GL200
Multi-function Mini Asset Tracker

- Water Resistant
- Full Power Management
- 400 Hours Standby Time, Up to 200 Days Standby Time With External Battery Accessory
- I/O Interfaces to Connect Directly to Vehicles

The water resistant GL200 is a powerful GPS locator designed for lone worker, vehicle, pet and asset tracking applications. Its built-in GPS receiver has superior sensitivity and fast time to first fix. Its quad band GPRS/GSM subsystem supports 850/900/1800/1900 MHz allowing the GL200’s location to be monitored in real time or periodically tracked by a backend server and mobile devices. Its built-in 3-axis accelerometer allows motion detection and extends battery life through sophisticated power management algorithms. System integration is straightforward as complete documentation is provided for the full featured @Track protocol. The @Track protocol supports a wide variety of reports including emergency, geo-fence boundary crossings, low battery and scheduled GPS position.

Advantages

- Water resistant
- Quad band GSM/GPRS 850/900/1800/1900 MHz
- Embedded full featured @Track protocol
- Internal u-blox chipset
- Internal GSM/GPS antennas
- MMCX type RF connector for external GPS antenna
- Low power consumption, long standby time with internal battery
- Internal 3-axis accelerometer for power conservation and motion detection
- Full power management, can be connected to external DC power or battery
- CE/FCC/PTCRB/Anatel certified
## GL200

### Multi-function Mini Asset Tracker

### GSM Specifications

| Frequency | Quad band: 850/900/1800/1900 MHz  
Compliant to GSM phase 2/2+  
-Class 4 (2W @ 850/900 MHz)  
-Class 1 (1W @ 1800/1900 MHz) |
|------------|-------------------------------------------------------------|
| GPRS       | GPRS multi-slot class 12  
GPRS mobile station class B |
| RMS Phase Error | 5 deg |
| Max Out RF Power | GSM850/GSM900: 33.0±2 dBm  
DCS/PCS: 30.0±2 dBm |
| Dynamic Input Range | -15 ~ -108 dBm |
| Receiver Sensitivity | Class II RBER 2% (-107 dBm) |
| Stability Of Frequency | < 2.5 ppm |
| Max Frequency Error | ±0.1 ppm |

### GPS Specifications

- **GPS Chipset**: u-blox All-In-One GPS receiver
- **Sensitivity**
  - Autonomous: -148 dBm  
  - Hot start: -160 dBm  
  - Tracking: -162 dBm
- **Position Accuracy**
  - Autonomous: < 2.5m  
  - SBAS: 2.0m
- **TTFF (Open Sky)**
  - Cold start: 30s average  
  - Warm start: < 30s  
  - Hot start: < 1s

### General Specifications

- **Dimensions**: 67.5mm*40mm*21mm
- **Weight**: 60g
- **Internal Battery**: Li-Polymer 1300 mAh
- **Standby Time**: Without reporting: 400 hours  
5 minutes reporting: 130 hours  
10 minutes reporting: 150 hours
- **Water Resistance**: IPX5 compliant
- **Charging Voltage**: 5V DC
- **External Battery Voltage**: 3.5V to 4.5V DC
- **Operating Temperature**: -20°C ~ +55°C

### Air Interface Protocol

- **Transmit Protocol**: TCP, UDP, SMS
- **Scheduled Timing Report**: Report position and status according to preset time schedules
- **Geo-fence**: Support up to 5 internal geo-fence regions
- **Low Power Alarm**: Alarm when internal battery is low
- **Power On Report**: Report when the device is powered on
- **Power Off Report**: Report when the device is powered off
- **Motion Detection**: Motion alarm based on internal 3-axis accelerometer
- **SOS/Emergency Alarm**: SOS alarm when function key is long pressed

### Interfaces

- **Digital Inputs**: Two digital inputs  
  One positive trigger for ignition detection  
  One negative trigger input for normal use
- **Digital Outputs**: One digital output, open drain, 150 mA max current drain
- **Power Button**: For power on and power off, can be disabled by OTA using @Track protocol
- **Function Button**: Emergency alert or instant geo-fence
- **Mini USB Interface**: For external power and configuration
- **MMCX RF Connector**: For external GPS antenna
- **Indicator LED**: GSM, GPS and battery status