

# Basic Track & Trace

## Introduction

Nowadays, when smart devices are progressing very fast, the phrase “basic track and trace” has a new meaning. Getting only the coordinates from the device is not enough anymore. Therefore, GPS trackers must be universal to meet various requirements. Among other things, when choosing a GPS tracker, it is very important to understand what additional services and tools you will get with the device.

## Solution description

Teltonika GPS trackers are developed on one common firmware platform, which is constantly being developed and extended with new features. A common platform means that the main core of functionality is the same on all types of our trackers - be it professional, advanced or simple tracker. Smart usage of functions opens for a user various possibilities and brings a valuable advantage comparing to other GPS trackers of a similar price range in the market, making them suitable for different telematics solutions. Talking about hardware specifications, all Teltonika trackers are equipped with a high gain GNSS antenna for accurate GPS tracks. 128MB internal memory ensures collection of records in the areas where GSM network connection is not available. Internal memory makes possible firmware updates - the feature that not every simple GPS tracker has. All our trackers have an internal backup battery that allows sending a notification if an unauthorized power unplug is detected.

Let's take a look at software solutions. For a fast and easy “Teltonika data protocols” implementation, data packets parser tool and source code examples of communication server are prepared. For an easy control of the whole fleet, customers get access to FOTA WEB service for free. FOTA WEB is a powerful tool for remote configuration and firmware updates. Trackers support universal configurator - a tool for configuration, firmware updates and testing. As for documentation related to all functions and configuration instructions, our customers can find this information in Teltonika WIKI page.

FMB920 is one of the most popular of our trackers. Sure enough, its competitive price, smart functionality, and high quality made FMB920 our bestseller. We ship this GPS device from the factory with a default configuration ready for a track and trace usage scenario. The client just needs to insert SIM card and set the server settings. Thanks to a wide firmware functionality and configuration capabilities, FMB920 is suitable for customers with a variety of different needs.

The basic firmware functionality supports such generic features like sleep modes, trip detection, and different data acquisition modes that depend on ignition/movement source or even the connected GSM operator. The device supports different ignition detection modes, depending on the installation variant. Moreover, it supports such advanced functions like auto geofence, towing detection, green driving, crash event detection, virtual odometer, unplug detection, GPRS/SMS notifications and many more. The user can easily enable the function he needs using the configurator or FOTA WEB and change the configuration in accordance with the changing needs of the client.

Teltonika trackers also support BLE technology that significantly expands their functionality. For example, if a client wants to get more telemetric vehicle data, it is possible to connect via Bluetooth® OBDII dongle and read such data like millage, engine hours, engine faults, fuel level, etc. Advanced BLE mode lets to configure BLE beacons and various BLE sensors (temperature, humidity, movement, etc.). BLE beacons can be used as an immobilizer or for the authentication of drivers and passengers. Another possible way of using them is to monitor assets during transportation, even for indoor tracking. By the way, it also is possible to configure a device via Bluetooth®. Teltonika provides Bluetooth® communication protocols so that users could develop their own mobile application to read notifications in real time and do many other useful functions with their trackers.