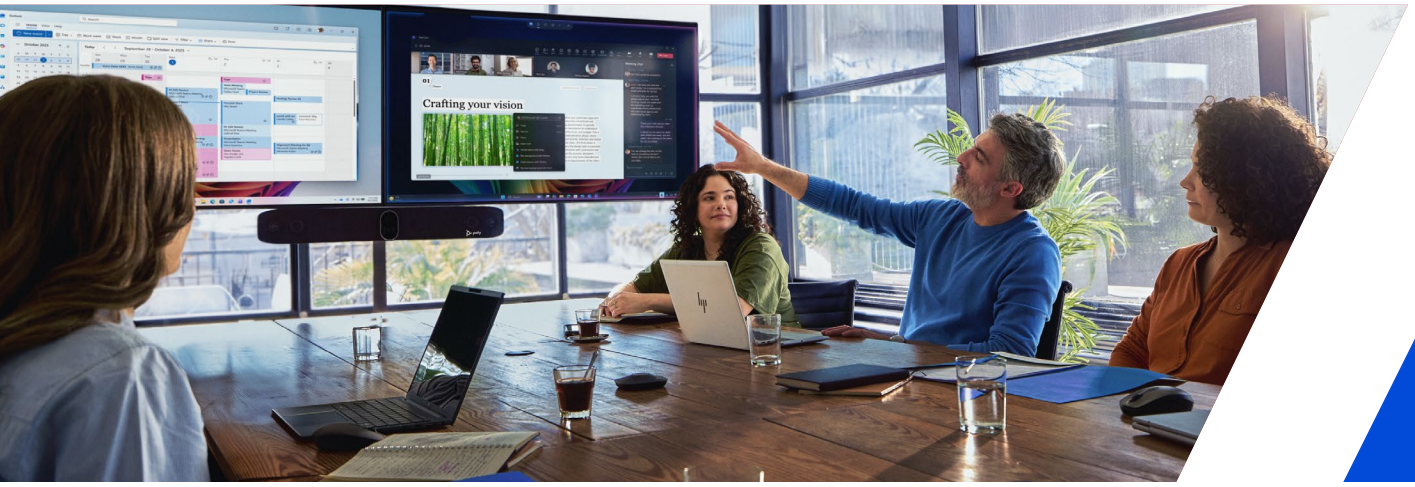
SOLUTION BRIEF

HP Poly Audio Innovations



HP Poly is at the forefront of audio technology and has developed innovative solutions to provide unparalleled noise cancellation and noise reduction. Even in challenging spaces such as open offices, outdoor calls or cafes, HP Poly offers some of the best noise-cancelling features in the market, including NoiseBlockAI, Acoustic Fence, WindSmart Technology, and SoundGuard.

HP Poly NoiseBlockAI

Distracting noise is one of the biggest challenges during calls. Keyboard typing, papers shuffling, HVAC systems, dogs barking, and reverberation can make it harder to understand the speaker, diverting attention from the conversation at hand.

NoiseBlockAI technology uses machine learning to identify and block noises, for a distraction-free call experience. This technology seamlessly eliminates disruptive noises during gaps in conversation and intelligently filters them when someone is speaking. By removing these distracting noises and reverberation, NoiseBlockAI keeps conversations on track and allows meeting participants to be heard more clearly. Additionally, it removes the need for muting, helping to capture more authentic conversations with real-time reactions, fostering a more natural and engaging communication environment.

Problem	Feature	Benefit
Noises cause distractions during calls – ie train, keyboard typing, paper shuffling, and HVAC sounds.	Uses machine learning to recognize and block noises occurring during the meeting.	Keeps the focus on my voice so I can be heard more clearly. Keeps meetings on track by blocking out distractions for the far end.
Regularly clicking mute and unmute during a meeting takes away from focus.	Auto-mutes non-verbal noises so there's no need to mute/un-mute during meetings.	Near end participants can focus on their meeting. Captures more authentic conversation with real-time reactions
Audio reflections from glass and other hard surfaces make it difficult to hear the speaker.	Recognizes and reduces reverberation.	Enhances the clarity of voices in the meeting room.

