



National Security Systems
An NEC Company

New Ear Acoustic Biometric Authentication NEC Ear Acoustics



With increased security risks from unauthorized access, government agencies and organizations working with highly classified materials are searching for more sophisticated, continuous authentication solutions.

Introducing NEC Ear Acoustics, an innovative wearable that uses ear acoustic biometric authentication to continuously identify individuals and prevent unauthorized use of devices. NEC Ear Acoustics replace traditional, one-time authentications like User ID's and passwords, while maintaining unmatched security and convenience. The revolutionary NEC Ear Acoustics validate the user continuously – not just once during login – but nonstop throughout the entire session on the device to eliminate unauthorized access.

This leading-edge solution enables an ingenious way to verify personal authentication by acquiring biometric information from the ear (ear canal surface temperature and pulse related information). Plus, an SDK for application development makes it possible for users to independently develop applications for iOS and Android that utilize the functions of the NEC Ear Acoustics.

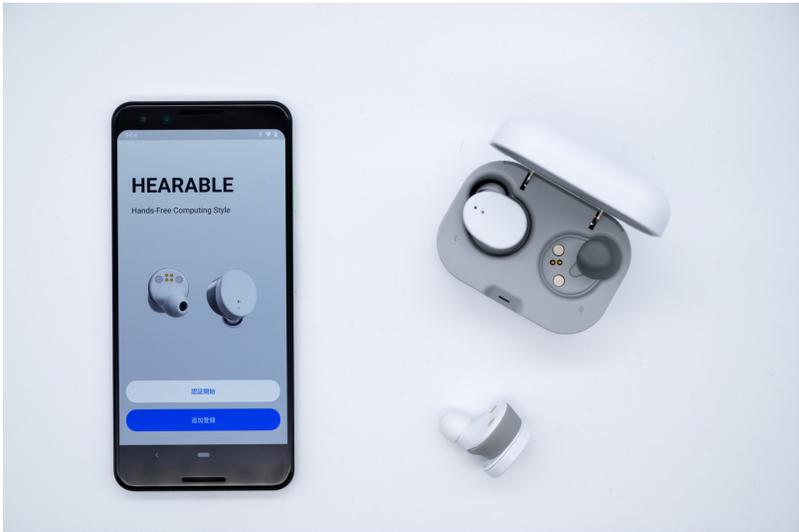
At a Glance

- **Joint development between NEC and Foster Electric.**
- **NEC's original ear acoustic authentication determines an individual's identity from reflected sound.**
- **Unobtrusive wearable authentication that's user-friendly and affordable.**
- **Speech active noise cancelling.**
- **Sensors acquire biological information for identity authentication.**
- **Enables development of services and applications that use temperature change data.**

Solution Overview

NEC Ear Acoustics are a biometric authentication method that identifies individuals using the internal structure of the head, including ear holes. Through wearable technology, NEC Ear Acoustics differs from other biometrics authentication because personal identification can be performed by simply listening to sound, anytime, anywhere. When using digital services such as online meetings, users have no need to enter an ID or password and can be authenticated naturally and continually just by wearing earbuds.

Key Features

Shape	True Wireless type
	
Functions	Ear acoustic authentication Speech active noise cancelling (ANC) Sensors (geomagnetism, acceleration, angular velocity, touch, proximity, ear canal surface temperature, pulse related information)
Operating time	Continuous playback time: Up to 6 hours Continuous talk time: Up to 6 hours
Weight	Body approx. 8g x 2, charger (excluding USB cable) approx. 60g
Transmission method	Bluetooth Ver. 5.2
Body size	25.0mm x 21.7mm x 27.2mm (Including ear tips)
Charging case size	41.0mm x 67.0mm x 47.0mm (Excluding charging cable)

NEC continues to set the standard for secure, rapid, and accurate identity recognition solutions, delivering a high security, scalable, frictionless experience.

To learn more about Iris & Face on the Move and NEC National Security Systems, please visit necnss.com.

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