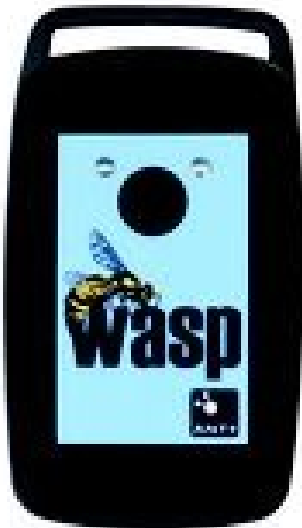


## **Wi-Fi ANT+ bridge Can Collect and Send Wireless Sensor Data to Internet from up to 60+ ANT+ Devices Using Nordic nRF24AP2**



Ultra Low Power (ULP) RF specialist Nordic Semiconductor today announces that a unique Nordic nRF24AP2-based Wi-Fi to ANT+ bridge gateway device has been developed by U.S. electrical engineering specialist North Pole Engineering. The device allows wireless data from more than 60 ANT+ sensors to be recorded, analyzed, and uploaded to the Internet via Wi-Fi for the first time in applications such as group gym classes (e.g. indoor cycling, rowing, and aerobics), team sports, and remote health monitoring.

Available now and called the 'WASP', this portable Wi-Fi ANT+ bridge employs a class-leading Nordic nRF24AP2-8CH 8-channel ANT Connectivity IC (integrated circuit or 'chip') and essentially receives data from connected ANT+ devices at up to 1Mbps and translates the data into Wi-Fi packets, making it available to any Wi-Fi (IEEE 802.11 b/g/n) connected device. The WASP can also create its own 11Mbps Wi-Fi network and so can be used outdoors powered by an internal rechargeable lithium-ion battery for up to 6-hours even in its most power-hungry continuous scan mode.

"ANT+ wireless sensors are usually only designed to communicate out to about 3m so have traditionally had to be tied to some kind of hub device such as a sports watch or USB stick to collect data," explains Joe Tretter, VP of Engineering at North Pole Engineering. "With the WASP you can move that ANT+ data straight to the Internet or some other end-point - such as a smartphone or tablet - using a low-cost Wi-Fi network."

In operation the WASP is easy to use and highly robust. It has a single (screen)

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button on its OEM-brandable interface that users push to join a pre-configured Wi-Fi network and if for any reason the WASP can't join that network (a possible scenario in real-world operating environments) - they simply push the button again to instruct the WASP to create its own Wi-Fi network. It will then receive data automatically from any ANT+ device within the vicinity and send that to the Internet. And if it can't connect (another real-world possibility) it will store the data within its 16-Mb internal memory and transmit it once it regains Internet access.

"The first reaction many people have to this devices is: 'What a brilliant idea, how come nobody has thought of doing this before?'," states Jim Meyer, VP of Business Development, North Pole Engineering. "This is because it really opens an enormous application potential for ANT+ to further expand it's dominance in the sports & fitness market by making it even easier to use for groups."

Meyer continues: "This includes, for example, a spin class instructor having an iPad in front of them with every class member's data (heart-rate, bike speed/cadence and/or power) displayed in real-time which they can use to modify the class or customize their instruction for individual members - a real value-added-benefit in the fiercely competitive gym market. "

We're also developing ANT+ converters for gyms that have invested heavily in training computers such as those embedded in gym equipment that aren't ANT+ compatible 'out-of-the-box'."

"This is a really smart product that marries the popularity of Wi-Fi networks with the multi-million unit market-leading installed base of ANT+ sensors in the sports & fitness market to make ANT+ an even more compelling and automatic choice for group applications," comments Geir Langeland, Nordic Semiconductor's Director of Sales & Marketing. "And just as importantly, it allows gyms to offer their members a genuine value-added benefit in a very competitive market without any significant extra costs because the WASP utilizes a Wi-Fi network they'll probably already have in place and in many cases sports & fitness equipment and sensors they or their members already own."

[www.nordicsemi.com](http://www.nordicsemi.com)

Posted by Sara Cohen, Editorial Intern

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