



# Battery Powered Asset & Vehicle Tracker

Maximize efficiency. Minimize risks. Manage assets.

## MG14

### HIGHLIGHTS

- LTE Cat-M/UMTS/GPRS
- Integrated cellular and GNSS antenna
- LED status indicators for GNSS and network registration
- Integrated accelerometer
- BLE5.0 support, low power consumption
- Large Li-rechargeable backup battery
- SMS, UDP, TCP, FTP & MQTT
- Up to 16 Geo-fences (polygon and circles)
- Over the air configuration and firmware update
- Extended AT Command set for flexible and easy configuration
- Easy installation
- IP67 Rating
- Optional  
Magnet Holder

Ideal for stolen vehicle, goods or other assets to be tracked with no installation process required. The battery-powered, small-size MG14 GPS tracker is designed to be used with internal Li rechargeable battery for fast installation. It is a "Slap & Track" GPS tracker. The MG14 provides asset location tracking and receiving alerts when the asset has been moved or tampered with, plus many more features.

#### IT'S RELIABLE

The MG14 is a high-performance, IP67 rated device. It has an integrated LTE Cat M modem, a GNSS receiver, and a 3-axis accelerometer, relative Humidity and Temperature Sensor, for cellular data communication, location tracking, and motion detection respectively.

#### IT'S SIMPLE

With power from battery the MG14 can be easily used anywhere the tracking is required. MG14 can be programmed to wake-up on motion, upon a preset schedule. Reports can be triggered periodically or in response to events - such as removing, movement, Geo-fence violations, and many others.

#### IT'S FUNCTIONAL

The MG14 comes with pre-configured software. Its internal motion sensor and configurable event alarms enable total management of your high-value assets. The device supports variable frequency reporting when moving or stationary.

***The application firmware is flexible and can be customized to be compatible with your existing server at special request.***



## Specifications:

### CELLULAR

- LTE Cat-M
- LTE Bands: 2/4/5/12/13/17/25/16
- Integrated high performance antenna

### GNSS

- GPS, GLONASS, BeiDou & Galileo
- Tracking Sensitivity : -161 dBm
- Acquisition Sensitivity : -146 dBm
- Location Accuracy : < 2.5CEP

### SENSOR

- Accelerometer: 3x
- TEMPERATURE & HUMIDITY
- REAL TIME CLOCK

### BATTERY INFORMATION

- MG14 : Lithium re-chargeable battery 5200mAh @3.7V. It is designed for the case where more reports are need per day. So the operation time depends on the usage case. The Lithium battery has the nature of self-discharging, so the usage should be limited to 1 year and then recharging is required.
- (Depends on the LTE signal strength and how many reports per hour)

### ELECTRICAL

- Operating Current
  - ✓ Hibernate: < 20uA @ 3.7V
  - ✓ Tracking 200mA @3.7V Typical
  - ✓ Reporting: 300mA @3.7V Typical

### PHYSICAL

- Dimensions: 179.3 x 94.46 x 33.07mm
- Weight : < g
- Internal Cellular and GNSS Antenna

### ENVIRONMENTAL

- IP67 Rating
- Operation Temperature: -30°C to +70°C
- Storage Temperature: -40°C to +85°C

### Blue tooth

- BLE 5.0

### INTERFACE IOs (for maintenance only)

- I/O Connector : female panel connector
- RS232 UART TTL (3.3v) (RX/TX) x1
- RS485 x1
- CAN x1
- GND (x1)
- Power Supply: DC terminal 12v
- Solar Supply: DC terminal 9v

### APPROVALS

- FCC
- PTCRB
- Carrier

## Asiatelco Technologies Inc. (ATEL)

**Asiatelco** is the leading provider of wireless terminal products to its value customers worldwide. Its innovative products and solutions are widely used for reliable broadband access, IoT/M2M applications and voice communication with 4G LTE, 3G & 2G wireless technologies. ATEL's sales and marketing are globally positioned. It has become globally well-known company in the wireless industry due to its excellent products, solutions and services. For more information, contact Asiatelco Technologies Inc.

## **FCC Regulations:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

## **FCC RF Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with FCC RF Exposure compliance requirements, this grant is applicable to only Mobile Configurations.

The antennas

used for the transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.