



THEFT PREVENTION AND REMOTE MONITORING FOR CHARTER YACHTS

INTRO

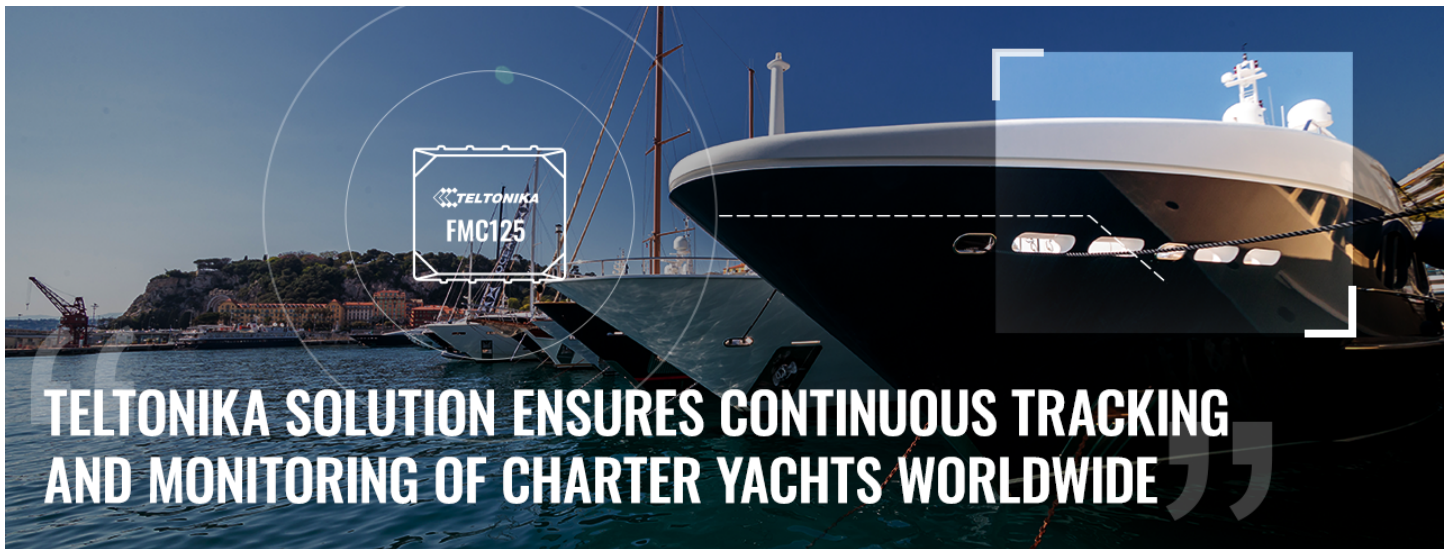
Chartering a fleet of yachts provides a luxurious and personalised holiday experience, access to remote destinations, flexibility, and exclusivity. Sadly, it also brings increased risks, such as theft, unreported accidents, and rising operating costs. Waterproof Teltonika GPS trackers backed up with satellite connectivity, have become the perfect companion for these businesses, allowing owners to mitigate risk and prevent unnecessary losses.

CHALLENGE

The global yacht charter market – bareboat, crewed, skippered, and cabin – is estimated to be worth **\$7.22 billion** in 2022 and is forecast to grow to \$11.06 billion by 2030. Unfortunately, hundreds of millions of dollars worth of marine assets are stolen worldwide every year resulting in an estimated loss of **\$60 million** annually. Furthermore, if left unmonitored and unregulated, the average vessel maintenance and fuel costs can more than double.

While the most popular way to charter a yacht is through a charter company, most boats in such fleets are privately owned. These vessels are sometimes chartered with their own crew but are often rented to clients who prefer to captain the vessel themselves. There are significant risks associated with chartered vessels, whether they are operating domestically or internationally. Collecting and transmitting live data on a vessel's movements and state of repair is invaluable to yacht owners.

As with any marine equipment, the question of durability and connectivity comes into play. Thanks to the IP67-rated Teltonika GPS trackers, supported by the **Iridium network** connectivity, charter yachts can be seamlessly tracked and monitored worldwide.



SOLUTION

We meet these challenges by choosing Teltonika [FMC125](#) tracker with 4G LTE Cat 1 network connectivity, an RS232 serial port and multiple inputs and outputs, complemented by the [IP67 casing](#) and the [Iridium Edge®](#) modem accessory for backup telemetry when cellular networks are unavailable. This comprehensive solution provides numerous benefits to ensure effective theft prevention and thorough monitoring of charter yachts.

