FMB230



WATERPROOF GPRS/GNSS TRACKER WITH FLEXIBLE INPUTS CONFIGURATION



IP67 CASING

Reliable tracking in harsh conditions

2G NETWORK

Quad band cellular connectivity with global coverage

NEGATIVE INPUT

Allows easier installation of

IMPULSE INPUTS

Suitable for fuel flow meters data reading











FMB230 is WATER and DUST resistant tracker with internal GNSS, GSM antennas, configurable digital, analogue inputs and digital outputs, negative input, impulse inputs, Bluetooth connectivity and backup battery. FMB230 is developed on the existing Teltonika platform, therefore it keeps all of the functionalities from FMB130 with an additional IP67 resistance to dust and water. It can be mounted inside and outside of a vehicle without worries that high pressured water, mud or dusty environment will impact its operation or performance quality. This is particularly relevant for the industries where harsh conditions exist, such as agriculture, construction and mining, and more.





Module

Name	Teltonika TM2500
Technology	2G(GSM/GPRS)/GNSS/BLUETOOTH

GNSS

GNSS	GPS, GLONASS, GALILEO, BEIDOU, QZSS, AGPS
Receiver	Tracking: 33
Tracking sensitivity	-165 dBM
Position Accuracy	< 2.5 CEP
Velocity Accuracy	< 0.1 m/s (within +/- 15% error)
Hot start	<1s
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
Internal Back-up battery	170 mAh Li-lon battery 3.7 V (0.63 Wh)
Internal fuse	3 A, 125 V
	At 12V < 2.5 mA (Ultra Deep Sleep)
	At 12V < 5 mA (Deep Sleep)
Power consumption	At 12V < 5.5 mA (Online Deep Sleep)
	At 12V < 18.5 mA (GPS Sleep)
	At 12V < 34 mA (nominal with no load)

Bluetooth

Specification	4.0 + LE	
Supported peripherals	Temperature and Humidity sensor, OBDII dongle, Inate	ck Barcode Scanner, Universal BLE sensors support
Physical specification		

Physical specification

Dimensions	70,5 x 67,0 x 25,6 mm (L x W x H)
Dimensions	$85,0 \times 67,0 \times 25,6 \text{ mm (L} \times W \times H)$ (length with connector socket)



Operating environment

Operating temperature (without battery)	-40 °C to +85 °C
Storage temperature (without battery)	-40 °C to +85 °C
Operating temperature (with battery)	-20 °C to +40 °C
Storage temperature (with battery)	-20 °C to +45 °C
Operating humidity	5% to 95% non-condensing
Ingress Protection Rating	IP67
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

Interface

Digital Inputs	3
Negative Inputs	1 (Digital Input 2)
Impulse Inputs	2 (Digital Input 1, Digital Input 2)
Digital Outputs	3
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

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	GNSS, 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, Reach, RoHS

^{*} in progress

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