FMB002

ADVANCED PLUG AND TRACK DEVICE WITH BLUETOOTH

FMB002 is ultra-small OBDII Plug and Play device with GNSS, GSM, BLE 4.0 connectivity CAN bus data reading capability. It is a perfect tracker for a wide range of use cases - including fleet management of light commercial vehicles, driver log-book, insurance telematics (UBI), car rental & leasing and others. Main feature of FMB002 is OBDII standard data reading from vehicles on-board computer. Combined with effortless, low cost integration it becomes easy and powerful solution. Device supports various Bluetooth Low energy sensors, beacons, hands-free headset, firmware and configuration update via Bluetooth.

Last, but not least – device is only 50% of a size of its predecessor FMB001 device. Much smaller, yet with enriched feature set, FMB002 is an obvious choice for your OBD application!

Our smallest GNSS tracker for simple connected car applications

Crash detection according to accelerometer data

Bluetooth for external devices and Low Energy sensors

OBDII Data

Allows reading CAN bus data from vehicle ECU

USE CASES

FLEET MANAGEMENT

DRIVER LOG-BOOK

INSURANCE TELEMATICS (UBI)

CONNECTED CAR

RENTAL AND LEASING

OBDII connector

Navigate LED

Status LED

Module

Name	Teltonika TM2500
Technology	GSM/GPRS/GNSS/BLUETOOTH

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
Receiver	33 channel
Tracking sensitivity	-165 dBM
Accuracy	< 3 m
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	12 – 30 V DC with overvoltage protection
Back-up battery	3.7 V 45 mAh

Bluetooth

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

Physical specification

Dimensions	52.6 x 29.1 x 26 mm (L x W x H)

Interface

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	Nano-SIM
Memory	128MB internal flash memory

OBD Interface

Data	K-Line, CAN bus data
Data reading	Up to 32 vehicle onboard parameters, supported OBD protocols: SAE J1850 PWM (41.6 kbaud) SAE J1850 VPW (10.4 kbaud) 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)

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	+10 °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, Bluetooth), FMBT mobile application (Configuration)
SMS	Configuration, Events, Debug
GPRS commands	Configuration, Debug
Time Synchronization	GPS, NITZ, NTP
Fuel monitoring	OBDII
Ignition detection	Accelerometer, External Power Voltage, Engine RPM