# **FMB150**



# GNSS/GSM/BLUETOOTH TRACKER WITH INTEGRATED CAN ADAPTER AND INTERNAL GNSS/GSM ANTENNAS AND INTERNAL BATTERY



# **2G NETWORK**

Quad band cellular connectivity with global coverage

#### **CAN DATA FOR EV VEHICLES**

CAN module allows data reading from electric vehicles (EV)

# **INTEGRATED CAN DATA PROCESSOR**

Allows to monitor real fuel consumption and level, full mileage, engine temperature and more

# **NEGATIVE INPUT**

Allows easier installation of accessories









FMB150 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 and buses. With the current software version FMB150 can be used in advanced applications as logistics, delivery services, utility transport, car sharing and more. For now, one SW option is available to fulfil your business demands:

A default FMB150 software version with LV-CAN parameters, including fuel level, consumption, odometer, CAN speed, pedal position.

Supported vehicle types: light vehicles, electric vehicles, trucks and buses.





#### Module

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

GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver	Tracking: 33
Tracking sensitivity	-165 dBM
Position accuracy	< 2.5 CEP
Velocity accuracy	< 0.1m/s (within +/- 15% error)
Hot start	<1s
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-lon battery 3.7 V (0.63 Wh)
Power consumption	At 12V < 6mA (Ultra Deep Sleep)
	At 12V < 8mA (Deep Sleep)
	At 12V < 11mA (Online Deep Sleep)
	At 12V < 20mA (GPS Sleep)
	At 12V < 35 mA (Nominal with no load)
	At 12V < 1.5 A Max. (with full Load / Peak)

# Bluetooth

Specification	4.0 + LE

#### **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
1-Wire	1 (1-Wire 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 Via Call, 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

Digital Input 1, Accelerometer, External Power Voltage, Engine RPM

# Certification & Approvals \*

Ignition detection

Regulatory CE-RED, E-mark, Reach, RoHS, Anatel

<sup>\*</sup> in progress