TELTONIKA | Telematics

SECURE VEHICLE DISABLING SYSTEM SECO

INTRO

Motor vehicle theft is one of the world's biggest concerns and the fastest growing crimes in many countries around the world. This great challenge for car rental agencies, carsharing clubs, businesses, state organisations and private car owners caused property losses of over 6 billion US dollars globally in 2018. Luckily for them, Teltonika GPS trackers have a remote secure engine cut-off (SECO) functionality that can help to recover a stolen vehicle and prevent the loss.

CHALLENGE

As statistics show it all over the world, most of the time thieves are well organized and can steal a targeted vehicle such as automobile, truck, bus, motorcycle, scooter, or snowmobile in a matter of a few seconds. For instance, a car is being stolen every 35 min in Germany, every 10 min in Australia and every 6.5 min in the US.

Another extensive issue – stolen rental cars. It has been 92,000 stolen rental cars only in the United States alone between 2015 and 2018. Unfortunately, police forces **fail to recover** over half of the stolen vehicles. For criminals, it is a relatively low-risk way of making a fortune.

Some known methods used by thieves to steal motor vehicles are **theft of an unattended vehicle without a key; taking a vehicle without owner's consent (twocking); opportunistic theft; carjacking; fraudulent theft; joyriding; frosting; Keyless-Go systems theft and so on.**

As well, erratic and intentionally inappropriate driver behaviour, unauthorised use of rental cars causes faster engine, tires and components wear, extra fuel consumption, traffic accidents, road infrastructure damage and may result in a substantial amount of expenses for business over time.

While other remote vehicle disabling systems available in the market have some drawbacks, Teltonika has come with the most **secure and efficient solution** by far – SECO.

SOLUTION

Keeping in mind the scale of motor vehicle thefts and the demand for a solution in the market, Teltonika introduced remote vehicle disabling system in its GPS trackers known as **secure engine cut-off** or SECO. This functionality is available in any FMB series tracker with one or more digital output (DOUT) and it takes only a few minutes to set up. For this case, we use the new generation Teltonika model [FMB130](link) with flexible I/O.

The system is used to prevent unauthorized users from operating a vehicle and to **gradually decelerate and stop** a vehicle in-transit under certain pre-determined conditions. In a nutshell, it has been designed to be activated for specific situations, such as unauthorized access or use of a vehicle.

SECO provides authorized users the ability to prevent movement of a vehicle and eventually to stop an operating vehicle with **GPRS** or **SMS text command** by simply pressing a button in a dedicated fleet management software program or mobile app.

Here is how it works: When the stolen vehicle speed exceeds the preconfigured threshold speed, the **Speed Pulse Scenario** will be activated forcing the driver to slow down.

After that, when the stolen vehicle speed inevitably goes lower than the preconfigured threshold speed, GPS tracker will disable speed pulsing and will activate DOUT permanently. So, the vehicle will be gradually and safely decelerated and stopped by controlling a fuel pump of the car.

In essence, remote disabling allows a car owner, a dispatcher or other authorized personnel safely to decelerate a stolen vehicle by gradually limiting a fuel supply to the engine from a remote location. Thus, it will be inevitably brought to a safe and controlled stop what allows to avoid traffic incidence, road infrastructure damage or casualties.

When it's done, the stolen but now **stalled vehicle location** can be swiftly tracked by Automatic Vehicle Locator (AVL) software application in a smartphone, tablet or PC and recovered at once. As a result, automobile loss (and the goods) has been successfully prevented.