Current Products with HP Poly NoiseBlockAI

Video
HP Poly Studio X family
HP Poly Studio V family
HP Poly Studio R30
HP Poly Studio USB
HP Poly G7500
HP Poly Studio G62

Desktop Phones
HP Poly Edge V Series[2]
HP Poly Edge E Series
HP Poly CCX Series

Headsets
HP Poly Legend 50
HP Poly Voyager Free 60 Series

Conference Phones
HP Poly Trio C60

Demo Videos

- HP Poly Video Conferencing NoiseBlockAI



HP Poly Acoustic Fence

Meetings are often taken on the go or in highly trafficked meeting spaces, introducing unwanted noises and conversations into calls that disrupt the flow of meetings. The sounds from outside the meeting can be distracting and lead to confusion by making it challenging for participants on the far end of the call to discern whether a voice is part of the conversation.

HP Poly Acoustic Fence technology defines a specific zone to capture voices within, effectively shielding calls from non-participant voices. Functioning as a smart mute, it eliminates the confusion of other voices joining the call and allows near end participants to focus on the meeting and participate authentically without constantly toggling the mute button. While a speaker is talking in the defined zone, voices from outside of it may still be picked up, but less prominent. This ensures that the primary conversation remains clear, providing a seamless and distraction-free meeting experience.

Current Products with HP Poly Acoustic Fence

Video
HP Poly Studio X family
HP Poly Studio V family
HP Poly Studio R30
HP Poly Studio USB
HP Poly G7500
HP Poly Studio G62

Headsets
HP Poly Focus 6 Series
HP Poly Voyager Focus 2
HP Poly Voyager 4300
HP Poly Savi 7400
HP Poly Savi 7300

Desktop Phones
HP Poly Edge V Series
HP Poly Edge E Series
HP Poly CCX Series

Conference Phones
HP Poly Trio C60

Demo Videos

- HP Poly Conferencing - Acoustic Fence Video
- HP Poly Edge E Deskphone Series



How it works

Video Conference	
HP Poly Studio X family HP Poly Studio V family HP Poly Studio R30 HP Poly Studio USB	Personal and public meeting spaces often have open doors, open floor plans, or are near high trafficked locations. In an office environment, individuals may not always be aware of ongoing video calls, leading to confusion on the far end when non-participant voices inadvertently enter the call. With HP Poly Acoustic Fence technology, the audio pick-up zone is selected as an angle from the video bar. This ensures that voices from people talking outside of the designated meeting space are not included in the call.
HP Poly G7500 HP Poly Studio G62	When used on HP Poly G7500 or G62 with multiple, physically separated microphones, Acoustic Fence technology becomes even more precise. It creates a defined sound barrier that can more accurately tune outside conversations allowing to better showcase the speaker's voice.

Headsets

HP Poly Acoustic Fence technology creates a defined zone in front of the headset wearer's mouth and captures their voice within it, shielding the call from distracting outside voices and sounds. Multiple microphones located on a microphone boom and the ear cup(s) work together to reduce background noise so that the user's voice is heard more clearly on calls. The microphone(s) on the ear cup(s) will pick up background noise that should be minimized, while the microphone on the boom recognizes and transmits your voice.





Desktop Phones

HP Poly Acoustic Fence technology on HP Poly desktop phones helps block out the background conversations and noises that the other party would otherwise hear—perfect for noisy corporate offices and home offices. Acoustic Fence technology works when the phone user is either using the phone's handset or a wired headset. The feature uses the phone's speakerphone microphone as a reference microphone to remove the background noise. With Acoustic Fence technology, you have more productive conversations by eliminating the need to repeat yourself because of distracting interruptions.



Headset Technology

Acoustic Fence 2.0

Acoustic Fence 2.0[5] with enhanced noise reduction builds on previous implementations of Acoustic Fence technology to further reduce nearby distracting sounds, making background noise less perceptible to the far end.

AI Noise Reduction

Another solution for taking care of distracting background sounds during important calls, AI noise reduction[3] detects and filters ambient sounds so only your voice comes through. Meetings stay quiet and focused without manual muting.

