

# OneRadio Announces First Customer for their Wide-Band Receiver Platform

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OneRadio Corporation, a spinout from CoMotion at the University of Washington (UW), is excited to announce that Pacific Northwest National Laboratory's National Security Directorate is using the OneRadio™ Platform for security-related applications.

The OneRadio™ Platform is a 0 – 2.5 GHz wide-band RF receiver, and a first in its category to deliver an instantaneous bandwidth of 2 GHz and an unprecedented dynamic range with an average noise floor of -195 dBW/Hz based on a patent pending invention. The combination of its instantaneous bandwidth, extreme linearity, and dynamic range opens the door to a completely new generation of applications like Radio Frequency (RF) Fingerprinting, allowing individual wireless IoT devices to be discovered and quickly identified by their RF characteristics as a means of securing them, which is unthinkable using existing receivers.

“We are thrilled to be working closely with the Pacific Northwest National Laboratory (PNNL) as our first customer.” said Mohan Vaghul, CEO of OneRadio. “PNNL is a premiere institution in the Pacific Northwest focused on delivering high-impact, science-based, practical solutions to their sponsors.” PNNL's National Security Directorate is an early adopter of OneRadio platform for applications relating to RF Fingerprinting and machine learning for spectrum analysis. OneRadio's linearity, instantaneous bandwidth and dynamic range provide the visibility and access that enable such applications.

The OneRadio™ platform comes in a 8U chassis with key features including a graphical user interface to view the entire spectrum or portions of it continuously, ability to save the signal data for off-line processing, and tools to view and analyze the saved signal data.

OneRadio's high dynamic range invention enables the receiver to discern weak signals in the presence of very strong signals in the entire 2.5 GHz spectrum, enabling the simultaneous detection of a variety of transmitter devices anywhere in the spectrum. The direct sampling nature of the OneRadio platform provides the linearity needed to maintain the pristine quality of the signals from any transmitter device. The instantaneous bandwidth allows for continuous visibility into the entire RF spectrum without the need for scanning. OneRadio delivers the dynamic range and linearity required to successfully enable an application like RF Fingerprinting, the ability to fingerprint based on the RF characteristics of the transmitter device. In addition, the instantaneous bandwidth and the versatility of the OneRadio platform enables implementation of machine learning techniques for spectrum analysis of the entire spectrum.

The commercialization of OneRadio's patent pending High Dynamic Range (HDR) invention was possible due the support and guidance from CoMotion, UW's collaborative innovation hub, and the Electrical Engineering department at the UW.

“OneRadio is a classic example of how engineering and other technologies across campus utilize CoMotion for their commercialization journey.” said Vikram Jandhyala, UW Vice President for Innovation Strategy & Executive Director for CoMotion. “We are gratified to see OneRadio land their first customer and drive this technology into new application areas that fully leverage its core value proposition.”

“The technology behind OneRadio is the result of many years of research at UW's Electrical Engineering department.”, said Radha Poovendran, Chair of the department. “We are excited to see this foundational technology being commercialized by OneRadio, and expect this technology to have wide reaching impact.”

The OneRadio™ platform is currently available for sale. For pricing and other information, please contact Mohan Vaghul ([mvaghul@oneradiocorp.com](mailto:mvaghul@oneradiocorp.com)) or visit [www.oneradiocorp.com](http://www.oneradiocorp.com).

### **About OneRadio Corporation**

OneRadio creates, develops and markets wide-band receiver technology for radio frequency (RF) applications that demand the highest level of sensitivity and bandwidth. OneRadio provides unprecedented visibility and access into the entire RF spectrum through its innovative technologies that benefit aerospace, defense, intelligence communities, telcos, and other enterprises. The company is headquartered in Seattle, WA. For more information, please visit the company's website at [www.oneradiocorp.com](http://www.oneradiocorp.com).

Source: OneRadio Corporation

### **Company Contact**

Mohan Vaghul  
OneRadio Corporation  
[mvaghul@oneradiocorp.com](mailto:mvaghul@oneradiocorp.com)