How it works – Teltonika tracking device uses the latest [GNSS](#) positioning technologies to provide accurate, real-time tracking of a yacht, regardless of whether it is within the range of a [GSM](#) network. As a result, charter companies and owners can conveniently monitor their entire fleet's live location and voyage data from a centralised software platform. What is more, the FMx125 series has a [Static Navigation mode](#) that filters out track jumps when the yacht is stationary, reducing the possibility of inaccurate position detection and/or confusion.

When the GSM network is unavailable, the FMC125 tracker, connected to the Iridium Edge accessory via an RS232 port, transmits data via the Iridium satellite network connectivity. Using the narrowband [Iridium Short Burst Data® \(SBD®\)](#) protocol, it is an efficient packet-based messaging service for fleets operating in remote areas without cellular coverage. This allows yacht owners and managers to receive real-time status reports from anywhere in the world.

For example, an owner in Sydney who has chartered a yacht to a customer travelling to France can access live data on the vessel's condition. In the event of an accident or major equipment failure, instant alerts are provided detailing the time, location, and severity of the incident.

In addition, Teltonika GPS tracker includes geofencing capabilities (Auto Geofence or Manual Geofence scenarios), allowing virtual boundaries to be set around permitted areas. If the yacht crosses these boundaries, unauthorised movement alerts are triggered, facilitating immediate response to potential security breaches. This feature also helps to ensure compliance by notifying owners if the vessel deviates from approved routes.

Even more, with Jamming detection, Unplug detection, and Immobilizer scenario, Teltonika GPS tracking devices allow fleet owners to take preventative action against theft by triggering an alarm system, instant notifications, blocking the vessel starter, etc.

The solution also includes the option to equip a yacht with a panic button. In the event of an emergency, a crew in distress can press the panic button. If the GSM network is unavailable, it activates the Iridium Edge satellite communications modem. It will send the signal, along with precise coordinates from Teltonika FMC125 tracker and other valuable information programmed to be sent in such events. This means that coastal emergency services can save valuable time by knowing the exact location of an event and the time the signal was sent.

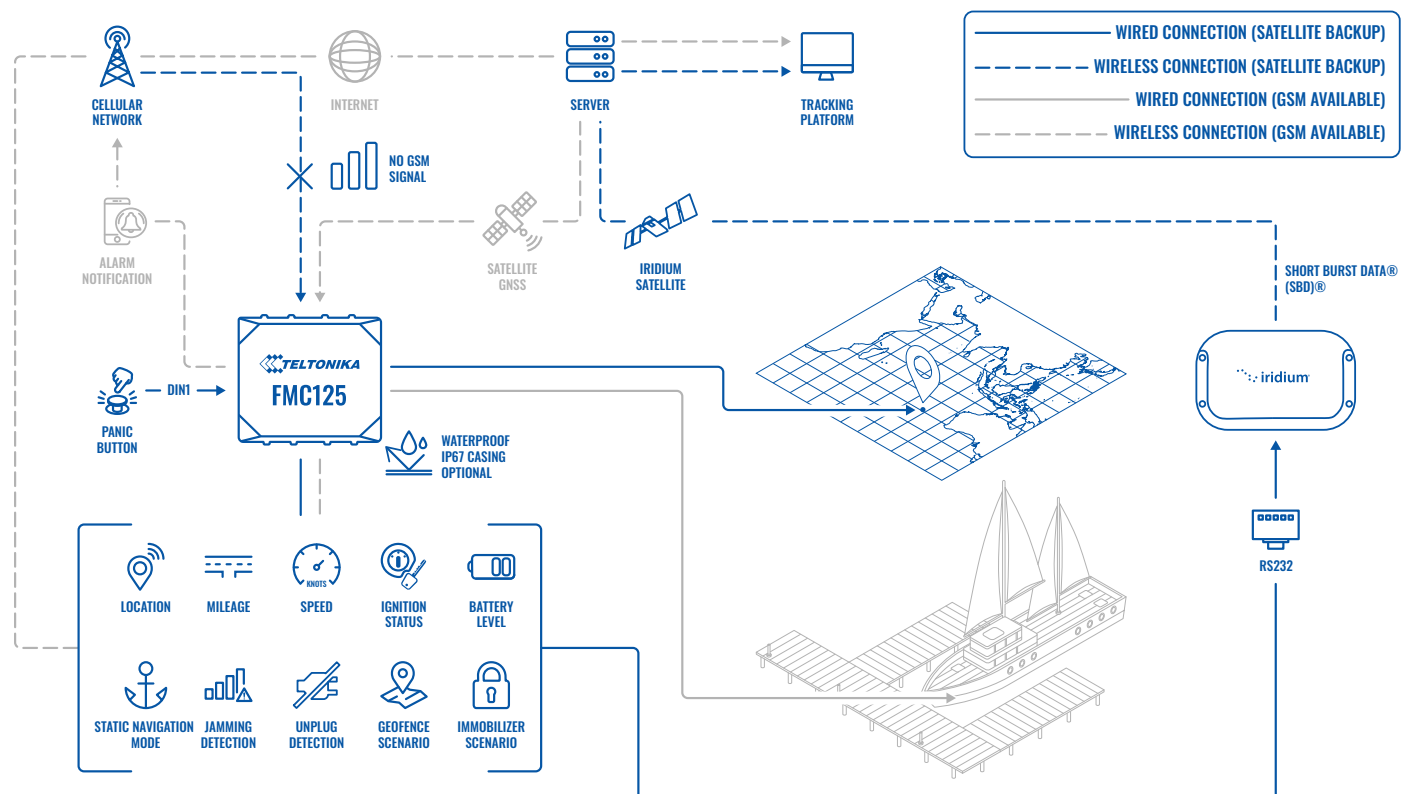
Continuous monitoring of the yacht battery levels is another key aspect of the solution. This feature helps to detect potential power-related faults and prevent unexpected outages, which is particularly important in remote locations. Moreover, the tracking system extends its functionality to include fuel theft prevention by monitoring fuel levels and providing alerts in the event of unusual consumption or unauthorised access to fuel tanks. In such case, an additional set of LLS sensors connected via the AIN1 input of the FMC125 would be required.

