



TELTONIKA TELEMATICS SOLUTIONS FOR CHALLENGING DRIVING CONDITIONS IN THE 2022 DAKAR RALLY

INTRO

It is well known that the severity of driving conditions and the risk of accidents vary from road to road because of their different types, technical conditions, climatic and environmental factors. However, these circumstances also pose a serious challenge for vehicle GPS devices and telematics service providers. Teltonika Telematics is ready to contribute to solving these problems to help companies and fleets overcome potential obstacles.

CHALLENGE

Severe driving conditions are not uncommon for professional drivers - intense heat, immoderate cold (or both), vibration, dust, sand, mud, torrential rain, filthy water, extreme humidity, etc. That includes rough, mountainous or abnormal roads, dusty or salty environments, and so on. These are serious challenges not only for drivers, passengers, road users, and vehicles but for GPS devices, too.

Another challenging scenario is motorsport racing in a variety of climatic conditions, exposed to a wide range of environmental factors, including demanding and even dangerous terrains such as deserts, gravel roads, and mountains. Even there, competing vehicles must also be tracked and monitored as accurately and timely as possible.

So, the question is, can Teltonika trackers be a valuable assistance in this case too? Can these GPS devices not only withstand difficulties but also ensure continuous tracking accuracy and reliable data transmission? Yes, they can and here is how we know that...

SOLUTION



It comes without saying, only well-designed, manufactured, safe and reliable GPS devices can be efficiently used in extreme weather and driving conditions. In short, they have to be flawless as much as it is technically achievable without breaking a bank.

To demonstrate the solution, we choose the ADVANCED category vehicle GPS tracker **FMC130** with 4G (LTE Cat 1) connection with fallback to 2G network and ideal for vast area coverage, which is mounted on the support lorry of the 'Teltonika Racing' team taking part in the Dakar Rally 2022 - annual cross-country rally marathon and the most demanding racing event known in the motorsport world so far.

Other relevant accessories include CAN adapter **LV-CAN200** to acquire foremost vehicle CAN Bus data, brand-new wireless Teltonika **EYE Beacon** and **EYE Sensor** models assisting to track assets of interest location, temperature and humidity range. Altogether, this set of devices will provide real-time monitoring of key parameters and ensure data-driven decision-making, improving race management routines, optimising the use of resources and giving a better chance of winning the race.

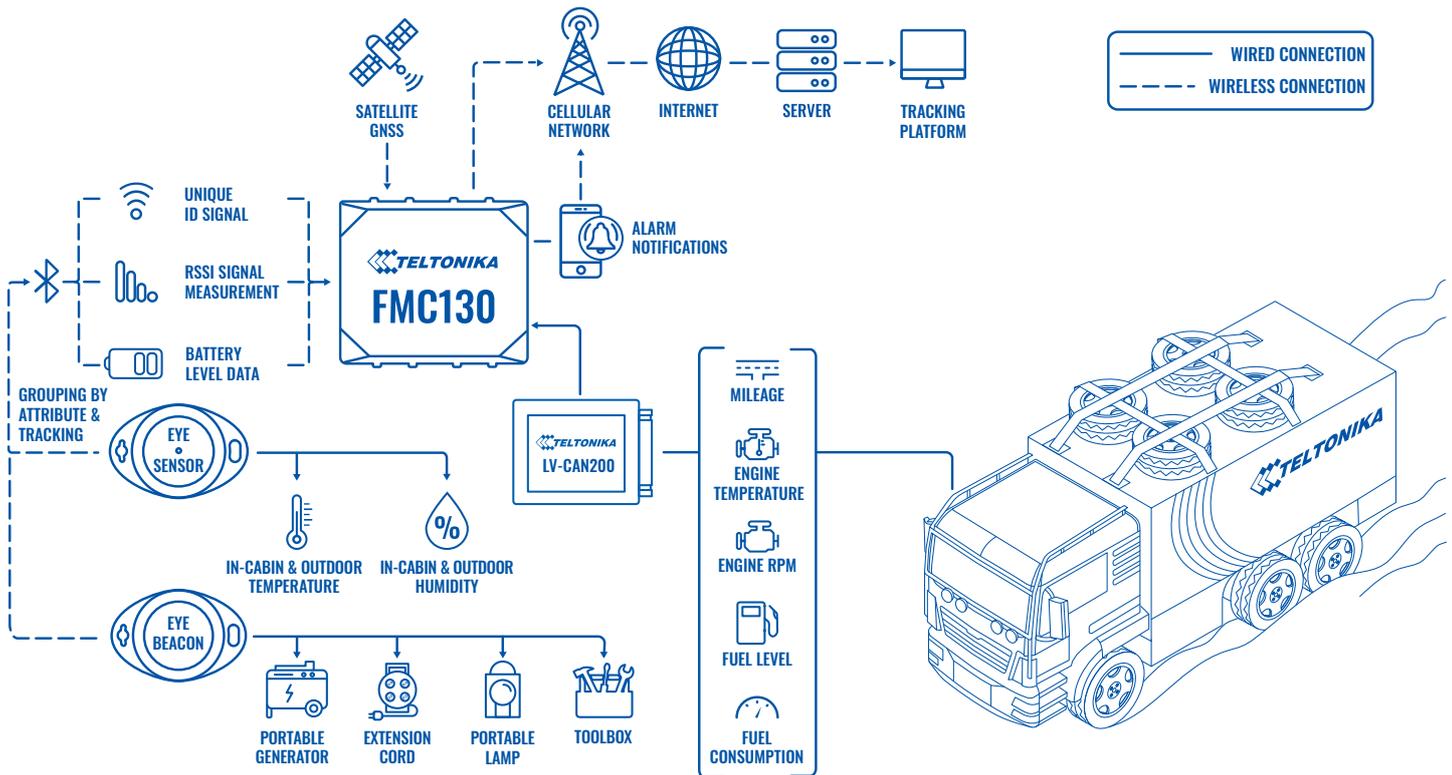
To make it clear, this year the rally goes through canyons and cliffs in the Neom region in Saudi Arabia, passing by the Red Sea coastline, into stretches of dunes surrounding Riyadh, with a lot of actions on the sand in the Empty Quarter desert. To some extent, these are the most unforgiving conditions for any driver, motor, vehicle or IoT device and the ultimate testing ground at the same time. Here to add, the model FMC130 is **approved and certified** by the Communications and Information Technology Commission (CITC) in the Kingdom of Saudi Arabia.