Furthermore, all Teltonika GPS trackers are equipped with **Immobilizer, Unplug detection, Towing detection, Auto Geofence, Manual Geofence** features which can be used in a combination with SECO making a theft process even more challenging and vehicle a less appealing target.
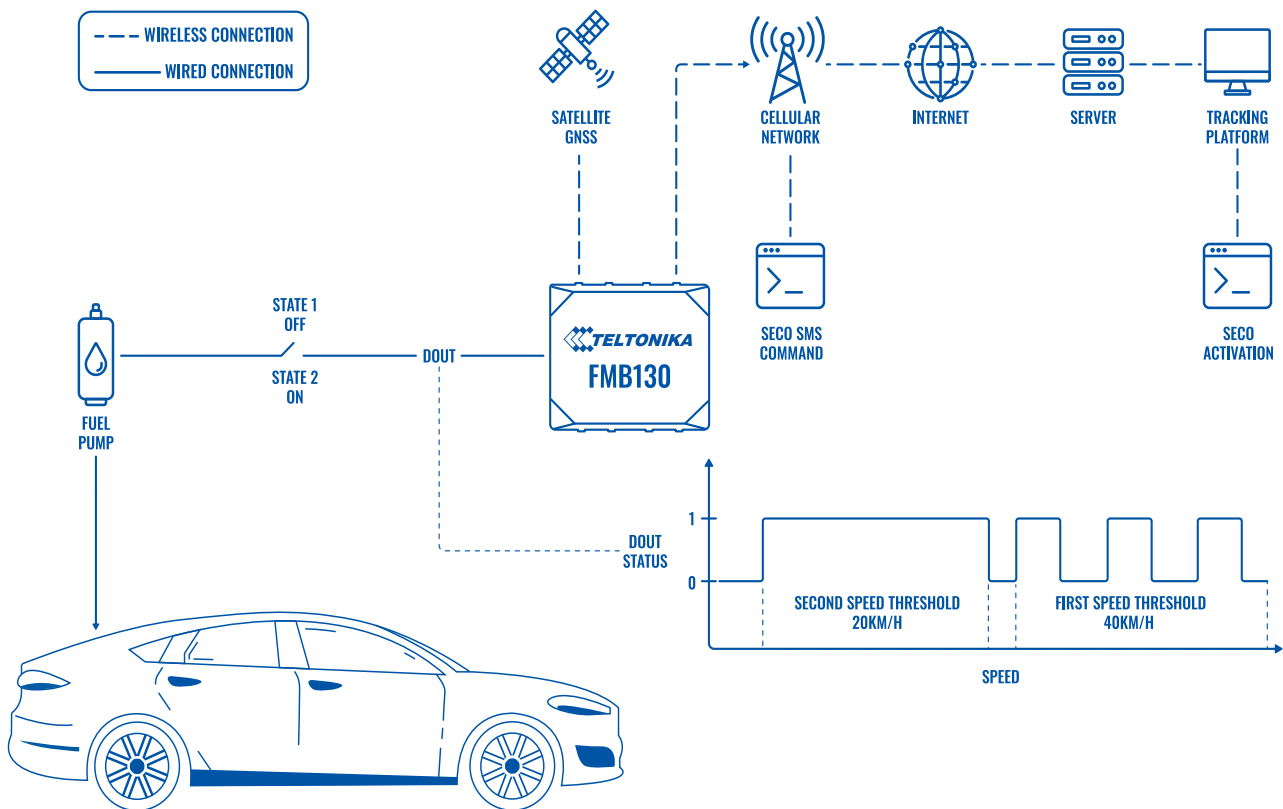
Learn more about [Anti-Theft Solution and Stolen Vehicle Recovery](link) use case.

Vehicle disabling system **can be integrated** with other onboard wireless communications systems that include features such as door sensors, cargo sensors, temperature sensors, electronic cargo seals, and trailer connection and disconnection systems. For example, if the vehicle onboard computer system installed by car maker or aftermarket supplier detects a loss of signal from the communication network or tampering of electronic cargo seals, a pre-determined vehicle disabling protocol can be initiated.

The most common applications for SECO function are **courier delivery services, logistics, cargo forwarders, taxi fleets, expensive construction vehicles, rear antique vehicles, business class corporate fleets, luxury automobiles, yachts, motorboats** and similar.

Please be advised, SECO functionality is only available in Teltonika FMB series GPS trackers starting with the firmware version 03.25.10.Rev.110 or higher.

TOPOLOGY

BENEFITS

• **It is a truly secure feature** – SECO allows to recover the stolen vehicle and prevent the loss by bringing it to a safe and controlled stop.

• **Facilitates to safe the cargo** – it allows recovering goods loaded on the stolen vehicle (e.g. LCV or HGV).

• **Allows avoiding traffic incidence**, road infrastructure damage or casualties.

• **User-friendly and convenient process management** – GPRS or SMS text command is activated by simply pressing a button in a dedicated fleet management software program or mobile app.

• **Do it your way** – can be activated by any smartphone or mobile phone with SMS service, tablet and PC.

• **Saves time, effort, and defeats uncertainty** – stalled vehicle location can be tracked by AVL software application to speed up the recovery.

• **The most secure and efficient** – remote vehicle disabling solution by far.

• **Keeping your business intact** – can be activated by any smartphone or mobile phone with SMS service, tablet and PC.

WHY TELTONIKA?

Having over 10 million devices successfully deployed, the undeniable benefits of Teltonika GPS trackers are appreciated by thousands of drivers and business owners every single day in over 160 countries around the world.

Many industries in the variety of markets will find SECO usage scenario helpful and effective, including security, rental, leasing, delivery services, taxi and car-share services, telecoms, utility service providers, luxury fleet owners and so on.

When it comes to monitoring company fleet and applying a remote secure engine cut-off feature, Teltonika can offer a wide range of made in EU easy-to-install GPS devices with DOUT such as FMB920, FMB120/130/140, FMB122/125, FMB202/204/208, etc.

These GPS trackers are perfectly suitable for most of the companies in the vast majority of the industries using passenger cars, SUVs, business class and luxury cars, light commercial vehicles, buses, motorbikes, motorcycles, scooters and more.

FEATURED DEVICE

FMB130

RECOMMENDED PRODUCTS

FMB series trackers with at least one DOUT