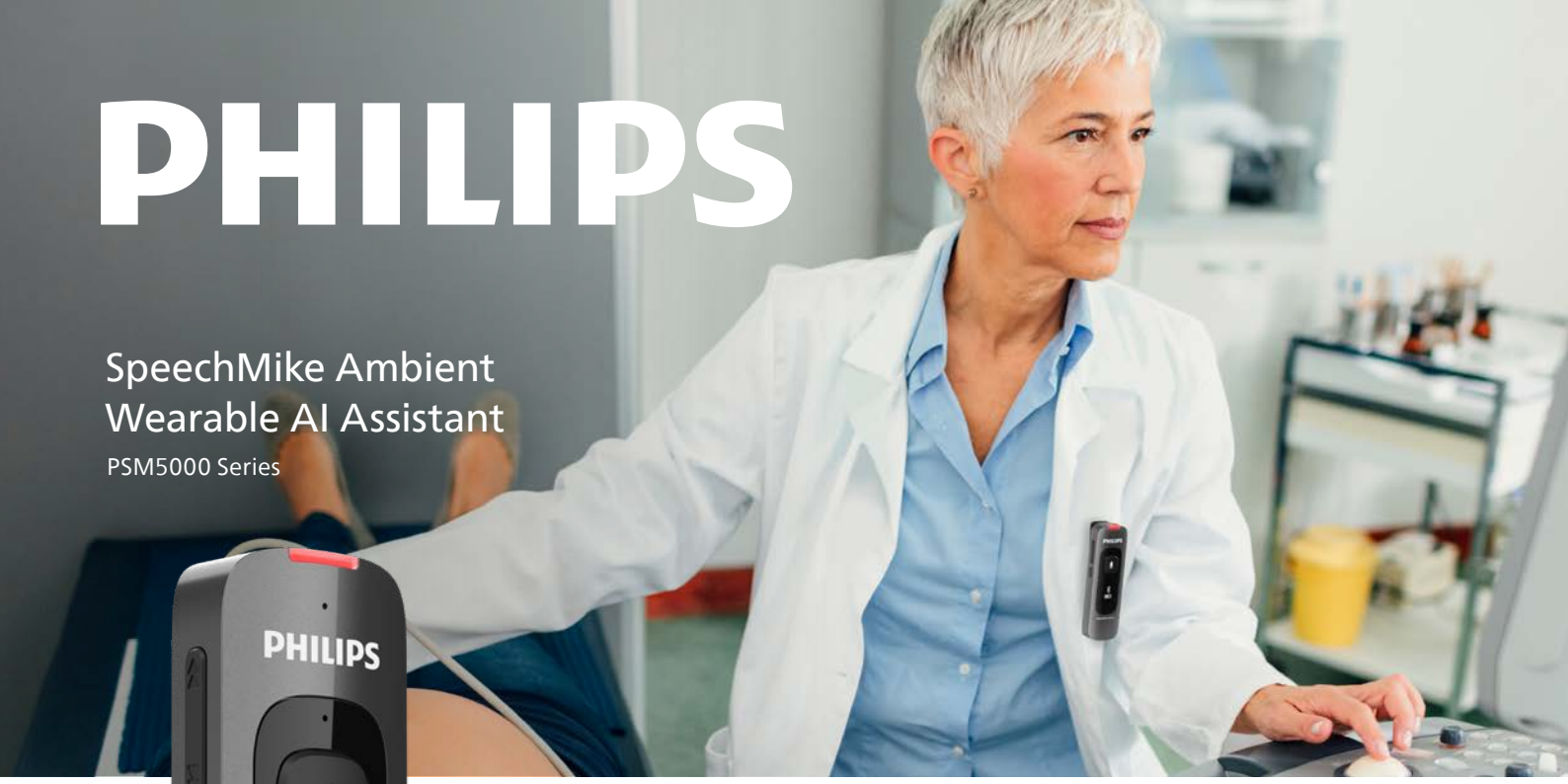
PHILIPS

SpeechMike Ambient
Wearable AI Assistant

PSM5000 Series



Actual size

Communicate, document, care

Transforming healthcare with ambient AI

The healthcare landscape is shifting, with clinicians facing growing administrative burdens, language barriers, and time pressure. The SpeechMike Ambient Wearable AI Assistant builds on the proven Philips SpeechMike family, now expanded for today's clinical challenges: a next-generation, professional-grade dictation microphone, designed to enhance AI-driven speech recognition workflows. From transcription, clinical note generation, multilingual interpretation, hand-off note creation, and virtual assistant functions, the device is designed to optimize daily routines. By improving documentation, communication, and workflow efficiency, the SpeechMike Ambient enables healthcare professionals to focus more on patient care, reduce burnout, and improve care quality.

