650 and Expansion Module, and the SoundStation® IP conference phone. Our phones are engineered to deliver a superb communications experience. They offer outstanding sound quality, advanced functionality, ease of use, security, tools for efficient provisioning and upgrades, and protection of your investment over time.

#### Outstanding Sound Quality

Polycom VoIP phones have earned an excellent reputation for unrivaled sound quality and full-duplex speakerphone performance. Polycom's revolutionary HD Voice technology is taking the quality of voice communications to the next level. Polycom HD Voice leverages wideband audio for

over twice the voice clarity, Polycom's patented Acoustic Clarity Technology 2, as well as best-in-class system design to deliver life-like interactivity, richness, and clarity of voice calls\*. Polycom VoIP phones also incorporate features to ensure superb voice quality on the network. They include IEEE 802.1 p/Q, Layer 3 TOS, and DSCP<sup>4</sup> Quality of Service support, dynamic jitter buffer, and sophisticated packet loss concealment algorithms. Polycom VoIP phones enhance the productivity of your calls because you spend less time trying to hear what other people are saying, and more time communicating with them.

#### Advanced Functionality<sup>2</sup>

Polycom's cutting-edge software enables enhanced call handling, security, and advanced applications on Polycom VoIP phones. Shared call/bridged line appearance; multiple call- and flexible line appearances; busy lamp field (BLF)<sup>2</sup> functionality; HTTPS<sup>4</sup> and TLS<sup>3</sup> security; support of Microsoft LCS 2005<sup>3</sup> for telephony and presence are just a few of the many software features<sup>5</sup> developed to perfect the user experience.

#### Ease of Use

Polycom VoIP endpoints offer an easy transition from legacy PBX and Key Systems to the world of IP telephony. Our phones boast an intuitive user interface, encompassing a large high-quality LCD, intuitive menu navigation, and a combination of familiar dedicated feature keys and context-sensitive soft keys for one-button access to essential telephony features.

#### Efficient Installation, Provisioning, and Upgrades

Polycom VoIP phones are designed to make installation, configuration, and upgrades as simple

and efficient as possible. The phones can be centrally configured and upgraded in the field from an FTP, TFTP, HTTP<sup>4</sup>, or HTTPS<sup>4</sup> server and support provisioning server redundancy<sup>3</sup>. Polycom desktop VoIP phones boast dual-port Ethernet switches for LAN and PC connection, so you can leverage existing CAT 5 wiring and avoid additional cabling expenses. Furthermore, all Polycom VoIP phones provide a choice of powering options and support both an external AC adapter and Power over Ethernet (Cisco® Inline Power and IEEE 802.3af)<sup>6</sup>.

#### Investment Protection

Polycom products are your future-proof choice for business IP communications. Our standards-based phones can be upgraded to new software and firmware in the field to consistently meet your evolving needs, whether you must switch to a new call server solution, or just prefer to keep your organization on the cutting edge of developments in IP telephony.

#### Make Great Things Happen with Polycom's VoIP Solutions

In today's Internet driven world, the ability to conduct real time communication and collaboration has become critical to an organization's survival. As the market leader in voice, video, data and Web solutions, our award-winning conference technology makes it easy for people to interact and maximize productivity — over any network, in just about any environment, anywhere around the globe. That's why more organizations worldwide use and prefer Polycom conferencing solutions. Because when people work together, great things happen. See how you, too, can achieve great things with Polycom's VoIP Solutions.

\* HD Voice is currently available on Polycom SoundPoint IP 650 only.

<sup>1</sup> Please visit <http://www.polycom.com/technpartners.htm> for a full list of supported IP PBX and Softswitch solutions.

<sup>2</sup> Features must be supported by the call server. Please contact your IP PBX or Softswitch vendor for a list of supported features.

<sup>3</sup> Requires SIP version 2.0.x or higher.

<sup>4</sup> Requires BootROM version 3.0.x or greater.

