

Polycom® VoIP Products

Frequently Asked Questions

General Questions on Polycom VoIP

Why Polycom VoIP telephones?

Polycom is a leading independent supplier of standards-based Voice over IP (VoIP) endpoints. Polycom VoIP phones are fully interoperable with leading IP PBX and Softswitch platforms¹, so that our customers can have a variety of end-to-end, fully 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 a wide range of VoIP endpoints to meet the unique business communication requirements of our customers. The Polycom VoIP product portfolio includes the SoundPoint® IP family of desktop phones, an attendant console based on the SoundPoint IP 601 and Expansion Module, and the SoundStation® IP 4000 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. Polycom IP telephones are your future-proof choice for business communications.

What is a Technology / Interoperability Partner?

Polycom Technology and Interoperability Partners¹ deliver industry-leading IP telephony servers that provide both traditional phone functionality and advanced features, like unified messaging, presence, and collaboration tools. Polycom's strategy is to ensure that our phones are fully interoperable with Partner platforms, so that

our joint customers can enjoy the benefits of an integrated end-to-end VoIP solution.

Can the phones be used on a non-Partner platform?

In order to ensure interoperability and full business telephony functionality, the SoundPoint IP and SoundStation IP telephones should be operated in conjunction with Partners' IP PBX (customer premise equipment similar to a legacy PBX or Key System) or Softswitch (hosted telephony similar to the traditional home phone service) solution. Polycom does not recommend using the phones in conjunction with call server platforms that have not been certified by Polycom.

Will Polycom VoIP phones work with existing PBX or Key Systems?

While many PBX and Key System vendors now provide optional VoIP gateways that are standards-based, interoperability testing must still be conducted between these systems and Polycom IP phones to ensure proper operation and feature support. Polycom cannot guarantee interoperability with a system that is not provided by one of our Partners.

Which protocol is the best?

There is no one protocol that is better than all the others. Each protocol has different advantages over the others and the choice depends on your business communication needs.

Does the phone have a different hardware design for each protocol?

No. The phones can support various standards-based protocols by deploying different firmware on the same hardware.

Can I reprogram a SoundPoint IP from SIP to MGCP and vice versa?

No, this cannot be done in the field. Please make sure to order the right SoundPoint IP

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



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SKUs, so that they are compatible with the protocol of your call server solution.

Where can the telephones be purchased?

The SoundPoint IP and SoundStation IP phones are available through Polycom Certified VoIP Channel Partners. These Channel Partners have met the stringent requirements pertinent to becoming Polycom-certified, which involves training, testing, and making a commitment to support their customers. Polycom IP phones are also distributed by service providers that offer Polycom IP phones in conjunction with a variety of hosted VoIP services.

The SoundPoint IP and SoundStation IP Telephones

What telephone models are available?

Polycom offers a family of SoundPoint IP desktop phones, the SoundPoint IP Attendant Console Solution, and the SoundStation IP 4000 conference phone.

The **SoundPoint IP 301** is an entry-level two-line desktop phone that supports essential IP telephony features and functionality. With its intuitive user interface, the SoundPoint IP 301 provides an easy transition from legacy PBX and Key Systems to the world of IP telephony. The SoundPoint IP 301's expanded memory enables the support of HTTPS secure provisioning.

The **SoundPoint IP 430** is a two-line desktop IP telephone designed to meet the needs of general business users conducting a low-to-medium volume of calls. The phone boasts a full-duplex speakerphone that provides excellent voice quality and enables two-way simultaneous conversations that are as natural as being there. The SoundPoint IP 430 delivers a robust feature set, including built-in PoE circuitry, graphical

LCD, and support for advanced telephony features and security.

The **SoundPoint IP 501** is a three-line desktop IP telephone that delivers exceptional sound quality. This full-featured, enterprise-grade IP phone is an optimal solution for transactional-type workers conducting a medium-to-high volume of calls. The SoundPoint IP 501 boasts a full-duplex speakerphone with Polycom Acoustic Clarity Technology, large graphical grayscale LCD, and expanded memory to support HTTPS secure provisioning.

The **SoundPoint IP 601** is the ultimate IP telephone delivering unsurpassed voice quality, an advanced feature set, and the expandability to support up to three SoundPoint IP Expansion Modules. Ideal for users requiring multiple lines and advanced features, the SoundPoint IP 601 delivers both traditional telephone capabilities and new, converged applications.

The **SoundPoint IP Expansion Module** augments the user interface of the SoundPoint IP 601 by adding a high-resolution graphical grayscale LCD and 14 illuminated multifunctional keys, configurable as a line appearance or speed dial with busy lamp field (BLF) functionality. The Expansion Module is a cord-free, hot-swappable, plug-and-play solution requiring virtually no configuration.