Products with AI Noise Reduction:
HP Poly Mission Series

Demo Videos: HP Poly Mission Headset – Audio Performance

Spatial Audio

For users listening to audio and video files, spatial audio makes sound more lifelike and immersive by allowing more depth and directionality between the left and right earcups, elevating the media experience.

Products with Spatial Audio:
HP Poly Focus 6 Series

Windsmart Technology

Windsmart technology from Poly provides wind noise reduction from background noise caused from strong breezes of up to 14 mph. There are multiple layers to the wind noise reduction system.

- Microphone boom has aerodynamic characteristics to minimize wind turbulence (flow separation) (HP Poly Voyager Legend 50 & 30)
- Sophisticated wind screen design has calibrated porosity to minimize wind energy while allowing correct speech energy.
- Each microphone is inside its own “wind box”, so that a microphone with less wind noise can be selected over a mic that has more wind noise.
- Additional wind noise filters are applied once all the microphone signals are algorithmically selected and summed.

Current Products with WindSmart Technology

Headsets
HP Poly Voyager Free 60 Series
HP Poly Voyager Legend 50 & 30

Demo Videos

- Voyager Free 60 Series – WindSmart Technology Demo Video

SoundGuard and SoundGuard Digital

• HP Poly Encore Pro QD	• HP Poly Blackwire 3200/3300	SoundGuard provides acoustic limiting for protection against sounds exceeding 118dBA
• HP Poly Focus 6 Series • HP Poly Blackwire 8225 and 5200 • HP Poly Voyager Focus 2 and 4300	• HP Poly Mission Series • HP Poly Savi 8400, 8200, 7400,7300 • HP Poly EncorePro USB • HP Poly Encore Pro QD when used with DA85 or DA75	All the benefits of SoundGuard plus anti-startle protection, which detects and eliminates sudden increases in sound, and time-weighted average (TWA) control, which prevents average sound exposure from exceeding85 dBA



Video Conferencing Technology

HP Poly VoiceScoreAI

Simplify Setup With AI-Powered Live Audio Scoring.

The worst time to find out a meeting space's sound is not optimal is during a call. An audio disruption during a critical presentation or review can not only hinder the delivery, but also diminish the impact of the content. VoiceScoreAI prevents this by simplifying audio set-up.

By utilizing machine learning to analyze the room acoustics and provide a live audio score, VoiceScoreAI enables a single IT admin to test and adjust a room's audio quickly and efficiently. Not only does this reduce set-up time, but it eliminates guesswork. Admins can identify the ideal noise filtering settings and adjust mic placement to avoid issues before they arise.

VoiceScoreAI, available on select HP Poly video devices[4], is a feature of HP Poly Labs, a collaborative program focused on delivering innovative solutions to enhance the hybrid meeting experience.

Current Products with VoiceScoreAI

Video
HP Poly Studio X32
HP Poly Studio X52
HP Poly Studio X72
HP Poly Studio G62

Demo Videos

- HP Poly VoiceScoreAI

M-mode, originally called Music Mode

Video calls are used widely for an assortment of use cases where it's necessary to hear the true audio with full depth and detail. For users wishing to experience this true audio with no AGC or noise suppression, only echo cancellation, M-mode is a great solution.

Use cases include:

- Remote music learning
- Assists in hearing internal sounds during medical examination
- Teaching language
- Diagnose trouble with a machine on manufacturing floor

Current Products with M-mode

Video
HP Poly Studio X family
HP Poly Studio V family
HP Poly G7500
HP Poly Studio G62

1. Verbal noise reduction included in HP Poly NoiseBlockAI for headsets
2. HP Poly Edge V Phones 250 and above include NoiseBlockAI v3
3. On-device AI reduces typical background noises, allowing the user to be heard clearly improving the overall user experience.
4. HP Poly VoiceScoreAI is available on HP Poly Studio X32, Studio X52, Studio X72, and Studio G62 on version 4.4 or higher and HP Poly Studio V52 and Studio V72 on 1.4 or higher.
5. Acoustic Fence 2.0 version with enhanced noise reduction currently only available on HP Poly Focus 6 Series

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