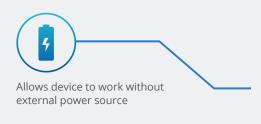# FMB001

ADVANCED PLUG AND TRACK DEVICE WITH BLUETOOTH®

FMB001 is advanced OBDII Plug and Play tracker with GNSS, GSM and Bluetooth connectivity. It is perfectly suitable for light vehicle tracking in applications like courier delivery service, car rental & leasing, insurance telematics and many other where simple integration is a must. Also, it has additional feature – reading OBDII data from vehicles on-board computer. FMB001 device supports temperature/humidity sensors, hands-free, firmware and configuration update via Bluetooth.

Allows device to work without external power source

Crash detection functionality working according accelerometer data

Bluetooth for external devices and Low Energy sensors

OBDII Data

Allows reading CAN bus data from vehicle ECU

USE CASES

LIGHT VEHICLES

HEAVY DUTY TRANSPORT

INSURANCE TELEMATICS (UBI)

COURIER DELIVERY SERVICES

RENTAL AND LEASING

OBDII connector

Micro USB

Status LED   Navigate LED

Module

Name	Teltonika TM2500
Technology	GSM/GPRS/GNSS/BLUETOOTH® LE

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
Receiver	33 channel
Tracking sensitivity	-165 dBM
Position accuracy	< 2.5 CEP
Velocity accuracy	< 0.1m/s (within +/- 15% error)
Hot start	< 1 s
Warm start	< 25 s
Cold start	< 35 s

Cellular

Technology	GSM
2G bands	Quad-band 850 / 900 / 1800 / 1900 MHz
Data transfer	GPRS Multi-Slot Class 12(up to 240 kbps)
Data support	SMS (text/data)

Power

Input voltage range	10 - 30 V DC with overvoltage protection
Back-up battery	170 mAh Li-Ion battery 3.7 V (0.63 Wh)

Bluetooth® technology

Specification	4.0 + LE
Supported peripherals	Temperature and Humidity sensor, Headset, Inateck Barcode Scanner, Universal Bluetooth® LE sensors support

Interface

Digital Inputs	1
Connection	OBDII Socket
GNSS antenna	Internal High Gain
GSM antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	Micro-SIM
Memory	128MB internal flash memory

OBD Interface

Data reading	Up to 32 vehicle onboard parameters, supported OBD protocols: ISO 9141-2 (5 baud init, 10.4 kbaud) ISO 14230-4 KWP (5 baud init, 10.4 kbaud) ISO 14230-4 KWP (fast init, 10.4 kbaud) ISO 15765-4 CAN (11 bit ID, 250 kbaud) ISO 15765-4 CAN (11 bit ID, 500 kbaud) ISO 15765-4 CAN (29 bit ID, 250 kbaud) ISO 15765-4 CAN (29 bit ID, 500 kbaud)

Physical specification

Dimensions	50.7 x 49.6 x 25 mm (L x W x H)
Weight	63 g

Operating environment

Operating temperature (without battery)	-40 °C to +85 °C
Storage temperature (without battery)	-40 °C to +85 °C
Operating humidity	5% to 95% non-condensing
Ingress Protection Rating	IP41
Battery charge temperature	0 °C to +45 °C
Battery discharge temperature	-20 °C to +60 °C
Battery storage temperature	-20 °C to +45 °C for 1 month -20 °C to +35 °C for 6 months

Features

Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding detection, Jamming detection, GNSS Fuel Counter, Excessive Idling detection, Unplug detection, Towing detection, Crash detection, Auto Geofence, Manual Geofence, Trip
Sleep modes	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep
Configuration and firmware update	FOTA Web, FOTA, Teltonika Configurator (USB, Bluetoot® wireless technology), FMBT mobile application (Configuration)
SMS	Configuration, Events, Debug
GPRS commands	Configuration, Debug
Time Synchronization	GPS, NITZ, NTP
Fuel monitoring	OBDII
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM

Certification & Approvals

Regulatory	CE/RED, E-Mark, EAC, RoHS, REACH, ANATEL