# Laird's Connectivity Solutions Helps Airthings Wave Bring Wireless Innovations to Smart Radon Monitoring


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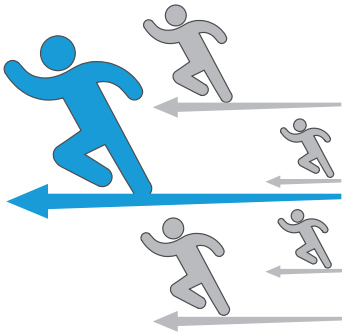
# Airthings Wave Smart Radon Detectors Utilize Laird's SaBLE-x Bluetooth® Wireless Modules to Provide Homeowners Both Real-Time and Long-Term Indoor Air Quality Data Intelligence



When bringing innovative new technologies to market that establish an entirely new category of wireless products, being first-to-market with an intuitive, dependable solution is key to establishing the critical leadership position in that emerging category. For Airthings, leading innovators in radon detection technology, getting their newest solution for homeowners to market in record time was paramount to their new product's success.

Airthings Wave smart radon detector is a significant advancement for consumers, making at-home radon detection simple, easy and innovative by taking advantage of the latest in connected home technology. Airthings' mission is to ensure people around the world take control of their air quality through simple, affordable and accurate technology solutions by making smart radon monitors as common in homes as smoke detectors. Partnering with Laird to supply and support a robust, high-performing Bluetooth module for their newest product design helped assure Airthings a wireless solution and an aggressive time-to-market goal could be achieved.

**"Laird provided excellent support to our engineers so that we could develop the product in record time"**

"LSR, a Laird Business, is a well-known provider of high quality modules and industry-leading design support. In our case, time to market was essential, so we needed something that was pre-certified and works out of the box. Laird provided excellent support to our engineers so that we could develop the product in record time." said Oyvind Birkenes, CEO of Airthings.

Airthings set out to create wireless innovation with a clear purpose of wellness and safety for families. The surprising reality is that radon gas is the leading cause of lung cancer among non-smokers, and results in nearly 10 times as many deaths each year as either home fires or carbon monoxide. Constant, consistent monitoring of radon levels is critical to keeping homes safe, as levels fluctuate daily and measurements are influenced by temperature and humidity.

By revolutionizing the way consumers will check for indoor radon, Airthings was able to leverage Laird's certified wireless modules in their newest product – **Wave**. Having previously partnered with wireless product development specialists LSR (now a part of Laird), they selected the popular **SaBLE-x** Bluetooth Low Energy (BLE) Certified Module, which was the first module commercially available in the U.S. based on based on Texas Instruments' CC2640 chipset. Ensuring a long battery life and reliable connectivity with the homeowner's smartphone or tablet are critical to customer satisfaction for this new product, and the SaBLE-x can deliver over twice the signal range of previous generation Bluetooth modules with significantly greater battery efficiency.


**SaBLE-x**
Texas Instruments
CC2640 Chipset

- **Bluetooth v4.2 (BLE) with integrated MCU**
- **On-module ARM Cortex M3 MCU and stack**
- **Supports hosted or hostless operation**

Wave is a smart radon detector that provides consumers with critical - potentially life-saving data on indoor air quality, accessible by using the latest Bluetooth technology available through Laird. Wave also includes temperature and humidity sensors which helps provide the ultimate accuracy in radon readings allowing for early detection and notifications of potential mold concerns. In product development, "innovative" is great, but "intuitive" is critical to ensure the technology can be used to its full potential.

Airthings Wave gives homeowners' instant visibility into radon levels measured by using digital sensors and smart-home technology via their smartphone or tablet. This real-time data is a significant differentiator, as radon levels are dynamic and require continuous monitoring to determine potential impact or need for mitigation.

Oyvind discusses why Laird's certified module technology was chosen as an integral part of their final product: "We were able to develop a product with excellent Bluetooth communication range, certifications and software drivers all completed in just a few short weeks. We would not have been able to launch this product at the 2017 Consumer Electronics Show without the certified module solutions and close support from Laird's team of wireless experts."

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**For more information about the Wave by Airthings, please visit:**
**www.airthings.com**

**To learn more on Laird's SaBLE-x Bluetooth Module, please visit:**
**www.lsr.com/embedded-wireless-modules/bluetooth-module/sable-x-ble-module**

**To learn more about Laird's embedded connectivity solutions, please visit:**
**www.lairdtech.com/connectivitysolutions**