The **SoundPoint IP Attendant Console Solution**. Based on the SoundPoint IP 601 desktop phone and up to three SoundPoint IP Expansion Modules, the attendant console provides an enhanced user interface and advanced call handling capabilities that help telephone attendants - executive assistants, receptionists, and secretaries - effectively and efficiently manage and monitor a high volume of simultaneous calls.



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The **SoundStation IP 4000** is the market-leading SIP conference phone. Featuring Polycom's award-winning Acoustic Clarity Technology, the SoundStation IP 4000's full-duplex speakerphone provides outstanding voice quality and enables simultaneous two-way natural conversations. The SoundStation IP 4000 supports a broad range of IP telephony features, including directories, call forwarding, hold, transfer, pickup, three-way local conferencing, and presence. With superior room coverage and microphone pickup for small to medium-sized conference rooms, the SoundStation IP 4000 is expandable for larger rooms with optional extension microphones.

What features do Polycom IP phones support?

The SoundPoint IP and SoundStation IP phones are engineered to provide a high-quality, rich and secure communications experience by delivering superb sound quality, an intuitive user interface, and a rich feature set, including shared call / bridged line appearance, multiple call- and flexible line appearances, three-way local conferencing, presence, messaging, and custom ring tones. To ensure a high level of security, all Polycom IP phones support digest authentication, HTTPS secure provisioning, "signed" software executables, TLS security, and encrypted configuration files. Features available on SoundPoint IP phones will vary depending on the model and telephony server that the phone is operated with. Please refer to the respective product datasheets and check with your call server platform provider to determine the list of supported features.

What protocols do Polycom VoIP telephones support?

The SoundPoint IP 301 and 501 support both SIP and MGCP. The SoundPoint IP 430 and 601 currently only support SIP. The SoundPoint IP 600 supports MGCP. The SoundPoint IP Expansion Module is protocol

agnostic and supports the protocol of the host SoundPoint IP 601 (SIP). The SoundStation® IP 4000 supports SIP.

Do the phones come in any other color?

No. The only color available is gray.

What is the SoundPoint IP Expansion Module?

The SoundPoint IP Expansion Module enhances the user interface of the SoundPoint IP 601 with a high-resolution graphical LCD and 14 multifunctional keys that can be configured as a line appearance or speed-dial with busy lamp field (BLF) functionality.

A high-performance attendant console based on the SoundPoint IP 601 and up to three SoundPoint IP Expansion Modules provides a productivity-enhancing solution for telephone attendants - receptionists, administrative assistants, and other "power users" who manage and monitor multiple simultaneous telephone calls on a daily basis.

Which SoundPoint IP models support the Expansion Module?

The SoundPoint IP 601 is the only telephone model that supports the SoundPoint IP Expansion Module.

How many Expansion Modules can be attached to the SoundPoint IP 601?

The SoundPoint IP 601 will support up to 3 Expansion Modules.

How are powering and signaling implemented on the SoundPoint IP Expansion Module?

The SoundPoint IP Expansion Module's powering and signaling are provided by the host phone.



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How does the SoundPoint IP Expansion Module communicate with the host phone and other attached Expansion Modules?

The communications happen through the host phone's and Expansion Modules' infrared ports.

What does it take to install and configure the SoundPoint IP Expansion Module?

Installation and configuration of the SoundPoint IP Expansion Module are very simple, since both power and signaling are taken from the host SoundPoint IP 601 phone. Just snap the Expansion Module onto the host phone – and it works. No extra wires or power supplies are required. Up to three Expansion Modules may be attached to and detached from an idle SoundPoint IP 601 at any time.

Hardware Technical FAQ

What are the powering options for SoundPoint IP and SoundStation IP?

The **SoundPoint IP 301** ships with a standard CAT-5 cable and an AC adapter that plugs into a jack located on the rear of the phone. For Power over Ethernet, both IEEE 802.3af and Cisco Inline Power versions of the optional PoE cable are available for purchase. In addition, SKUs with included PoE cable and optional AC adapter can also be ordered.

The **SoundPoint IP 501** ships with a custom network cable that contains a jack that applies power to the unused pairs in a CAT-5 network cable from a supplied AC adapter. For Power over Ethernet, both IEEE 802.3af and Cisco Inline Power versions of the optional PoE cable are available for purchase. In addition, SKUs with included PoE cable and optional AC adapter can also be ordered.

The **SoundPoint IP 430** and **601** come with a standard CAT-5 cable. The phones ship with an AC adapter that plugs into a jack

located on the rear of the phone. Both the models have integrated support for IEEE 802.3af PoE. In addition, the SoundPoint IP 601 supports Cisco Inline Power.

The **SoundPoint IP Expansion Module** is powered by the host telephone.

The **SoundStation IP 4000** only supports AC adapter as a powering option at this time.

