Day by day e-bikes are more sophisticated, smarter and can reach to the user longer distances making of it one important part of our life. Regardless of the e-bike is expensive or cheap, keeping safe and connected is getting more importance. To give a fast and adaptive solution to these necessities ebikemotion has created the “GPS TRACKER” unit, a modular solution that can be installed in different positions of the e-bike or frame creating a link between the Cloud and the e-bike. ebikemotion® GPS TRACKER is smart, modular, CAN BUS compatible accessory, fully adaptable to your specifications that will help to locate the e-bike, getting the e-bike system status and even update by remote other parts. Discover it!

ebikemotion® GPS TRACKER is the result of years of work expended in developing Automotive Tracking solutions. All our knowledge and know-how has been applied to this solution that is 100% designed for bicycles. The TRACKER includes a movement sensor that wakes up the unit if we detect movement in special situations (e-bike off, or protection activated as example). Same sensor is also used for alert systems or to detect falling of the rider.

The main functions of the unit are:
- Location of e-bike, falling alert, remote checking and status of e-bike, Automatic reporting of e-bike (STRAVA track uploading, status of e-bike for sharing, etc.), remote monitoring of e-bike, automatic charging of TRACKER battery from e-bike battery, alert if the e-bike is out of selected area, remote inform about remain time to full charge, etc.

ebikemotion® GPS/GSM TRACKER uses a SIM on CHIP integrated from factory in the PCB Board provided by Vodafone Global. One solution with worldwide coverage.

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EN 15194
DIN EN ISO 13849
According to Directive 2006/42/EG

TARGET APPLICATIONS:
- Location and Position of electric bicycles
- Collect data and update firmware of devices connected (Smart BMS, Motor Controller, Displays, etc.)
- Fleet of e-bikes for sharing, renting, etc.

SIM ON CHIP with GLOBAL CONNECTION SUPPORT

Designed & Manufactured in Spain (EU)
Product Features and Specifications

- Power supply compatible 12 to 56V
- Quad-band GSM/GPRS
- Supported frequencies GSM850MHz, EGSM900MHz, DCS1800MHz and PCS1900MHz
- Programmable general purpose input and output; One SIM card interface
- Battery overvoltage, undervoltage and overcurrent fault detection
- 5 Volts 500 kbauds High speed CAN SERIAL communication under requirement
- Internal Li-Po Battery (1000 mAh)
- EN 15194 - DIN EN ISO 13849 - According to Directive 2006/42/EG
- IP67 Waterproof
- GPS Receiver, supports QASS, SBAS ranging, supports WAAS/EGNOS/MSAS/GAGAN
- 22 tracking/66 acquisition-channel, up to 210 PRN channels
- 12 multi-tone active interference cancellers and jamming elimination
- Indoor and outdoor multi-path detection and compensation
- Max NMEA update rate up to 5 HZ
- EPO orbit prediction
- Always locate advanced location awareness technology
- GPRS data downlink transfer: max. 85.6 kbps
- GPRS data uplink transfer: max. 85.6 kbps
- Coding scheme: CS-1, CS-2, CS-3 and CS-4
- PAP protocol for PPP connect
- Integrate the TCP/IP protocol
- Support Packet Broadcast Control Channel (PBCCH)
- Support External or Internal Active Antennas

Dimensions Box:
- Length: 62.5 mm
- Height: 23.6 mm
- Width: 47.0 mm

Dimensions PCB:
- Length: 59.0 mm
- Height: 43.0 mm
- Width: 11.0 mm
- With Battery: 18.0 mm

This is the standard size of the TRACKER. But the layout and shape could be adapted for customers requirements.