



FMB-120 • GPS Tracker Technical Datasheet



FMB-120 GNSS/GSM - Bluetooth Tracker



Sensors



Sleep modes



SMS



Fuel monitoring



Time Synchronization



Ignition Detection



Product Summary

Fleetly FMB-120 is ADVANCED tracker with internal GNSS, GSM antennas, Bluetooth connectivity and backup battery. FMB 120 is designed for light vehicles tracking but is also suitable for advanced applications like logistics, delivery services, utility transport and more. It is excellent for refrigerated transport, because it has extended input/output set and 1-wire interface for temperature monitoring. With Fleetly CAN adapters, FMB 120 can be even used in agriculture or construction & mining.

Key Features:

➤ Sensors

Accelerometer

➤ Scenarios

Green Driving, Over Speeding detection, jamming 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 (Analogue), LV-CAN200, ALL-CAN300, CAN-CONTROL, OBDII dongle

➤ **Ignition detection**

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

Technical Specification

Module

Name	FMB-120
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
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 ranges	10 - 30 V DC with overvoltage and reverse Polarity protection
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 < 8mA
Online Sleep	At 12V < 11mA
GPS Sleep	At 12V < 20mA
Nominal	At 12V < 35 mA

Bluetooth

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

Physical specification

Dimensions	65 x 56.6 x 18.9 mm (L x W x H)
Weight	55 g

Interface

Digital Inputs	3
Digital Outputs	2
Analog Inputs	2
CAN Adapter inputs	1
1-Wire	1
GNSS antenna	Internal High Gain
Cellular antenna	Internal GSM High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	Micro-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 Battery charge	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, E-Mark, ROHS, REACH,
SIRIM QAS, SDPPI POSTEL, ICASA