What types of headsets are supported?

SoundPoint IP phones are compatible with amplified headsets REV E. and higher. Direct connect RJ-9 headsets are supported. Please refer to your headset vendor for compatibility information.

Why does the handset and headset volume reset on every call?

The handset and headset volumes both reset following each call to comply with FCC requirements and with the recommendations of the Americans with Disabilities Act. This feature can be disabled through a modification to the configuration file.

Is there a hub or switch in the phone?

All SoundPoint IP phones contain a dual-port 10/100 Mbps Ethernet switch.

Can an additional phone be plugged into the second Ethernet port?

Polycom recommends that in order to maintain voice quality, the second Ethernet port be used only with standard PC applications. You should not “daisy chain” phones together.



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Software/Firmware Technical FAQ

What Codecs are supported?

All SoundPoint IP and SoundStation IP phones support G.711 μ /A law and G.729a (Annex B.)

Do the phones support custom ring tones?

Custom ring tones or wave file ring tones can be downloaded on some versions of software. Please refer to the Administrator Documentation for the specific type and version of software you have.

Is there a web browser built into the phone?

Polycom IP phones do not currently support this capability.

Can the phones support LDAP directories?

Currently there is no support for directories like LDAP. This capability will likely be supported in the future.

Networking FAQ

How do the phones place calls to the PSTN?

The IP phone call's data packets are routed to a gateway, which then transports that call over to the Public Switched Telephone Network (PSTN). This task is completely transparent to the user.

Do the SoundPoint IP work over broadband connections like cable and DSL?

To ensure voice quality is maintained, proper network design rules relating to items such as latency, firewalls, bandwidth, and QoS should be applied at all times. As long as proper network design guidelines are followed, Polycom IP phones will deliver exceptional performance on networks with broadband connections such as cable or DSL.

What Quality of Service measures do the phones support?

All SoundPoint IP and SoundStation IP phones support Layer 3 Type of Service (TOS), DCSP, 802.1 p/Q VLAN and Priority tagging.

Configuration and Upgrade FAQ

How are the phones configured?

Polycom phones support zero-touch provisioning. Phones can be fully configured by modifying the configuration files that are loaded to the phone from a boot server, thus eliminating the need to physically configure individual phones.

How does an administrator manage large quantities of phones?

The format and content of the configuration files are such that these files can be customized using administrator tools and used to provision phones upon boot up from an FTP, TFTP, HTTP, or HTTPS boot server. An administrator for a large group of phones can modify the configurations and push the new info to the phones by remotely rebooting the phones. Remote reboot capabilities need to be supported by your IP PBX or IP Softswitch platform. Please contact your reseller for details.

Does Polycom provide tools to configure the phones?

Polycom provides as part of its firmware releases XML-structured configuration files that can be managed with partner-supplied administrative tools or manually edited.

Do the phones have a web server?

SIP versions of Polycom IP phones support configuration through a Web interface.

How is the time set on the phones?

Polycom IP phones use Simple Network Time Protocol (SNTP) servers to provide



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accurate time. These servers can be located on the local network or available from various sites on the Internet.

What is the Password to access the Set-up?

The User ID and Password will vary depending on what version of software you are running. Please refer to the Administrator Documentation for the specific type and version of software you have.

How are the phones upgraded?

One can upgrade phone software by placing new files onto the boot server and rebooting the phones. The phones download all the configuration files on every reboot and download a small chunk of the .ld files to compare versions. If the version is the same the file is not downloaded, if it is different, the file will be downloaded.

How do users get firmware updates?

Certified Polycom VoIP Channel Partners can access most recent SIP software on the Polycom Resource Center at <http://extranet.polycom.com>. In the case of MGCP, firmware is distributed by the Technology Partners through their reseller channel base. Please contact the reseller you purchased your IP telephony solution from if you have any software needs.

Does the boot server need to be available at all times?

An FTP, TFTP, HTTP, or HTTPS boot server must be available anytime a configuration file change or firmware upgrade needs to be performed. The phone will boot from a flash image if the boot server is not available or if there are no new files located on the boot server that need to be loaded to the phone. Polycom recommends that the boot server be available at all times as the phone does upload log files to the boot server that can be useful if troubleshooting is required.

What happens to the phones if there is a power failure during the upgrade process?

The SoundPoint IP and SoundStation IP phones follow a fail-safe upgrade process where the phone does not delete the previous file image until a new one is successfully saved. A power failure or server outage during an upgrade will not damage the phone.

What documentation is available?

Please visit the IP Telephony Documentation section at http://www.polycom.com/resource_center/0,1454,pw-26-482,FF.html for a complete list of available documents, including data sheets, family brochures, and quick start guides. Please also check with your reseller for any custom documents developed by Technology and Interoperability Partners.

