

GPS Location Tag with ADC

The LoRa GPS Tag is self-powered via a rechargeable 3.7v 1922mAh Lithium Ion Battery. Battery life is dependent on tag configuration and upload intervals. With a configured location update interval of every x hours, the expected lifetime of the battery is ± 6 months.

LPWAN Features

- TCXO crystal for LoRa chip
- I/O ports: UART/I2C/GPIO/USB
- Temperature range: -40 °C to +85 °C
- Supply voltage: 2.0 ~ 3.6 V
- Low-Power Wireless Systems with 7.8 KHz to 500 KHz Bandwidth
- Ultra-Low Power Consumption 2.0 uA in sleep mode
- LoRa PA Boost mode with 22 dBm output power
- BLE5.0 (Tx power -20 to +4 dBm in 4 dB steps)
- Serial Wire Debug (SWD) interface
- Module size: 20 x 30 mm
- Chipset: Nordic nRF52840, Semtech SX1262

GPS Features

- Uses the very accurate GNSS Module: u-blox ZOE-M8Q chip
- Location Accuracy of ± 2.5 meter
- Velocity Accuracy of ± 0.05 m/s
- GPS, GLONASS, QZSS, and BeiDou Satellite support
- 10 Hz Update Rate
- 29 seconds Location Fix from Cold Start, 1 second from Hot Start
- Operating Voltage: 3.3 V
- Operating Current: < 15 μ A
- Chipset: u-blox ZOE-M8Q
- Module Size: 10 mm x 23mm

Applications:

- Wireless Sensor Network
- Environmental monitoring
- Wireless data transmission
- Data acquisition in the industrial environment
- Location and tracking of personnel or moving objects

