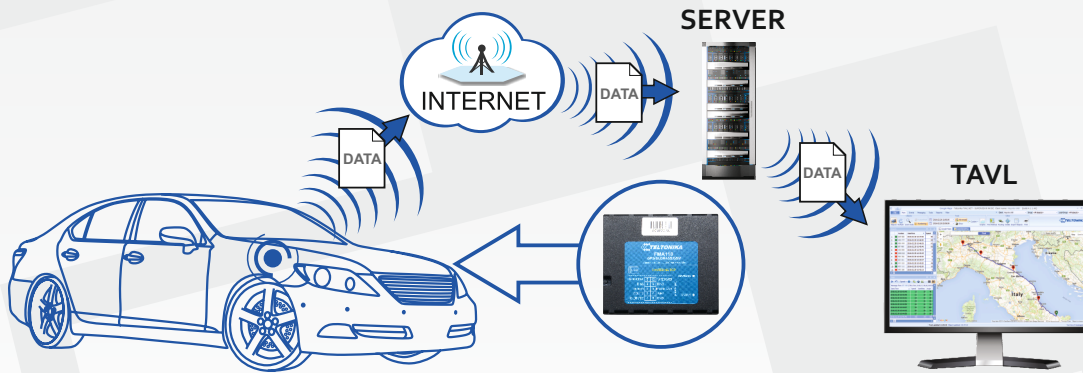




# FMA110

Small and professional tracker with internal high gain GNSS and GSM antennas.



### New generation GSM/GNSS module

With new integrated GNSS module, Your tracking experience will be better than ever before. Even higher sensitivity, faster than ever cold start and almost instant hot start ensures that Your fleet will be tracked precisely.

### Various vehicle CAN data

With additional Teltonika Vehicle CAN adapter you will be able to acquire CAN data and read DTC codes from any kind of transport such as light vehicles, trucks, buses, agriculture transport, and special transport. Supported vehicles list contains more than 1800 models.

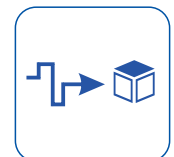


### 1-Wire®

1-Wire® protocol support enables you to identify your drivers and connect up to 4 temperature sensors. According to iButton® or RFID ID you can prevent unauthorized access to your fleet and temperature sensors allows you to monitor your cargo.

### Small case

Easy to install, hard to find! Small case, internal GSM and GNSS antennas allow mount tracker much easier. Dimensions only 65x57x19 mm.



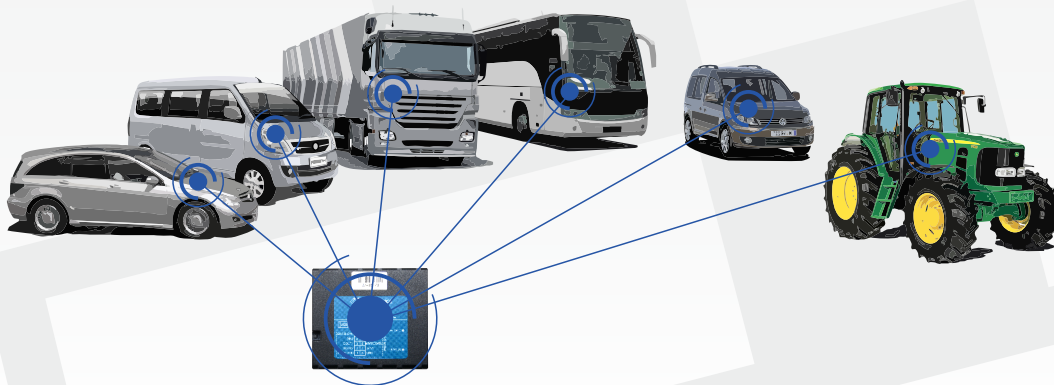
### Trip detection

Easy trip start and stop detection gives you possibility to have the report with correct time, location and driven distance for each trip.

