

The Geo-Telemetry Unit (GTU) is a sensor data and position system. The device uses the ZigBee industry standard to wirelessly transmit data through a mesh network to a base node. It includes the LEA-4H-0-000-0 GPS receiver with SuperSense and an RS232 interface for sensor and CPU interaction. The device utilizes the CC2431 from Texas Instruments for its location engine functionality. This will allow the device to be located indoors when reference nodes are available.

GTU Specifications:

- Weight: 4.1 oz. (w/o batteries)
- Battery: 2 x AA
- Battery Life: 8 hours
- Current:
 - 120 mA
 - 50 mA without GPS
- Display: 2.4 in. x 0.62 in.
- Wireless:
 - Connectivity: ZigBee
 - Range: 100 feet
 - Maximum Throughput: 8 Kbps
- GPS:
 - LEA-4H-0-000-0 from Ublox
 - Accuracy: 7 feet
- Location Engine Accuracy: 30 feet
- Microprocessors:
 - CC2431 from Texas Instruments
 - PIC18F6622 from Microchip Technology
- Sensor or CPU interface: RS232



Applications:

- Location Tracking
- Mobile Mesh Networks
- Military
- Industrial

