Smart 4G LTE Module w/GPS

2.25 in.

1.75 in.

The Radair™ Smart 4G LTE-M NB-IOT Communication Module w/GPS is a commercial grade, low-power wide area network (LPWAN) cellular communication module. This is the perfect application for always-on, low-power connectivity, independent of ethernet or Wi-Fi, as a failsafe option. Purposefully designed for IoT connected devices where affordability and reliability are paramount, the Radair Smart 4G LTE- M NB-IOT Communication Module w/GPS can be deployed at scale in urban or remote locations where reliable internet and power might not be available.

Specifications

- **Model:** Radair 901 4G LTE-M NB-IOT Communication Module w/GPS
- **Processor:** ARM Cortex M33 Processor, ARM Trustzone, ARM Cryptocell 310
- **RAM:** 256KB LLRAM
- **Storage:** 1MB Flash Memory
- **Power:**
  - 3.8 to 5V DC Input
  - 535mA-pk, 1.4uA-Sleep
  - 101mA-Core
  - GPS 47~1.3mA; 9mA GPS/LNA (selectable)
  - Modem RX 45mA, TX 60~380mA (23dbm)
- **LEDs (4):**
  - Power
  - 4G/LTE Network Status
  - 4G/LTE Traffic
  - GPS Satellite Lock
- **SIM:** nSIM (standard) eSIM (optional)
- **Debug:**
  - Serial Wire Debug (SWD) Trace Port
  - J-Tag Port

- **Modem:**
  - Responds to Nordic's "AT" Command Set over UART-0
  - Cat-M1: B1, B2, B3, B4, B5, B8, B12, B13, B14, B18, B19, B20, B25, B26, B28, B66
- **Antenna:**
  - 1 u.FL Connector for GPS at 50 ohms
  - 1 u.FL Connector for 4G at 50 ohms
  - 4G/LTE, On-Board Antenna (Optional)
- **Ports:**
  - 4 SPI
  - 4 I2C
  - 4 UART
  - 1 Digital Microphone PDM
  - 4 PWM, 32 GPIO, 12Bit ADC
  - 3 32Bit Timers
  - 2 RTC
- **Interface**: M.2 67 (M-key) Female Connector

Operation requires LTE and GPS antenna alongside nSIM card, sold seperately, options at Radair.io