Engineered for clear and reliable audio capture

- High-performance beamforming microphones ensure accurate speech recognition
- Specific audio modes for optimal performance across environments and use cases
- Patented ambient sound intelligence ensures natural, intelligible recordings

Designed for AI and ambient applications

- Purpose-built design for superior performance of AI-powered assistants and tools
- Secure, encrypted communication with IT-compliant design for safe clinical use
- Developer SDK for fast, native integration into custom software ecosystems

Built for mobility, comfort, and continuous use

- Compact, wearable design for seamless stationary, mobile, and hands-free use
- All-day power with simple, flexible charging
- Hygienic, low-maintenance design for safer handling and reduced operating costs

Highlights

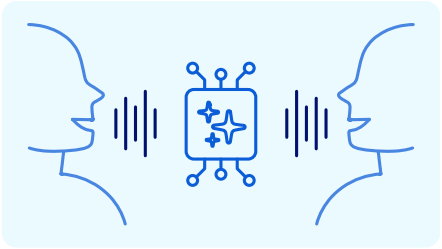
Four-microphone array

The SpeechMike Ambient features four high-performance microphones with active noise cancellation and speaker separation for consistently clear, intelligible audio. Its wearable design keeps the microphones close to the speaker at all times, ensuring greater accuracy in dynamic, noisy clinical environments—far outperforming smartphones or generic microphones.

Selectable audio modes

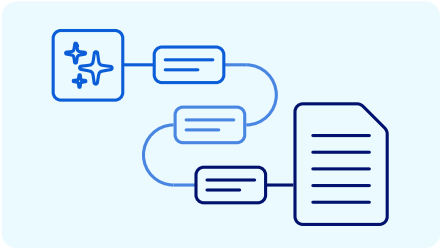
Different workflows call for different audio setups, and the SpeechMike Ambient is designed to meet those needs. Based on user research, it offers selectable audio modes that range from single-user recording with noise cancellation to conversation scenarios such as real-time interpretation and speaker separation. This flexibility ensures optimal performance across different environments and use cases.

AI-powered audio processing



The built-in patented ambient sound intelligence automatically detects individual speakers and creates two distinct audio streams. This results in natural, easy-to-follow playback, making the device ideal for automated documentation, conversation transcription, and protocol generation.

Optimized for AI-driven workflows



The SpeechMike Ambient is engineered specifically to capture high-fidelity, multi-speaker audio in real-world environments—perfect for AI transcription and ambient scribe scenarios in clinical, and virtual assistant functions. Its superior input quality significantly enhances AI model accuracy, making it ideal for generating clinical notes, transcriptions, and real-time documentation.

Enterprise-grade security and compliance

The SpeechMike Ambient ensures secure data transmission with encrypted Bluetooth LE technology, and a secure “Passkey” pairing method. Only one device can connect at a time, preventing external access or interference. Tested for reliable coexistence with Bluetooth, Wi-Fi, and other 2.4 GHz devices, the system meets global standards like CE, FCC, and RCM.

Developer-ready for native integration

The SpeechMike Ambient is fully backwards compatible with existing SpeechMikes, ensuring seamless integration into current workflows while unlocking new opportunities. With it’s comprehensive software development kit (SDK) and API access, third-party software providers can natively integrate the device into desktop and mobile applications. With full control over button mapping, device settings, and audio input, the SDK enables rapid onboarding for speech recognition platforms, AI tools, and enterprise software ecosystems.

Multiroom connectivity and flexible use

Designed for seamless transitions between mobile and stationary use, the device can be worn with a magnetic clip or neck strap for hands-free operation. It stores up to 10 wireless profiles, automatically connecting to the nearest workstation when moving between patient rooms or work areas, eliminating the need for manual pairing. The docking station enables charging and desktop recording, while the ergonomic, lightweight build with tactile feedback ensures comfort and durability for long shifts.

Highlights

All-day battery

The energy-efficient design delivers up to 10 hours of continuous recording time, ensuring full-shift battery life in a lightweight body. Users can recharge quickly via the docking station, a standard USB-C cable, or a PC USB port. This ensures reliable uptime and supports the mobile demands of clinical environments.

Hygienic and low-maintenance by design

Built with infection control in mind, the device uses hygienic, medical-grade materials and avoids the contamination risks common with handheld devices. Its smooth, polished surface resists germs and fingerprints while minimizing handling noise during operation for clearer audio capture. Compared to smartphones, it also lowers operational costs with fewer updates, simpler maintenance, and no need for mobile device management.

Enhanced patient care with ambient listening

Ambient listening enables clinicians to stay fully engaged with patients without manual documentation or device handling. By capturing relevant information in the background, it allows for natural, uninterrupted conversations, fostering trust and improving care quality. This reduces cognitive distractions, ensuring a stronger clinician-patient relationship.

How ambient AI enhances patient care across settings

Emergency departments

Streamlines documentation during high-stress, fast-paced situations.

Inpatient rounds

Automatically generates comprehensive notes during ward rounds.

Outpatient clinics

Enhances patient interactions by reducing time spent on documentation.

Ambient AI use cases with the Philips SpeechMike Ambient

Clinical documentation

Automatic transcription: capture and transcribe real-time audio during patient encounters.

