



FMB-125 • GPS Tracker Technical Datasheet



FMB-125

DUAL-SIM - Tracker with RS232



Sensors



Sleep modes



SMS



Fuel monitoring



Time Synchronization



Ignition Detection



Product Summary

FMB125 is small and professional real-time tracking terminal with GNSS and LTE/GSM connectivity and backup battery. Device equipped with GNSS/Bluetooth and LTE modules, internal GNSS, LTE antennas. FMB125 features RS485/RS232 data interface, which gives ability to connect various third-party external devices. It is perfectly suitable for applications where location acquirement of remote objects is needed: fleet management, car rental companies, taxi companies, public transport, logistics companies, and personal cars and so on.

Key Features:

➤ Sensors

Accelerometer

➤ Scenarios

Green Driving, Over Speeding detection, GNSS Fuel Counter, DOUT Control Via Call, Excessive Idling detection, Immobilizer, I Button Read Notification, Unplug detection, Towing detection, Crash detection, Auto Geo fence, Manual Geo fence, Trip

➤ Sleep modes

GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep

➤ **Configuration and firmware update**

FOTA Web, FOTA, Fleetly 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), Digital LLS (RS232, RS485), 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, RFID HID/MF7, Garmin FMI, TCP ASCII/Binary

➤ **RS485 Modes**

Log Mode, NMEA, LLS, TCP ASCII/Binary

Technical Specification

Module

Name	FMB-125
Technology	GSM/GPRS/GNSS/BLUETOOTH

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver	33 channel
Tracking sensitivity	-165 dBm
Position accuracy	< 2.5m CEP
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 and reverse polarity protection
Internal Back-up battery	170 mAh Li-Ion battery 3.7 V (0.63 Wh)

Power Consumption

Ultra-Deep Sleep	At 12V < 6mA
Deep Sleep	At 12V < 6.5mA
Online Deep Sleep	At 12V < 7mA
GPS Sleep	At 12V < 12mA
Nominal	At 12V < 38mA

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 18.9 mm (L x W x H)
Weight	52 g

Interface

Digital Inputs	1
Digital Outputs	1
Analog Inputs	1
CAN Adapter inputs	1
1-Wire	1
RS232	1
RS485	1

GNSS antenna	External (SMA connector) / internal (optional)
Cellular antenna	Internal GSM High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	2x SIM Card (Dual-SIM)
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

Certification & Approvals

Regulatory

CE/RED, EAC, ROHS, REACH, Anatel, SIRIM QAS, SDPPI POSTEL, ICASA

