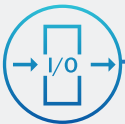


# FMB110

## GNSS/GSM/BLUETOOTH TRACKER WITH INTERNAL GNSS/GSM ANTENNAS

FMB110 small and professional tracker with internal high gain GSM and GNSS antennas, which is able to collect device coordinates and other useful data and transfer them via GSM network to server. This device is perfectly suitable for applications where location acquirment of remote objects is needed: fleet management, car rental companies, taxi companies, public transport, logistics companies, personal cars and so on. FMB110 can perform tasks on remote objects, such as monitoring engine status, controlling truck's door etc.



Digital Input/Output for remote monitoring and control



1-Wire® interface to monitor temperature data and RFID/iButton tags



Crash detection functionality working according to accelerometer data



Bluetooth for external devices and Low Energy sensors



## USE CASES



LIGHT VEHICLES



HEAVY DUTY TRANSPORT



TRAILER TRACKING



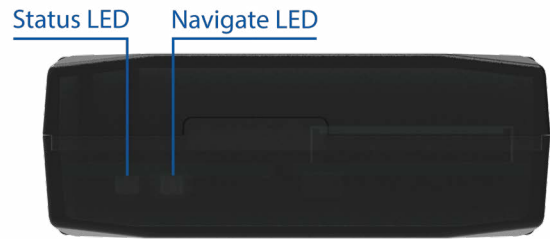
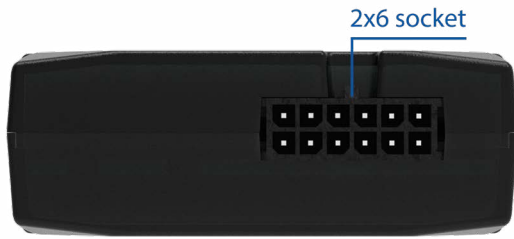
REFRIGERATED TRANSPORT



INTERNATIONAL LOGISTICS



CAR SHARING



**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
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), GPRS Mobile Station Class B
Data support	SMS (text/data)

**Power**

Input voltage range	10 - 30 V DC with overvoltage protection
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**Power Consumption**

At 12V < 5 mA	Ultra Deep Sleep
At 12V < 6 mA	Deep Sleep
At 12V < 7 mA	Online Deep Sleep
At 12V < 17mA	GPS Sleep
At 12V < 35 mA	Nominal with no load

**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	50 g

**Interface**

Digital Inputs	3
Digital Outputs	2
Analog Inputs	2
CAN Adapter inputs	1
1-Wire	1
GNSS antenna	Internal High Gain
CellularGSM antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	Micro-SIM + eSIM
Memory	128MB internal flash memory

**Operating environment**

Operating temperature	-40 °C to +85 °C
Storage temperature	-40 °C to +85 °C
Operating humidity	5% to 95% non-condensing
Ingress Protection Rating	IP41

**Features**

Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding detection, Jamming detection, GNSS Fuel Counter, DOUT Control Via Call, Excessive Idling detection, Immobilizer, iButton Read Notification, 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
Fuel monitoring	LLS (Analog), LV-CAN200, ALL-CAN300, CAN-CONTROL, OBDII dongle
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII dongle)

**Certification & Approvals**

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