## DESCRIPTION

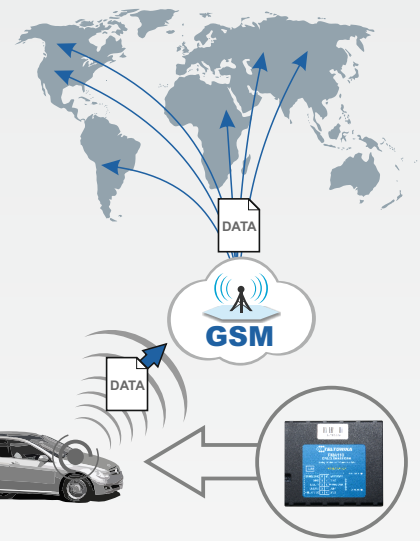
FMA110 small and professional tracker with internal high gain GNSS and GSM antennas, which is able to collect device coordinates and other useful data and transfer them via GSM network to server. This device is perfectly suitable for applications where location acquirement of remote objects is needed: fleet management, car rental companies, taxi companies, public transport, logistics companies, personal cars and so on. FMA110 can perform tasks on remote objects, such as monitoring engine status, controlling truck's door etc.

## APPLICATION



## FEATURES

- With new integrated GNSS module, your tracking experience will be better than ever before. Even higher sensitivity, faster than ever cold start and almost instant hot start ensures that your fleet will be tracked precisely
- Small and easy to mount case
- High gain internal GSM antenna and internal GNSS antenna allow mount FMA110 much easier
- Real Time tracking
- Smart data acquisition based on time, distance, angle, speed delta, ignition and I/O events allow to have precise online tracker
- Sending acquired data via GPRS (TCP/IP and UDP/IP protocols)
- Smart algorithm of GPRS connections for GPRS traffic saving
- Operating in roaming networks by preferred GSM providers list
- Add all your unwanted GSM operators to black list
- Events from I/O elements detection and sending via GPRS or SMS
- 5 geofence zones (rectangular or circle)
- Auto Geofencing created for car towing detection and car theft prevention
- Deep Sleep mode (less than 6 mA power consumption)
- Online Deep Sleep mode for constant connection with server
- Firmware and configuration update via GPRS (FOTA)
- 3 operational modes (Home, Roaming, Unknown) based on operator
- Time synchronization by NTP (Network Time Protocol) if GNSS signal is absent
- GSM Anti-jamming detection
- Integrated scenarios:
  - Over speeding to secure driver and prevent penalties
  - Immobilizer function
  - Authorized driving (1-Wire® iButton® ID keys up to 50 iButton keys) is used to prevent stealing or driver identification
  - GSM Anti-jamming detection
- Trip start and end detection
- CAN data acquisition from any kind of transport such as light vehicles, trucks, buses, agriculture and special transport with Teltonika Vehicle CAN Adapter



## SPECIFICATIONS

### GSM

- Quad-band 900/1800 MHz; 850/1900 MHz
- GPRS Multi-Slot Class 12 (up to 240 kbps)
- GPRS Mobile Station Class B
- SMS (text/data)

### GNSS

- Tracking: 33/99 acquisition channels
- -165 dBm sensitivity
- Hot start < 1s
- Warm Start < 25s
- Cold start < 35s
- NMEA-183 protocol
- GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
- Accuracy < 3m

### INTERFACE

- 1 Digital Input Reserved for Ignition Status Monitoring
- 2 Digital Inputs
- 1 Analog Input (10V or 30V range)
- 2 Digital Open-collector Outputs (connecting external relays, LED, buzzers etc.)
- 1-Wire<sup>®</sup> temperature sensor
- 1-Wire<sup>®</sup> iButton
- Motion sensor
- Power supply (+10...+30) V DC
- Internal high gain GSM antenna
- Internal high gain GNSS antenna
- Dimensions: L(65mm)xW(56,6mm)xH(18,9mm)
- 2 Status LEDs
- USB Port

## ACCESSORIES



▶ USB to mini USB cable



▶ Main socket 2x5



▶ RFID (1-Wire<sup>®</sup> interface) support



▶ 1-Wire<sup>®</sup> temperature sensor (TTJ)



▶ 1-Wire<sup>®</sup> iButton<sup>®</sup> and iButton<sup>®</sup> reader



▶ Analog fuel sensor



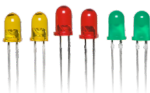
▶ Door sensors



▶ Relay 12V/24V



▶ Alarm button



▶ LED



▶ Buzzer