<sup>5</sup> Not all Polycom VoIP phones support all features. Please refer to the product documentation (user guides and data sheets) for details

<sup>6</sup> SoundPoint IP 430 and 650 only support IEEE 802.3af PoE

# Polycom VoIP Products Comparison



Feature	SoundPoint IP 301	SoundPoint IP 430	SoundPoint IP 501
<b>LCD Display</b>	4 line x 20 character monochrome	132 x 46 pixel graphical	160 x 80 pixel graphical grayscale
Unicode Characters Support		European character set	European character set
<b>SoundPoint IP Expansion Module Support</b>			
<b>Audio Features</b>			
Polycom HD Voice Technology			
Full-Duplex Hands-Free Operation (Acoustic Clarity Technology)		■	■
Wideband Codec Support: G.722			
Narrowband Codec Support: G.711 $\mu$ A And G.729A (Annex B)	■	■	■
Handset Operation	■	■	■
Headset Operation Through Dedicated Port	■	■	■
Voice Activity Detection	■	■	■
Packet Loss Concealment	■	■	■
Acoustic Echo Cancellation		■	■
Background Noise Suppression		■	■
Comfort Noise Fill	■	■	■
Local 3-Way Conferencing	■	■	■
Dynamic Jitter Buffers	■	■	■
<b>Telephony Keys and Features<sup>2</sup></b>			
Lines	2	2	3
Line/Speed Dial Keys	2	2	3
Mute, Headset, and Hands Free Keys	Mute and headset	■	■
Context Sensitive Soft Keys	3	4	4
Display/Menu Navigation Keys	2	5	6
Message Waiting Indicator	■	■	■
Busy Lamp Field (BLF) Functionality	■	■	■
Shared Call / Bridged Line Appearance	■	■	■
Flexible Line Appearance (one or more line keys per extension)	■	■	■
Multiple Call Appearances	■	■	■
<b>Microsoft LCS 2005 Interoperability for Telephony and Presence<sup>3</sup></b>			
Compatibility with Microsoft Office Communicator and Windows Messenger 5.1 Clients	■	■	■
<b>USB Port</b>			
<b>Security Features</b>			
TLS Security <sup>3</sup>	■	■	■
Encrypted Configuration Files <sup>3</sup>	■	■	■
HTTPS Secure Provisioning <sup>4</sup>	■	■	■
URL Syntax for Boot Server Address <sup>4</sup>	■	■	■
Support for "Signed" Software Executables <sup>4</sup>	■	■	■
<b>Networking/Provisioning</b>			
Two-port 10/100 Mbps Ethernet Switch	■	■	■
QoS Support – IEEE 802.1 P/Q, Layer 3 TOS, DSCP <sup>3</sup>	■	■	■
Can be provisioned and upgraded from an FTP, TFTP, HTTP, or HTTPS <sup>4</sup> server; server redundancy supported	■	■	■
<b>Power Options</b>			
AC Power	■	■	■
Power Over Ethernet (Cisco)	■ <sup>5</sup>		■ <sup>5</sup>
Power Over Ethernet (IEEE 802.3af)	■ <sup>5</sup>	Built-in, autosensing	■ <sup>5</sup>
<b>Protocol Support</b>			
IETF MGCP V1.0 With NCS	■		■
SIP (RFC 3261)	■	■	■

<sup>2</sup> Most features must be supported by the call server. Please contact your IP PBX or Softswitch vendor for a list of supported features.

<sup>3</sup> Requires SIP version 2.0.x or higher.

<sup>4</sup> Requires BootRom 3.0 or higher.

<sup>5</sup> With optional cable (IEEE: 2200-11077-002, Cisco: 2200-11014-002)

<sup>6</sup> With optional PoE Interface Module (part number: 2200-06630-001)



HDvoice

SoundPoint IP 601

SoundPoint IP 650

SoundPoint IP Expansion Module

SoundStation IP 4000

320 x 160 pixel  
graphical grayscale

320 x 160 pixel  
backlit graphical grayscale

160 x 320 pixel  
graphical grayscale

248 x 68 pixel  
backlit graphical

Up to 3 Expansion Modules

Up to 3 Expansion Modules

Through the host phone

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6 (12 with Exp. Module)  
6 (48 with 3 Exp. Modules)

6 (12 with Exp. Module)  
6 (48 with 3 Exp. Modules)

Through the host phone  
14

1

Mute and hands free

4

4

3

6

6

3

Built-in, autosensing  
Built-in, autosensing

Built-in, autosensing

Through the host phone

Through the host phone

6

[www.polycom.com/voip](http://www.polycom.com/voip)

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Part No. 3726-07681-001 Rev. 09/06