



# GL502MG

## LTE Cat M1/NB2 IP68 ruggedized GNSS tracker with up to 10 years standby time

719g (25.36oz)	250 × 58 × 61mm 9.84''(L) × 2.28''(W) × 2.40''(H)
-20°C ~ +60°C	57000mAh, Lithium thionyl chloride battery (non-rechargeable)

### \*Standby Time:

1 Report/ Day		Up to 10 Years
6 Reports/ Day		Up to 6 Years
5 Minutes Reporting		Up to 3 Months

- Up to 10 Years Standby Time
- User Replaceable Battery
- Ruggedized Case
- Optional Magnetic Mounting
- IP68 Complaint
- BLE 5.2
- WiFi Positioning
- Power Saving Mode
- Continuous Mode
- OTA Control
- Scheduled Timing Report
- Geo-fences
- Motion Detection
- Low Power Alarm
- Wakeup Report
- Up to 10,000 Buffer Messages

The GL502 MG is a product specifically designed for container tracking, trailer tracking and asset tracking, Its ruggedized IP68 waterproof design ensures the product remains reliable when installed in the harsh environments. The unique casing design allows rapid, flexible and low-cost installations meaning it can simply be placed with container, fixed with four spikes, or set using the optional magnetic holder kit. With 57000mAh ultra- high capacity battery, the product features up to 10-year standby time meaning that fit and forget installation leaves users safe in the knowledge that the product will continue to monitor the asset over a long period. In addition, its user -replaceable battery brings lower maintenance cost. Its built-in BLE allows connectivity to diverse wireless accessories. It supports Wi-Fi scanning meaning more choice to locate the product and extend its applications in urban environments where there many wireless networks broadcasting and in places that are out of reach to GNSS.



Container Tracking



Trailer Tracking



Asset Monitoring



## GL502MG

Region	Operating Band	GNSS Type	Position Accuracy (CEP)
Worldwide	Cat M1/Cat NB1: LTE FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/ B19/B20/B25/B26/B27/B28/B66/B85 Cat NB2: LTE-FDD:B1/B2/B3/B4/B5/B8/B12/B13/B18/ B19/B20/B25/B28/B66/B71/B85 EG PRS: 850/900/1800/1900MHz	u-blox All-in-one GNSS Receiver	Autonomous: < 2.5m

## Interfaces

Battery Switch	Used for power on/off (Internal only)
Cellular Antenna	Internal only
GNSS Antenna	Internal only
BLE Antenna	Internal only
WiFi Antenna	Internal only
SIM Access	3FF SIM (Internal only)
LED Indicators	GNSS, PWR (Internal only)
USB Type-C	Used for firmware upgrading and debug (Internal only)

## Air Interface Protocol

Command Set	@Track protocol command
Transmit Protocol	TCP, UDP, SMS
Working Modes	Power saving mode for long standby time Continuous mode for emergency tracking
Scheduled Timing Report	Report position and status at preset time intervals
Geo-fences	Support up to 20 internal geo-fence regions
Low Power Alarm	Alarm when internal battery is low
Wakeup Report	Report when the device wakes up
Motion Detection	Motion detection based on internal 3-axis accelerometer
Reporting Frequency Adjustment	Intelligent adjustment of reporting frequency

\*Note: 1. The standby time is estimated under the condition of operating with LTE CAT M1/NB-IoT and the CSQ is greater than 15, working at a constant ambient temperature of 25°C and reporting once a day without any sensors. 2. The battery life estimation is based on LTE CAT M1/NB-IoT Connectivity and may be influenced by several factors such as network coverage, report sent interval, ambient temperature, sensors' setting, peripherals, installation location and orientation, etc. If you're interested in power consumption calculation of our device, please contact with our sales or FAE to get more information.

## Accessories



### WKF300

BLE key fob for continuously detecting the on-board status of the device



### GL502MG Battery Pack

Lithium thionyl chloride battery, 57000mAh  
3\*ER34615 3.6V/59A  
Model: GL502MG Battery Pack



### GL502MG Steel Lanyard Kit

Used for installation of GL502MG.

Parts list:

Steel Lanyard x1

Lanyard Plate x2

Model: GL502MG Steel Lanyard Kit



### GL502MG Magnetic Mounting Kit

Used for magnetic installation of GL502MG.

Magnet x4

Screw x4

Nut x4

Metal Gasket x4

Silicone Gasket x4

Model: GL502MG Magnetic Mounting Kit

## Debug Cable



### Type-C Data Cable

It is used for configuration, firmware upgrade and debug.