



FMB-920 • GPS Tracker Technical Datasheet



FMB-920

Smart Tracker - Internal Backup Battery



Sensors



Sleep modes



SMS



Fuel monitoring



Time Synchronization



Ignition Detection



Product Summary

FMB920 is a slim design easily fitted tracker with GNSS/GPS internal antennas, flash memory, integrated backup battery, accelerometer, inputs/output and various BLE 4.0 connectivity sensors and beacons support. Thanks to a rich feature set, this EASY category tracker delivers unquestionable value for the GPS telematics service providers and end-users.

Key Features:

- **Sensors**
Accelerometer
- **Scenarios**
Green Driving, Over Speeding detection, jamming detection, GNSS Fuel Counter, DOUT Control Via Call, Excessive Idling detection, 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), OBDII dongle

➤ **Ignition detection**

Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII dongle)

Technical Specification

Module

Name	FMB-920
Technology	GSM/GPRS/GNSS/BLUETOOTH

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
Receiver	33 channel
Tracking sensitivity	-165 dBm
Position accuracy	< 2.5m 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	6 - 30 V DC with overvoltage protection
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Back-up battery 170 mAh Li-Ion battery (0.63 Wh)

Power Consumption

Ultra-Deep Sleep	At 12V < 2mA
Deep Sleep	At 12V < 4mA
Online Deep Sleep	At 12V < 5mA
GPS Sleep	At 12V < 6mA
Nominal (with no load)	At 12V < 25mA

Bluetooth

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

Physical specification

Dimensions	79 x 43 x 12 mm (L x W x H)
Weight	54 g

Interface

Digital Inputs	1
Digital Outputs	1
Analog Inputs	1
GNSS antenna	Internal High Gain
Cellular antenna	Internal GSM High Gain
USB	2.0 Micro-USB
LED indication	2 status LED light
SIM	Micro-SIM
Memory	128MB internal flash memory

Operating environment

Operating temperature (With battery)	-20 °C to +40 °C
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	IP54
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, E-Mark, EAC, ROHS, REACH,
Anatel, ICASA, SIRIM QAS, SDPPI
POSTEL

