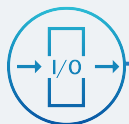


# FMB120

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

Teltonika FMB120 is ADVANCED tracker with internal GNSS, GSM antennas, Bluetooth connectivity and backup battery. FMB120 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 Teltonika CAN adapters, FMB120 can be even used in agriculture or construction & mining.



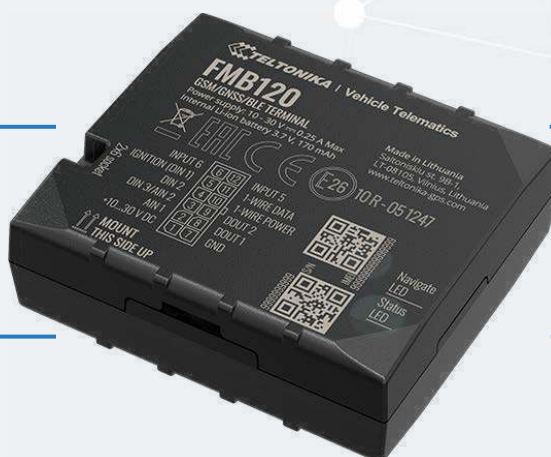
Digital Input/Output for remote monitoring and control



Allows device to work without external power source



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



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                                                                                                                  |
| Back-up battery     | 170 mAh Li-Ion battery 3.7 V (0.63 Wh)                                                                                                                    |
| Power consumption   | At 12V < 6 mA (Ultra Deep Sleep)<br>At 12V < 8 mA (Deep Sleep)<br>At 12V < 11 mA (Online Sleep)<br>At 12V < 20 mA (GPS Sleep)<br>At 12V < 35 mA (nominal) |

## 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     | 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 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 (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<br>-20 °C to +35 °C for 6 months |

## 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              | 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 |
|------------|----------------------------------|

