

FMB140 is an ADVANCED GSM/GNSS/Bluetooth tracker with integrated CAN data processor. It is compact 2 in 1 solution: GPS tracker and CAN adapter inside! Device allows to read CAN data from a wide range of various vehicles, including light & electric vehicles, trucks, buses and special machinery. Depending on exact software version FMB140 can be used in advanced applications as heavy logistics, delivery services, utility transport. Two options available to fulfill any business demands:

LV-CAN200 option - default software version with LV-CAN200 parameters, including fuel level, consumption, odometer, CAN speed, pedal position, Supported vehicle types: light vehicles, trucks, buses. ALL-CAN300 option\* - \*\*advanced\*\* software version allows to read more parameters than default version. Available \*\*additional parameters\*\* include AdBlue level, engine lifetime, airbag. Supported vehicle types: light vehicles, trucks, buses + electric vehicles, agriculture, construction, forest, utility & special machineries.

FMB140 supports Bluetooth 4.0 LE protocol, which lets you connect various external devices and Bluetooth low energy sensors. New device is a major improvement for telematics with easier installation and flexibility to choose proper set of features without a change of hardware.



CAN data reading from light vehicles, buses, coaches and trucks



Real fuel consumption and level, full mileage, engine temperature and more



CAN data reading from agriculture and special transport\*



Bluetooth for external devices and Low Energy sensors

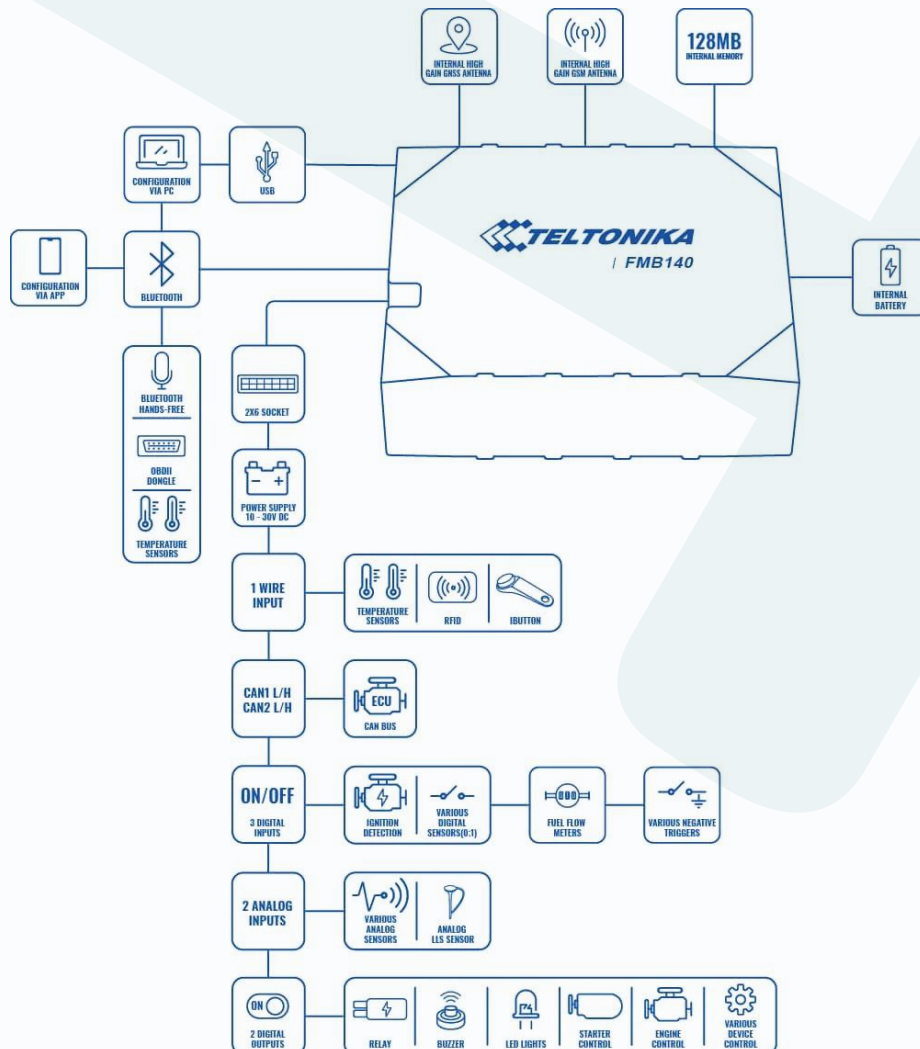


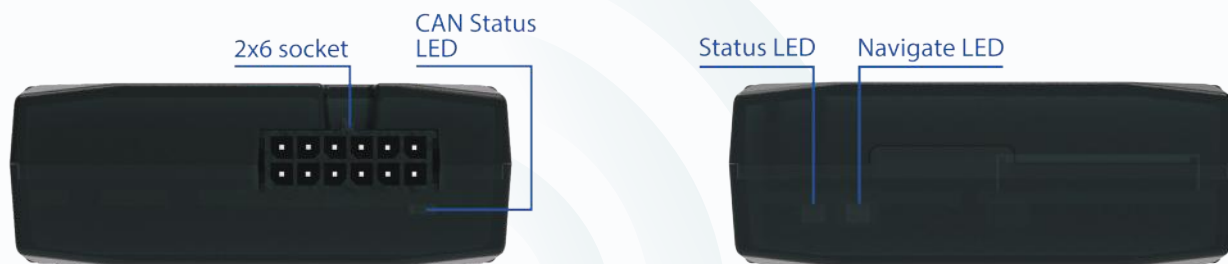
Configurable DIN/AIN for flexible remote monitoring and control



Negative input will allow easier installation of accessories

SCHEME





## Module

Name	Teltonika TM2500
Technology	GSM/GPRS/GNSS/BLUETOOTH

## GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver	Tracking: 33
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), GPRS Mobile Station Class B
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

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

## Physical specification

Dimensions	65 x 56.6 x 20.6 mm (L x W x H)
Weight	55 g

## Interface

Digital Inputs	3
Negative Inputs	1 (Digital Input 2)
Impulse Inputs	2 (Digital Input 1, Digital Input 2)
Digital Outputs	2
Analog Inputs	2
CAN interfaces	2
-1Wire	1(- 1Wire data)
GNSS antenna	Internal High Gain
GSM antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	3 status LED lights
SIM	Micro-SIM + eSIM
Memory	128MB internal flash memory

## 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

CAN Data	Fuel Level (Dashboard), Total fuel consumption, Vehicle speed (wheel), Vehicle driven distance, Engine speed (RPM), Accelerator pedal position
Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding detection, Jamming detection, GNSS Fuel Counter, DOUT Control Excessive Idling detection, Immobilizer, iButton Read Notification, 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, DOUT control, Debug
GPRS commands	Configuration, DOUT control, Debug
Time Synchronization	GPS, NITZ, NTP
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM