

SparkFun Pro RF - LoRa, 915MHz (SAMD21)

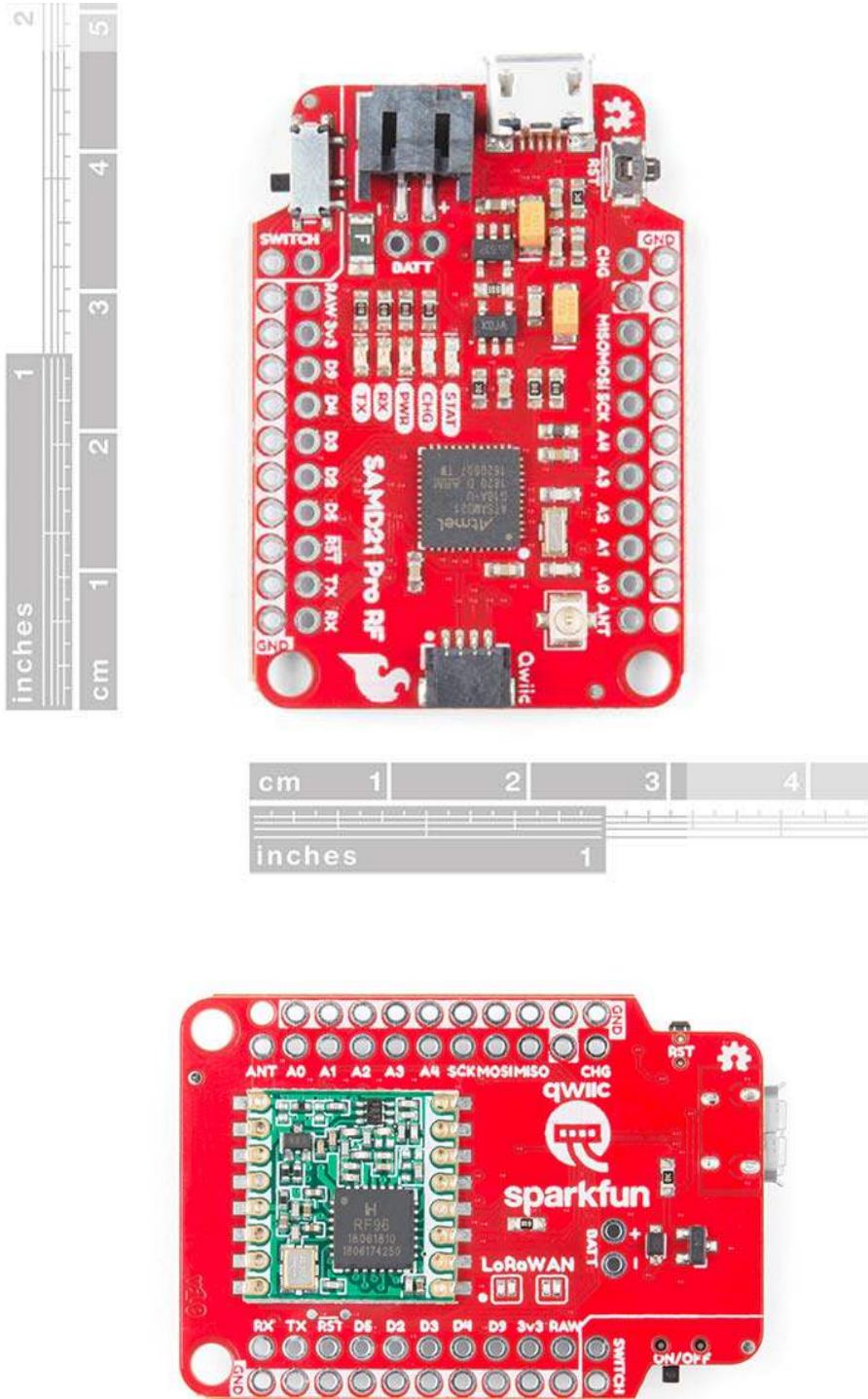
WRL-14916

The SparkFun Pro RF is a LoRa®-enabled wireless board that marries a SAMD21 and a long-range RFM95W to make a compact and easy-to-use IoT Arduino board. With its fast MCU and excellent point to point data transmission in the 915MHz ISM band with LoRa Capabilities, the Pro RF is a great choice for anyone interested or experienced in utilizing long range data communication.

Every pin on the SparkFun Pro RF is accompanied with a ground connection making the buttons and LEDs easy to connect. In case your building something to be embedded into clothing or other physically harsh environment the antenna includes a stress relief hole to make sure your wire antenna survives. A short (3 inch) wire antenna is sufficient for “short” distances (up to 1 mile line-of-sight), but we’ve also included a u.FL antennae connector for potentially longer distances.

The Pro RF also includes a power switch and 2-pin JST connector for powering from a lithium battery. With a Micro-B USB and the power switch in the off position, the Pro RF will charge the attached battery! The board programs over a reinforced Micro-B connector with a slim reset button that fits nicely on the side of the board. We’ve even added our popular [Qwiic](#) connector to the edge of the board making it incredibly easy to add sensors and actuators without the need for solder or a soldering iron!

Thanks to the Arduino LoRa library, the RFM95W radio is an easy to use packet radio. But it doesn't stop there because closing a few jumpers on the underside of the SAMD21 Pro RF initiates LoRaWAN mode on the radio module making it a node in a distributed sensor network.



<https://www.sparkfun.com/products/14916> 10-23-18