



WASTE TRANSPORT MANAGEMENT

INTRO

Waste management services are one of the most relevant topics of this decade, as it is related to waste recycling and environment saving. Specific equipment is used in waste removal, thus, a dedicated solution is required to prevent improper operations and to ensure an optimal and safe usage. GPS devices can easily help achieve these goals.

CHALLENGE

One of the main tasks for fleet managers is to keep their machinery in proper technical condition as any failure may cause significant losses and complications. Irresponsible driving with lowered forceps (which is prohibited) or delayed technical maintenance of trucks can disrupt daily business operations and result in unforeseen extra costs. Also, delayed garbage removal services or, in the worst case, no provision of services at all, can lead to many complaints and partnership problems with the existing contractors.

SOLUTION

Teltonika Professional GPS trackers, such as [FMB640](#) (2G), [FMC640](#) (4G with fallback to 3G and 2G) or [FMM640](#) (LTE CAT M1 with fallback to 2G) are the most accurate devices for tracking heavy duty vehicles in the most demanding and complex use cases.

Our Professional trackers **support FMS data reading** allowing to read a variety of vehicle's **on-board information** via **Protocol J1939** including axle load data, RPM, engine hours and more. FMC640 tracker has a special **SAE J1708** port which is used to read vehicle's fuel level and fuel consumption on particular types of vehicles. Besides, our Professional trackers have a functionality to read and support any **3rd party additional sensors**, for example, sensors connected via RS-232 and RS-485 interfaces or even custom CAN sensors used for any special and complex needs.

For better optimization of fleet operations, with the help of FMS data, you can monitor the load of rear axis, meaning it is possible to observe the weight of the waste uploaded into the truck and the locations where services are needed most. According to these statistics, **the owner can optimize the routes and reschedule trucks loading/servicing more effectively.**

Teltonika GPS trackers can receive data to **prevent unsafe behavior**, like driving with lowered forceps (which is prohibited), RPM, over-speeding, harsh cornering or braking. As a result, **it reduces fuel consumption and vehicle service costs**, and keeps vehicles chassis, brakes and other crucial parts in proper condition for a longer time.

