

FMB225

WATERPROOF GPRS/GNSS DUAL-SIM TRACKER
WITH RS232, RS485 INTERFACES

Product page



IP67 CASING

Reliable tracking in harsh conditions

2G NETWORK

Quad band cellular connectivity with global coverage

RS232/RS485

Serial communication interfaces to connect third-party external devices

DUAL SIM

Adds a backup communication channel and significantly reduce roaming costs



AGRICULTURE



CONSTRUCTION & MINING



WATER TRANSPORT



PUBLIC SERVICES



HEAVY DUTY TRANSPORT

Teltonika FMB225 is WATER and DUST RESISTANT tracker with internal GNSS and GSM antennas, Bluetooth connectivity and backup battery. FMB225 is designed for communication with various third party RS232 or RS485 devices, like digital fuel sensors (LLS), Garmin navigation device, RFID reader and much more. With Teltonika CAN adapters, FMB225 can be used in agriculture or construction & mining without any risk of water or dust to the device because of IP67 casing. It is totally protected from dust and remains safe during the short periods of immersion in water up to 1m depth. FMB225 is also excellent for refrigerated transport, because it has extended input/output set and 1-wire interface for temperature monitoring.



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
Internal Back-up battery	170 mAh Li-Ion battery 3.7 V (0.63 Wh)
Power consumption	At 12V < 6mA (Ultra Deep Sleep) At 12V < 6.5mA (Deep Sleep) At 12V < 7mA (Online Deep Sleep) At 12V < 12mA (GPS Sleep) At 12V < 38 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	70,5 x 67,0 x 25,6 mm (L x W x H) 85,0 x 67,0 x 25,6 mm (L x W x H) (length with connector socket)
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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	IP67
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

Interface

Digital Inputs	1
Digital Outputs	1
Analog Inputs	1
CAN Adapter Inputs	1
1-Wire	1
RS232	1
RS485	1
GNSS antenna	Internal GNSS High Gain
Cellular antenna	Internal GSM High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	Dual SIM
Memory	128MB internal flash memory

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, 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	GNSS, NITZ, NTP
Fuel monitoring	LLS (Analog), RS232/485 Fuel sensor, LV-CAN200, ALL-CAN300, CAN-CONTROL, OBDII dongle
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII dongle)
RS232 Modes	Log Mode, NMEA, LLS, LCD, RFIH HID/MF7, Garmin FMI, TCP ASCII/Binary
RS485 Modes	Log Mode, NMEA, LLS, TCP ASCII/Binary

Certification & Approvals *

Regulatory

CE-RED, E-mark, Reach, RoHS

* in progress