The fact is, despite the extreme environmental and driving conditions, the complete set of Teltonika GPS devices provides continuous and accurate vehicle location, speed, battery voltage, engine temperature, RPM, fuel level and its daily consumption, mileage; in-cabinet and outdoor temperature range and humidity tracked by sensors; even portable generator, halogenated portable lamp, extension cord, toolbox proximity data tracked by ID beacons.

Best of all, they work as specified and intended in each GPS product specification, continuously gather valuable data in real-time and help the 'Teltonika Racing' team to monitor the condition of trucks and certain assets, effectively manage resources and plan future actions.

Please note that the actually mounted FMC130 model (as well as other Teltonika GPS devices used on the support lorry) is just another vehicle GPS tracker assembled in one of our production lines - we have made no special modifications, adjustments or enhancements. This is exactly the same unit that we send to our customers when they place their orders. You can read more about vehicle GPS tracking for motorsport [here](#).

TOPOLOGY



BENEFITS

- **Accurate and reliable tracking even in extreme driving conditions** - whatever the circumstances, Teltonika GPS tracker FMC130 and the above-mentioned accessories have proven to work even in the toughest conditions, such as the Dakar Rally.
- **More projects, more income streams** - thanks to the well-tested reliability of Teltonika GPS devices, telematics service providers can also successfully compete in tracking fleets of vehicles operating in challenging conditions, thereby expanding business opportunities.
- **Improved company reputation and competitiveness** - impeccable fleet tracking and management with Teltonika devices will give telematics service providers and integrators a good reputation in the target market, helping them to stand out from the crowd and grow their business.

WHY TELTONIKA?

To successfully resolve vehicle fleet tracking and monitoring challenges in extreme driving conditions, we offer a rigorously tested and proven combo from Teltonika – the ADVANCED category vehicle GPS trackers, CAN Bus adapter LV-CAN200, wireless BLE technology-based EYE Beacons and EYE Sensors with functional Android/iOS mobile app to help telematics service providers and integrators succeed.

We are the right place to get all you need to succeed - the most abundant variety of top-quality certified GPS trackers, accessories, and solutions for any use case imaginable in vehicle telematics. From the start of the company 24 years ago until today, Teltonika 2,000 strong and growing team has manufactured 16 million IoT devices, helping to succeed thousands of customers and partners in over 160 countries across the globe.

FEATURED PRODUCT

FMC130

RECOMMENDED PRODUCTS

FMM130, FMU130, FMB130

RECOMMENDED ACCESSORIES

EYE BEACON, EYE SENSOR, LV-CAN200