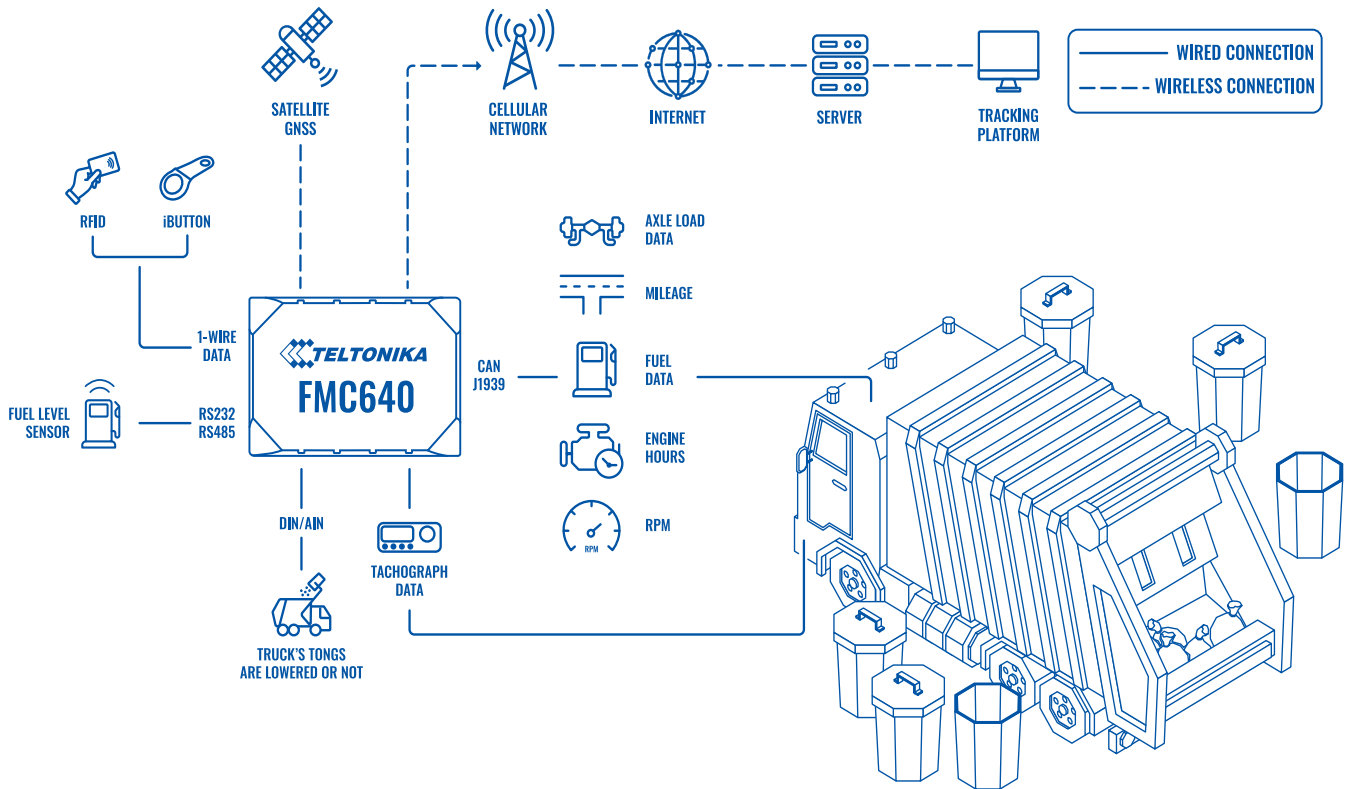
Driver identification is the most accurate option to record which driver operated the garbage truck at certain times, as well as to monitor driving behavior during the working hours. The driver's ID is authorized via 1-wire (RFID card or iButton). This functionality can also be used in 'immobilizer' scenario, so that the **engine can start only with ID authorization.**

Besides, every Professional Teltonika GPS tracker **can be connected with Tachograph**. This functionality allows to download DDD files and read live data from tachograph. There are two connection options – the first, as usual, connecting from the end of the tachograph, and the second is **an innovative connection** from the front panel with [TACHO cable](#). All the collected information is conveniently provided in the [WEB TACHO](#) application. **This feature can be used to avoid penalties** from the authorities by monitoring working and rest hours of employees.

We have a solution for **fuel thefts (draining) prevention**. All the FMX640 trackers can be connected to liquid level sensors (LLS) via RS-232 and RS-485 and can read **fuel level sensors data**. The advantage of this feature is that LLS can work without on-board computer and send **LIVE information**. Fleet managers can easily detect which particular vehicle has been drained and when.

Additionally, Professional FMX640 trackers allow you **to monitor whether the garbage truck's container is full or empty** by the axle load data received via J1939. Teltonika tracking devices can **determine whether the truck's tongs are lowered and still in use** or no longer used but still lowered by reading the status of connected digital inputs. This way, it is possible to ensure safe driving and to reduce unforeseen car service costs.

TOPOLOGY



BENEFITS

- **Timely maintenance and service** – easy and automated solution to keep vehicles in proper technical condition.
- **Multifunctional devices** – our GPS trackers have a multiple add-on ability of wires and sensors for various applications.
- **Easy-to-configure products** – Professional devices can read a variety of CAN data parameters to find the best decisions for your business in the future.

WHY TELTONIKA?

Teltonika is a worldwide telecommunications company with over 20 years of experience in vehicle telematics. Our Professional GPS trackers are solving multiple business issues by using one device, especially in the heavy-duty industries. It is convenient and saving a lot of extra costs in operating complex machinery – be it mining, agriculture or utility industries – as proved by thousands of our long-term customers.

FEATURED PRODUCT

FMC640 – 4G network coverage with fallback to 3G and 2G.

RECOMMENDED PRODUCTS

FMB640, FM6300, FMM640