Clinical note generation: convert transcriptions into structured notes, such as SOAP formats.

Hand-off notes: summarize patient information for seamless transitions between care providers.

Multilingual AI interpreting

Real-time translation: bridge linguistic gaps between providers and patients, enabling effective communication.

Care transitions: available to any caregiver throughout the continuum of care.

Capacity: no delayed care due to language barriers

Virtual assistant

On-demand information: answer clinical questions, retrieve guidelines, and receive drug references in real-time.

Task automation: schedule appointments, set reminders, and integrate with Electronic Health Records (EHR).

Evidence based benefits

Imagine healthcare workflows that are faster, smarter, and more connected. The Philips SpeechMike Ambient can help bring that vision to life.

Improved clinical documentation accuracy and efficiency

Studies show that real-time transcription and automation reduce documentation time by up to 40% (sources: Smith et al., 2020; Jones et al., 2019).

Automated clinical notes have been demonstrated to improve accuracy and consistency in patient records (source: Patel et al., 2021).

Enhanced communication across language barriers

Language interpretation services improve patient satisfaction scores and reduce medical errors, especially in diverse patient populations (source: Flores et al., 2018).

Multilingual capabilities ensure compliance with language access laws and guidelines (source: U.S. Dept. of Health and Human Services, 2020).

Reduction in burnout

Administrative burdens are a primary driver of clinician burnout (National Academy of Medicine, 2019). Automating repetitive tasks helps reduce cognitive overload and allows clinicians to focus on patient care.

Better hand-off and continuity of care

Effective hand-off notes are critical to patient safety. Research indicates that structured hand-off tools reduce communication errors by up to 30% (source: Joint Commission, 2020).

Cost savings and ROI

By improving efficiency, hospitals can save significant costs associated with documentation errors, delayed care, and clinician time, translating to higher revenue through improved billing and coding accuracy.

Specifications

Wireless connectivity
Wireless technology: 2.4 GHz Bluetooth Low Energy
Maximum power: ≤ 10mW
Maximum range: up to 25 m / 82 ft (in clear view)

Audio recording
Microphone type: MEMS 4-way microphone array
Characteristic: omni-directional and beam forming
Frequency response: 200 – 8000 Hz

Sound
Speaker type: built-in rectangular, dynamic speaker
Acoustic frequency response: 300 – 8000 Hz
Speaker output power: > 200 mW

Power
Battery type: Li-polymer
Rechargeable: via docking station or USB-C power supply
Battery lifetime: up to 10 hours continuous talk time
Charging time: 3 hours

Product dimensions
Product dimensions (W × D × H): 32 × 104 × 15 mm / 1.3 × 4.1 × 0.6 in
Weight: 42 g / 1.5 oz

Wireless Adapter
Product dimensions (W × D × H): 14 × 7 × 42.5 mm / 0.6 × 0.3 × 1.7 in
Weight: 4 g / 0.1 oz

Docking Station
Product dimensions (W × D × H): 85 × 85 × 32 mm / 3.4 × 3.4 × 1.3 in
Weight: 140 g / 4.9 oz
USB-C: for charging and data connection
USB-C: for Wireless Adapter
Kensington lock

System requirements Philips SpeechControl Device and Application Control Software
Processor: Intel dual core or equivalent AMD processor, 1 GHz or faster processor
RAM: 2 GB (32 bit)/4 GB (64 bit)
Hard-disk space: 30 MB for SpeechControl software, 4.5 GB for Microsoft .NET Framework
Operating system: Windows 11, Windows 10 (64 bit)
Graphics: DirectX-compliant graphics card with hardware acceleration recommended
Sound: Windows-compatible sound device
Free USB-C port

Supported speech recognition software
Dragon Medical One
Dragon Medical Practice Edition 3/4
Dragon Professional 13/14/15/16 Individual/ Group
Dragon Legal 13/14/15/16
Solventum Fluency Direct 8.0 and above
Fluency for Imaging 3 and above
Fusion Narrate powered by nVoq

Green specifications
Compliant to 2011/65/EU (RoHS)
Lead-free soldered product

Operation conditions
Temperature: 5° – 45° C / 41° – 113° F
Humidity: 10 % – 90 %

Design and finishing
Material: high-class polymers
Color: dark grey pearl metallic / black

Models and accessories

PSM5000
Philips SpeechMike Ambient Wearable AI Assistant
Microphone
Docking station
Wireless adapter
Mounting clip
Neck strap
USB cable

PSM5020
Philips SpeechMike Ambient Wearable AI Assistant
Microphone
Mounting clip
Neck strap
USB cable

ACC5000
Philips SpeechMike Ambient Docking Station
Docking station
USB cable

ACC5010
Philips SpeechMike Ambient Mounting Clip

ACC5020
Philips SpeechMike Ambient Neck Strap

ACC5100
Philips SpeechMike Ambient Wireless Adapter

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