# **FMB202**

Teltonika FMB202 is a SPECIAL waterproof (IP67) tracker with Bluetooth connectivity, internal high gain GNSS and GSM antennas and integrated high capacity backup battery. Device is designed to work longer without power supply. FMB202 with NiMH battery can work up to 2 days in power saving mode. FMB202 is perfectly suitable for agriculture, delivery, refrigerated transport, trailers tracking, security & emergency services and even more. 6-30V power supply makes FMB202 suitable for motorbikes and water transport.

- IP67 case fully waterproof case extended mounting capabilities
- 1-wire & extended I/O wide range of external sensors expand applications range
- High capacity battery long autonomous work expands number of vehicles types you're tracking



FLEET MANAGEMENT // FMB202



### Bluetooth



Integrated Bluetooth 4.0 LE allows usage of various wireless sensors and grants compatibility with previously available Bluetooth V3.0 features like device configuration, firmware update, headset support. Retrieve temperature and humidity information from Bluetooth sensors without the need of wired connection – reduce installation costs. Save on fuel by reducing aggressive driving, increase your driver safety and reduce the number of driving-related incidents with Android application BTAPP.



### Internal battery

Feel safe when vehicle is monitored by device with internal battery. When vehicle battery is disconnected, device still remains online and sends data to server.



### Advanced antitheft system

Prevent your vehicle from theft with advanced antitheft functionality. Combine Auto Geofencing with new Towing detection functionality.



### **Smart Crash detection**

Ensure safety of Your employee with smart Crash detection. Get alarm message immediately after accident, save workers life!



### 1-Wire

1-wire protocol support enables driver identification and connection of up to 4 temperature sensors. According to iButton or RFID ID you can prevent unauthorized access to your fleet. Also temperature sensors allows monitoring of your cargo.



# Waterproof (IP67) case

IP67 protection class means that device is waterproof and 100% protected against solid objects like dust or sand. Such casing allows you to mount tracker to water transport, motorcycle or other transport with trust.

### FMB202 USE CASES



### Water transport

It might seem that motorboats, ships or personal water crafts are items of luxury, but nowadays more and more people are acquiring such type of technology. To ensure safety we can offer you usual tracking solution designed for water transport.

### **Motorbikes**

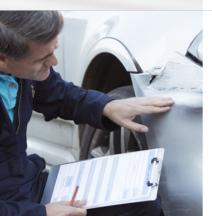
In urban cities motorcycles can get you into places where other vehicles cannot, it might be fastest means of transportation during traffic hours. This commodity has one disadvantage – it is an easy target for thieves. In most cases quick reaction to theft attempt could save your valuable asset. With our solution you will always have current location, receive warnings if motor bike is being moved or if tracker was disconnected from battery.

### **Construction & mining**

Probably most important aspect of construction machinery management is fuel consumption data. Powerful cranes and high capacity concrete mixers compared to light vehicles, use huge amounts of fuel during short periods of time – high chance of fuel theft if work time is accounted only on paper. Take full control of your fleet, workers and resources.

### **Delivery transport**

Quick and professional distribution of goods is the key to profit in delivery business. Route optimization can reduce your fuel expenses up to 30%; driver identification and behavior monitoring ensure high delivery standard and traceability, if any complaints need to be investigated. Gain full control of your fleet and resources with our solution.



# Insurance telematics

Main reasons for insurance pay outs are car accidents and thefts. There have been at least 7 million cases of stolen vehicles around the world every year and this number keeps growing every day; figures in traffic accident statistics are even greater. Real time tracking, warnings when theft attempt or crash is detected, with possibility to trace accidents – all this to determine culprit and reduce expenses when unforeseen event occurs.

