

GL505

Waterproof Hibernating Asset Tracking Device



- **Waterproof, IPX7 Compliant**
- **Long Standby Time, More Than 1000 Days**
- **Rapid and Covert Installation - No Wiring, No External Antennas**
- **User Serviceable CR123A Batteries**

The GL505 is a powerful waterproof GPS tracker designed for fixed asset tracking applications. It is powered by two user replaceable CR123A lithium batteries. Configuration allows it to wake up on a preset schedule to check if it needs to shift from dormant to active status and/or send update of its current location, then returning to a dormant state. Optimally configured, it will operate autonomously for 1000 days. Its built-in 3-axis accelerometer allows the GL505 to detect asset movement and transmit an alert message. The integrated @Track interface protocol allows the GL505 to communicate with a customer mobile phone or a backend server via GPRS/SMS and transfer reports of GPS position, etc. System integrators can easily incorporate the GL505 into existing tracking systems based on this full featured protocol.



Advantages

- Waterproof, IPX7 compliant
- Low power consumption, long standby time for more than 1000 days
- Powered by two user replaceable lithium batteries (CR123A)
- Internal u-blox chipset
- Quad band GSM/GPRS 850/900/1800/1900 MHz
- Embedded @Track protocol
- Internal 3-axis accelerometer for motion detection
- Internal GSM antenna
- Internal GPS antenna
- FCC/CE certified

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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 10 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	50-channel u-blox All-In-One GPS receiver
Sensitivity	Autonomous: -147 dBm Hot start: -156 dBm Reacquisition: -160 dBm Tracking: -162 dBm
Position Accuracy (CEP)	Autonomous: < 2.5m SBAS: < 2.0m
TTFF (Open Sky)	Cold start: 27s average Warm start: 27s average Hot start: 1s average

Interfaces

GSM Antenna	Internal only
GPS Antenna	Internal only
Internal Indicator LED	GSM, GPS and battery status
Serial Port	Internal 8 pin connector for upgrading or debugging

General Specifications

Dimensions	118mm*69.5mm*26.8mm
Weight	105g (without batteries)
Batteries	Two CR123A lithium batteries 1500 mAh
Standby Time	Standby current: < 10 uA SMS count: 1000 SMS SMS reporting standby: One SMS report per day: 1000 days TCP reporting standby: One report per day: 950 days Four reports per day: 248 days Five minutes reporting: 4 days
Waterproof	IPX7 compliant
Operating Temperature	-20°C ~ +60°C

Air Interface Protocol

Command Set	@Track protocol command Simple SMS command
Transmit Protocol	TCP, UDP, SMS
Working Mode	Power save mode, for long standby time Continuous mode, for emergency tracking
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
Motion Detection	Motion alarm trigger and optional change of working mode
Wakeup Report	Report when the device wakes up