



APNEAband

The First Home Sleep-Apnea Tracking Wristband Combining Comfort and Medical Accuracy

What is APNEAband?

APNEAband is the first tracking device worn on the wrist, ensuring accurate real-time detection of sleep-apnea events.

Say goodbye to in-lab overnight tests with multiple sensors attached to the body. APNEAband brings a safe, easy-to-use, affordable and non-invasive solution to detect sleep apnea at home.

Embedded sensors in a comfortable wristband track the heart rate (HR), variation in the time interval between heartbeats (HRV), oxygen saturation levels and bioelectrical impedance. The combination of these four indicators helps any physician to make a complete and reliable sleep apnea diagnosis.

Applications

APNEAband has been designed to track breath related conditions and in particular obstructive sleep apnea and acute mountain sickness.

Other healthcare applications

CEA-Leti wristband can be used to other health applications:

- dehydration;
- dialysis treatment response;
- chronic pain;
- epileptic seizures;
- phobia and panic disorder.

Wellness Applications

This technology can deliver cardiac-coherence biofeedback. Possible applications include detecting:

- work-related stress;
- stress caused by video games;
- hot flashes.

What's new?

CEA-Leti's software:

- Leverages a wide human-generated database, instead of simulated data, that helps provide a highly reliable medical diagnosis
- Has been implemented in dedicated wearable hardware
- Combines for the first time a diagnosis and assessment of treatment response
- Includes advanced signal-processing algorithms that efficiently extract and screen relevant health parameters.

What's next?

CEA-Leti has developed a software/hardware technology featuring greater medical accuracy and comfort for patients. This technology offers a wide range of applications for companies wishing to leverage business opportunities, including by delivering more healthcare outside of the clinical environment and closer to home. Leti is currently working on making this technology fully certified.

Key facts

- Wearable device
- Certified-ready technology
- Patented
- Human-generated database collected by the renowned Dr. Jean-Louis Pepin and Dr. JC Borel at CHU Grenoble Hospital



Interested in this technology?

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