The solution also can provide some onboard asset protection, enabling the monitoring and safeguarding of valuable equipment and smaller vessels, such as jet skis, tenders, and inflatable boats. If required, tracking features and relevant scenarios, such as location tracking, ignition notifications, automatic geo-fencing and more can also be applied to them using Teltonika GPS trackers and/or wireless EYE Beacons.

The FMC125 with a dedicated casing accessory and Iridium Edge modem have been developed with a robust and waterproof design to ensure their suitability for the demanding marine environment. With an IP67 rating, these tracking devices can withstand temporary submersion in water and provide reliable performance in the harshest conditions.

To sum up, the seamless integration utilises the robust Iridium satellite network when the yacht is operating outside of cellular coverage, providing continuous monitoring capabilities and peace of mind for yacht owners, fleet managers, operators, and customers.

TOPOLOGY



BENEFITS

- **Reliable and accurate tracking in harsh conditions** – Teltonika FMC125 GPS tracker with IP67-rated waterproof casing and Iridium Edge accessory can withstand harsh marine conditions, ensuring reliable tracking of charter yachts even in adverse weather conditions.

- **Global coverage** - the Iridium network provides truly global coverage, including seas, oceans, and polar regions, ensuring continuous tracking and monitoring of charter yachts wherever they are.
- **Seamless cellular and satellite integration** - the FMC125 model seamlessly switches between cellular networks and the Iridium satellite network, providing uninterrupted tracking and monitoring regardless of the yacht location.
- **Real-time monitoring** - the satellite technologies-based Teltonika solution allows real-time monitoring of charter yachts, providing up-to-date location information and other critical data.
- **Comprehensive theft prevention** - the monitoring solution extends beyond vessel tracking to include fuel theft prevention and protection of onboard assets, providing a thorough security system for the charter yacht.
- **Enhanced safety** - In the event of an emergency, the panic button and accurate location data provided by Teltonika solution can be vital for rescue operations.
- **Operational efficiency** - tracking and monitoring charter yachts can help improve operational efficiency by allowing better route planning, fuel management, and maintenance scheduling.
- **Yacht fleet protection** - Teltonika solution can help protect valuable fleet assets by providing alerts for unexpected movements or deviations from planned routes, jamming and unplug detection, immobilizer scenario, etc.

WHY TELTONIKA?

Teltonika Telematics is a trusted leader in advanced tracking and monitoring solutions. By choosing our solution, yacht owners, telematics service providers, and operators gain access to state-of-the-art, European-designed, waterproof tracking devices. The FMx125 series, combined with the Iridium Edge modem, ensures seamless tracking and monitoring even in remote areas, giving fleet managers and owners peace of mind while their vessels are cruising the seas or docked at different locations.

Teltonika has been manufacturing and delivering exceptional IoT products, services, and support to its customers worldwide for more than 25 years. With a presence in over 160 countries, we offer local expertise worldwide. Our range of certified GPS trackers, asset and autonomous trackers, accessories, and software solutions for multiple use cases in the telematics industry has reached 22 million IoT devices, so you can trust us to provide everything you need to succeed.

FEATURED PRODUCT

FMC125

RELATED PRODUCTS

FMB125, FMM125

RELATED ACCESSORIES

Iridium Edge, IP67 Casing

