



FMC003

LTE CAT1 advanced OBDII tracker with Bluetooth®



LTE CAT 1

Device supports LTE CAT 1 connectivity, which allows low-power wide area technologies to be used

OEM OBDII DATA

Available list of vehicles with OEM parameters to be read

OBDII DATA

Standart OBDII data reading from vehicle ECU

BLUETOOTH 4.0

Bluetooth for external devices and Low Energy Sensors



Fleet management



Driver log-book



Insurance Telematics (UBI)

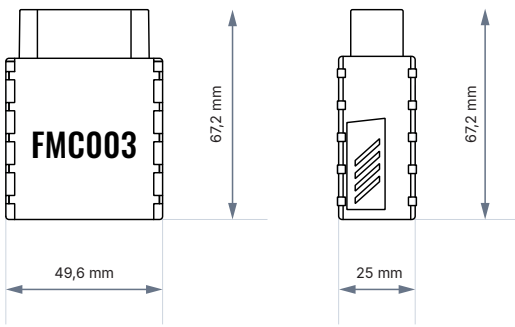


Connected car



Rental and leasing

FMC003 is a small plug and play device with LTE CAT 1 network coverage including 2G (GSM) fallback compatibility. Main feature of FMC003 is its possibility to read OEM parameters (PIDs) via OBD port. With this device you will be able to read Real Odometer and Real Fuel Level data. More to that, device comes with supported vehicles and data list, so you do not need to guess no more, now you know what data can be read from a specific vehicle. It is a perfect tracker for a wide range of use cases - including fleet management of light commercial vehicles, driver log-book, insurance telematics (UBI), car rental & leasing and others. Device supports various BLE 4.0 features including sensors, beacons, firmware and configuration update via Bluetooth which expands its already rich set of features.



Module

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|------------|--|
| Name | FMC003-MBIBO - MeiG SLM320-PE2C + Teltonika TM2500 FMC003-MCIBO - MeiG SLM320-L16A + Teltonika TM2500 |
| Technology | LTE(Cat1)/2G(GSM/GPRS)/GNSS/BLUETOOTH |

GNSS

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|----------------------|---|
| 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

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|----------------|--|
| Technology | LTE Cat 1, GSM |
| 2G bands | MeiG SLM320-PE2C: GSM: B2/B3/B5/B8 MeiG SLM320-L16A: GSM: B2/B3/B5/B8 |
| 4G bands | MeiG SLM320-PE2C: B1/B3/B7/B8/B20/B28 LTE-TDD:B38/B40/B41 MeiG SLM320-L16A: LTE FDD: B1/B2/B3/B4/B5/B7/B8/B20/B28 LTE-TDD:B40 |
| Data transfer | LTE: LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL) LTE TDD: Max 8Mbps (DL)/Max 2Mbps (UL) GSM: GPRS: Max 85.6Kbps (DL)/Max 85.6Kbps (UL) |
| Transmit power | Class 4 for GSM850/900: 23±2dBm Class 1 for GSM1800/1900: 20±2dBm Class 3 for LTE-TDD: 23±2.7dBm Class 3 for LTE-FDD: 23±2.7dBm |
| Data support | SMS (text/data) |

Power

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|---------------------|---|
| 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 < 3 mA (Ultra Deep Sleep) At 12V < 5 mA (Deep Sleep) At 12V < 16 mA (Online Deep Sleep) At 12V < 18 mA (GPS Sleep) At 12V < 33 mA (nominal with no load) At 12V < 2A Max. (with full Load / Peak) |

Bluetooth®

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|-----------------------|---|
| Specification | 4.0 + LE |
| Supported peripherals | Temperature and Humidity sensor, Inateck Barcode Scanner, Universal BLE sensors support |

Physical specification

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|------------|---------------------------------|
| Dimensions | 67,2 × 49,6 × 25 mm (L x W x H) |
| Interface | OBDII Socket |

Connection

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|----------------|---------------------|
| GNSS antenna | Internal High Gain |
| GSM antenna | Internal High Gain |
| USB | 2.0 Micro-USB |
| LED indication | 2 status LED lights |
| SIM | Micro-SIM |

OBD Interface

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|--------------|---|
| Data | HS CAN, MS CAN, SW CAN, K-line |
| Data reading | OEM Fuel level, odometer and up to 32 vehicle onboard parameters, supported OBD protocols: 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) ISO 14229 (UDS) J2819 (VW TP2.0) |

Operating environment

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|---|---|
| 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 | +10 °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

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|-----------------------------------|---|
| 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 | GPS, NITZ, NTP |
| Fuel monitoring | OBDII, OEM fuel level |
| Ignition detection | Accelerometer, External Power Voltage, Engine RPM |

Certifications & Approvals*

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| Regulatory | CE RED, E-Mark, RCM, KC, NCC |
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* Certification in progress. RCM, KC, NCC certificates will be done only for FMC003-ML1