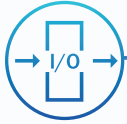


FMB120 small and professional tracker with internal high gain GSM and GNSS antennas, which is able to collect device coordinates and other useful data and transfer them via GSM network to server. This device is perfectly suitable for applications where location acquirment of remote objects is needed: fleet management, car rental companies, taxi companies, public transport, logistics companies, personal cars and so on. FMB120 can perform tasks on remote objects, such as monitoring engine status, controlling truck's door etc.



Digital Input/Output for remote monitoring and control



Allows device to work without external power source



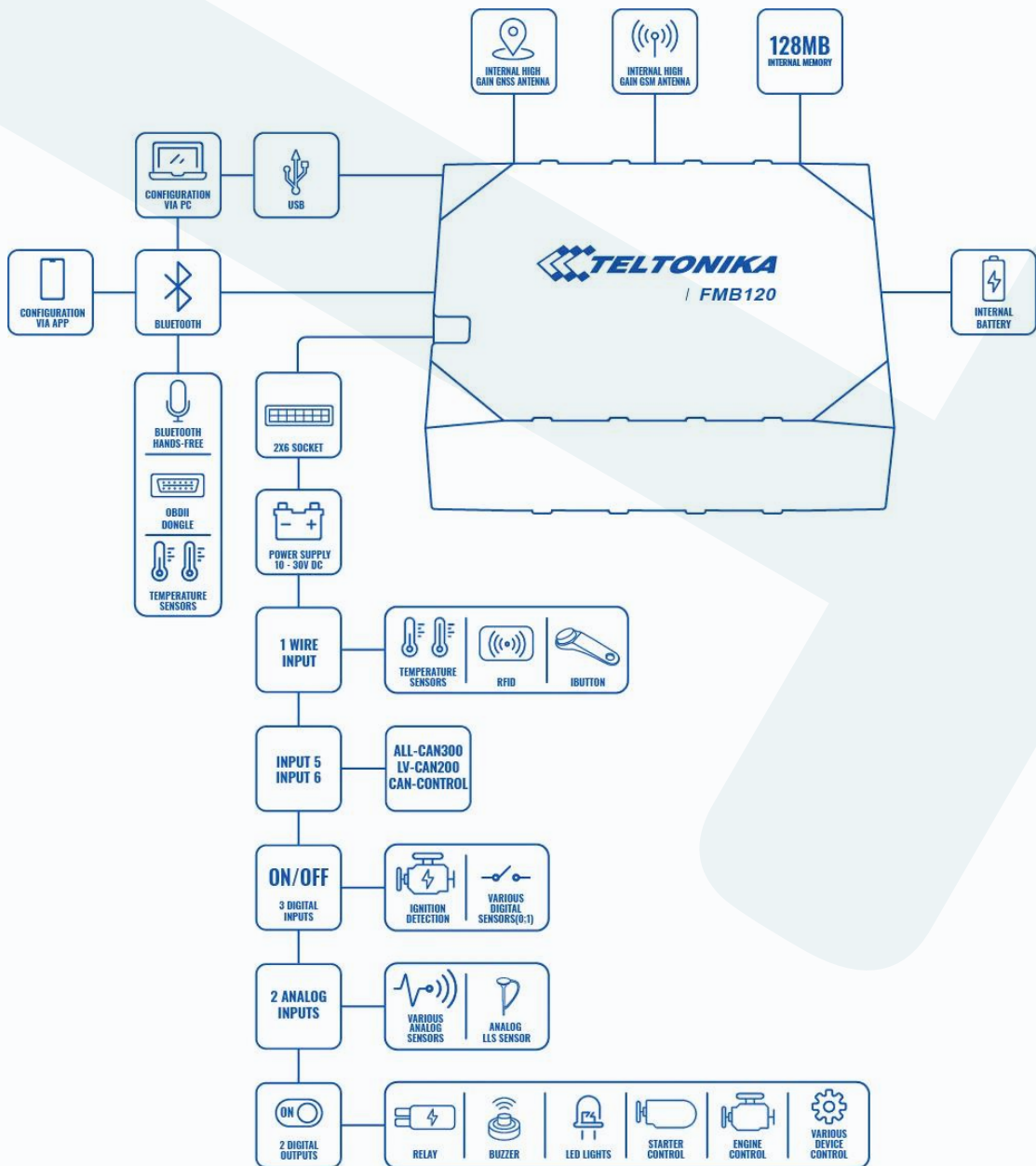
-1Wire® interface to monitor temperature data and RFID/iButton tags



Bluetooth for external devices and Low Energy sensors



SCHEME





## 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
Accuracy	< 3 m
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) At 12V < 8 mA (Deep Sleep) At 12V < 11 mA (Online Sleep) At 12V < 20 mA (GPS Sleep) 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
-1Wire	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 -20 °C to +35 °C for 6 months

## Features

Sensors	Accelerometer
Scenarios	Green Driving, Over Speeding detection, Jamming detection, GNSS Fuel Counter, DOUT Control 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
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