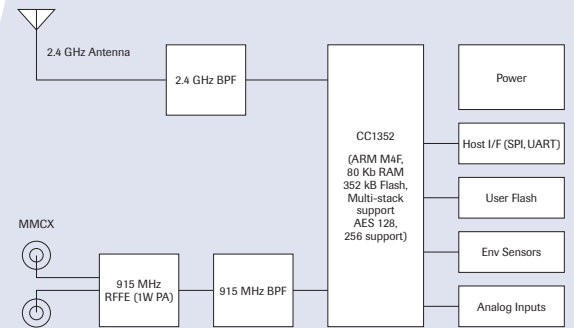


# vIMPULSE™2

Micropower Long Range Wireless Transceiver with simultaneous 900 MHz and 2.4 GHz RF capability

**The Vanteon vImpulse™2 radio is a dual-band software configurable radio transceiver module designed for long range data communications with very low power consumption for battery operated devices.**

## PRODUCTS



The small form factor and low power allow the module to be utilized in applications that require remote control and sensor data acquisition in industrial environments where frequent battery changes are inconvenient and costly. Applications include: industrial IoT, low power wireless sensor network systems, SCADA, meter reading, oil and gas monitoring and control. The use of unlicensed spectrum allows the device to be easily installed in an existing enclosure and deployed in a wide variety of systems.



### Other Features

- Multiple levels of sleep/wake for power savings
- Fast wake up by host
- Real time clock
- Auxiliary serial I/O (UART, I2C, SPI)
- Optional onboard environmental sensors
- Optional onboard user Flash

### Accelerate Your Design

Let Vanteon's engineering team help you get your products to market faster with a proven scalable radio design.

Call us at 888.506.5677

### Specifications

- Frequency Band 1: 2.4–2.48 GHz
- Frequency Band 2: 902–928 MHz
- Output Transmit Power: Variable up to 1 W (30 dBm)
- Receive Sensitivity: Waveform dependent, 2 dB noise figure
- Modulation Formats: FSK, GFSK, MSK, GMSK, DSSS, and more
- Sleep current: approx. 1  $\mu$ A
- Data Rate: Capable of up to 1 Mbps
- Dimensions: 1.25"  $\times$  1.13"  $\times$  0.25"
- Host interface: SPI, UART, GPIO
- Interference Avoidance: Frequency Hopping Spread Spectrum
- Multipath Mitigation: Spatial diversity using dual antennas
- Antenna connections: MMCX RF connectors
- Power control: Wide range of output power from -20 dBm to +30 dBm
- User Interface: LED triple color (red, green, blue)
- Analog Inputs: Multiple (multifunction) 12 bit @ 200 Ksps



**Celebrating over 30 years of service, innovation, and collaboration.**