FMM001

LTE CAT M1 ADVANCED PLUG AND PLAY TRACKER WITH BLUETOOTH

Teltonika FMM001 represents next step in communication technology – this is the first Plug and Track LTE CAT M1 OBD device with GNSS and Bluetooth connectivity. Possibility to read OBD II parameters, effortless installation and detailed accelerometer data provides a compelling solution. This is perfect tracker for a wide range of applications – fleet management of light commercial vehicles, car rental & leasing, driver log-book, insurance telematics (UBI) and so on. Device supports various Bluetooth Low Energy sensors, beacons, firmware and configuration update via Bluetooth.

4G

Reliable 4G connection with fallback to 2G network

OBDII Data

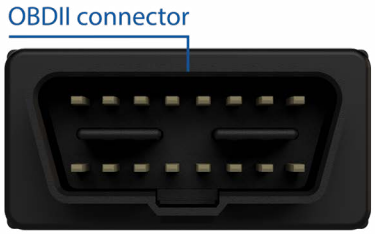
Allows reading CAN bus data from vehicle ECU

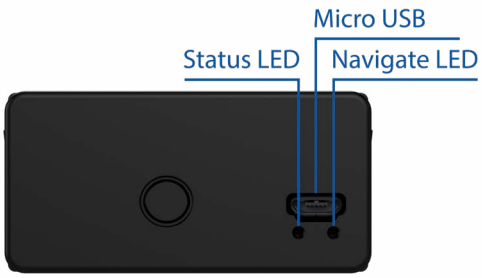
Crash detection functionality working according accelerometer data

Bluetooth for external devices and Low Energy sensors

USE CASES

- LIGHT VEHICLES
- HEAVY DUTY TRANSPORT
- INSURANCE TELEMATICS (UBI)
- COURIER DELIVERY SERVICES
- RENTAL AND LEASING





Module

Name	Quectel BG96, Teltonika TM2500
Technology	LTE CAT M1/CAT NB1/EGPRS/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	LTE CAT M1, CAT NB1
2G bands	EGPRS: 850/900/1800/1900MHz
4G bands	LTE FDD: B1/B2/B3/B4/B5/B8/B12/B13/B18/B19/B20/B28 LTE TDD: B39 (For CAT M1 Only)
Data transfer	CAT M1: Max. 375Kbps (DL), Max. 375Kbps (UL) CAT NB1: Max. 32Kbps (DL), Max. 70Kbps (UL) GPRS: Max. 107Kbps (DL), Max. 85.6Kbps (UL)
Data support	SMS (text/data)

Power

Input voltage range	10 - 30 V DC with overvoltage protection
Internal 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, Inateck Barcode Scanner, Universal BLE sensors support

Physical specification

Dimensions	67,2 x 49,6 x 25 mm (L x W x H)

OBD Interface

Data	K-Line, CAN bus data
Data reading	Up to 32 vehicle onboard parameters, supported OBD protocols: SAE J1850 PWM (41.6 kbaud) SAE J1850 VPW (10.4 kbaud) ISO 9141-2 (5 baud init, 10.4 kbaud) ISO 14230-4 KWP (5 baud init, 10.4 kbaud) ISO 14230-4 KWP (fast init, 10.4 kbaud) ISO 15765-4 CAN (11 bit ID, 250 kbaud) ISO 15765-4 CAN (11 bit ID, 500 kbaud) ISO 15765-4 CAN (29 bit ID, 250 kbaud) ISO 15765-4 CAN (29 bit ID, 500 kbaud)

Interface

Connection	OBDII Socket
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	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, Excessive Idling detection, 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, Debug
GPRS commands	Configuration, Debug
Time Synchronization	GNSS, NITZ, NTP
Fuel monitoring	ODBII (depends on vehicle model)
Ignition detection	Accelerometer, External Power Voltage, Engine RPM