FMB140

GPRS/GNSS TRACKER WITH
CAN DATA READING FEATURE

BUILT-IN CAN BUS DATA READING CHIP

Reading CAN data from light & electric vehicles, trucks, buses and special machinery

HELPFUL WIRING GUIDES

Efficient connection with wiring guides for each supported vehicle
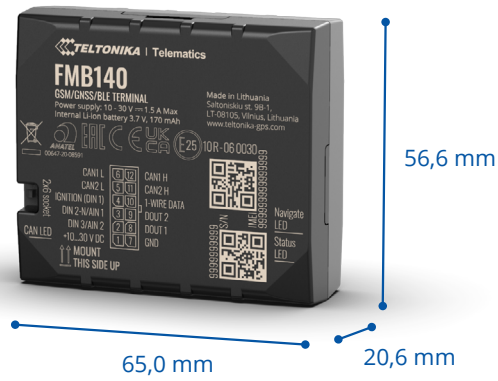
ECO DRIVING SCENARIO

Achieve efficient fuel consumption, prolong vehicle life and increase road safety

EXTENDED PRODUCT USAGE SCENARIOS

Connect Bluetooth LE-based external devices - Low Energy beacons and sensors to monitor temperature, humidity and movement.

LIGHT VEHICLES   HEAVY DUTY TRANSPORT   TRAILER TRACKING   REFRIGERATED TRANSPORT   INTERNATIONAL LOGISTICS   CAR SHARING

FMB140 is an ADVANCED GSM/GNSS/Bluetooth tracker with integrated CAN data processor. It is compact 2 in 1 solution: GPS tracker and CAN adapter inside! Device allows to read CAN data from a wide range of various vehicles, including light & electric vehicles, trucks, buses and special machinery. Depending on exact software version FMB140 can be used in advanced applications as heavy logistics, delivery services, utility transport. 2 options available to fulfill any business demands - LV-CAN200 option and ALL-CAN300 option.

56,6 mm

65,0 mm

20,6 mm

Module

Name	Teltonika TM2500
Technology	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	< 0.1m/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)

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 20.6 mm (L x W x H)
Weight	55 g

Interface

Digital Inputs	3
Negative Inputs	1 (Digital Input 2)
Impulse Inputs	2 (Digital Input 1, Digital Input 2)
Digital Outputs	2
Analog Inputs	2
CAN interfaces	2
1-Wire	1 (1-Wire data)
GNSS antenna	Internal High Gain
GSM antenna	Internal High Gain
USB	2.0 Micro-USB
LED indication	3 status LED lights
SIM	Micro-SIM or 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

CAN Data	Fuel Level (Dashboard), Total fuel consumption, Vehicle speed (wheel), Vehicle driven distance, Engine speed (RPM), Accelerator pedal position
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
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM

Certification & Approvals

Regulatory	Anatel, CE/RED, E-Mark, EAC, RoHS, REACH