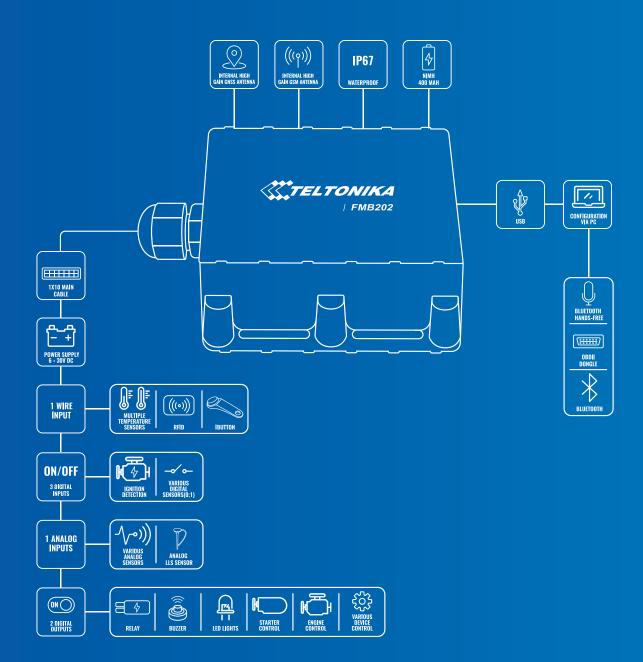
# FMB202 TECHNICAL DETAILS

GSM/GPRS features	Quad-band 900/1800 MHz; 850/1900 MHz GPRS Multi-Slot Class 12(up to 240 kbps) GPRS Mobile Station Class B SMS (text/data) Dual-SIM (1 x micro SIM card , 1 x eSIM)
Bluetooth	Bluetooth® transceiver fully compliant with Bluetooth specification V4.0 LE for external peripherals: • Voice calls over Bluetooth® • Configuration and Firmware update via Bluetooth® • Bluetooth® sensors • OBDII Bluetooth® dongle
GNSS	33 channel GNSS receiver -165 dBm sensitivity Hot start <1s Warm start < 25s Cold start < 35s NMEA-183 protocol GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS,AGPS Accuracy < 3m
Interface	3 Digital Inputs (1 reserved for Ignition Status Monitoring) 1 Configurable Analog Input (10V or 30V range) or DIN4 2 Digital Open-collector Outputs (connecting external relays, LED, buzzers etc.) 1-Wire (iButton, RFID, temperature sensors) Built in accelerometer Power supply (+6+30) V DC Waterproof (IP67) case Internal high gain GSM antenna Internal high gain GNSS antenna Dimensions: L(72,5mm)xW(73mm)xH(27,3mm) Integrated 400 mAh Ni-MH back-up battery 2 Status LEDs Micro USB Port
Features	128 MB internal flash memory Waterproof (IP67) case allow use device in place where is contact with water With new integrated GNSS module, your tracking experience will be better than ever before. Even higher sensitivity, faster than ever cold start and almost instant hot start ensures that your fleet will be tracked precisely Bluetooth® transceiver fully compliant with Bluetooth® specification V4.0 LE for external peripherals Small and easy to mount case High gain internal GSM antenna and internal GNSS antenna allow mount FMB202 much easier Real Time tracking Smart data acquisition based on time, distance, angle, speed delta, ignition and I/O events allow to have precise online tracker Sending acquired data via GPRS (TCP/IP and UDP/IP protocols) Smart algorithm of GPRS connections for GPRS traffic saving Operating in roaming networks by preferred GSM providers list Add all your unwanted GSM operators to black list Events from I/O elements detection and sending via GPRS or SMS 50 geofence zones (rectangular or circle) Auto Geofencing created for car towing detection and car theft prevention Towing detection using accelerometer Deep Sleep mode (less than 6 mA power consumption)

### **FMB202 TECHNICAL DETAILS**

Online Deep Sleep mode for constant connection with server Firmware and configuration update via GPRS (FOTA) 3 operational modes (Home, Roaming, Unknown) based on operator Time synchronization by NTP (Network Time Protocol) if GNSS signal is absent Time synchronization by NITZ (Network Identity and Time Zone) if GNSS signal is absent Integrated scenarios:

- Over speeding to secure driver and prevent penalties
- Immobilizer function
- Authorized driving (1-Wire® iButton® ID keys up to 50 iButton® keys) use to prevent
- stealing or indicate drivers
- GSM jamming detection
- Excessive Idling detectionDOUT control via call
- Trip start and end detection
- Bluetooth® scenarios:
  - Voice calls over Bluetooth®
  - OBDII Bluetooth® dongle
  - Data link mode over Bluetooth®
  - Bluetooth® sensors



Features