

EFFICIENT E-FORKLIFT FLEET MANAGEMENT WITH TFT100

INTRO

Downtime is a major obstacle for businesses in the manufacturing and distribution industry. E-forklift malfunctions can lead to lost staff and orders, adding to already soaring operational costs. It can also create a negative reputation among customers. An effective way to manage this issue is by implementing a performance monitoring system and prompt reporting. Fortunately, the Teltonika e-forklift management solution offers just that.

CHALLENGE

Managing e-forklift fleets can be a complex and challenging task and there are several key challenges to consider. The average operating cost for an electric forklift can be estimated by considering various factors such as the initial purchase price, maintenance, and fuel costs. A brand-new electric forklift with standard capacity might cost between **\$20,000-45,000**, with an additional \$2,500-5,000 for a battery and charger.

One of the key challenges is ensuring that batteries are properly charged and maintained to ensure maximum uptime and productivity. This requires careful monitoring of battery levels, charging times and usage patterns to optimise battery life and reduce the risk of downtime due to battery failure.

According to the [study](#), preventive maintenance reduces equipment downtime by 30-50% and extends the life of your forklift by 20-40%. Planned maintenance may cause downtime, but it is much less expensive than unplanned one.

Another difficulty is managing fleet performance and utilisation, including tracking usage patterns, identifying areas of inefficiency, and optimising routing and scheduling to reduce idle time and improve productivity. So, fleet managers need to consider the cost of tracking and maintaining equipment.

It is essential to track the cost of maintenance and repairs to ensure that the fleet is operating efficiently and cost-effectively. Teltonika Telematics has to offer a practical solution that can be integrated into a wide range of e-forklifts, offering a variety of benefits.



SOLUTION

To showcase our solution, we chose the Teltonika [TFT100](#) tracker, which has been specifically designed for the e-mobility sector and supports a high voltage supply range of 10-97 V. This GPS tracking device is compact, waterproof, dustproof, and [IP67 rated](#). It comes with an internal high gain GNSS and GSM antenna, Bluetooth LE connectivity, and a large 1,800 mAh internal battery. It also has multiple interfaces and an impressive set of practical usage scenarios, including the Manual CAN.

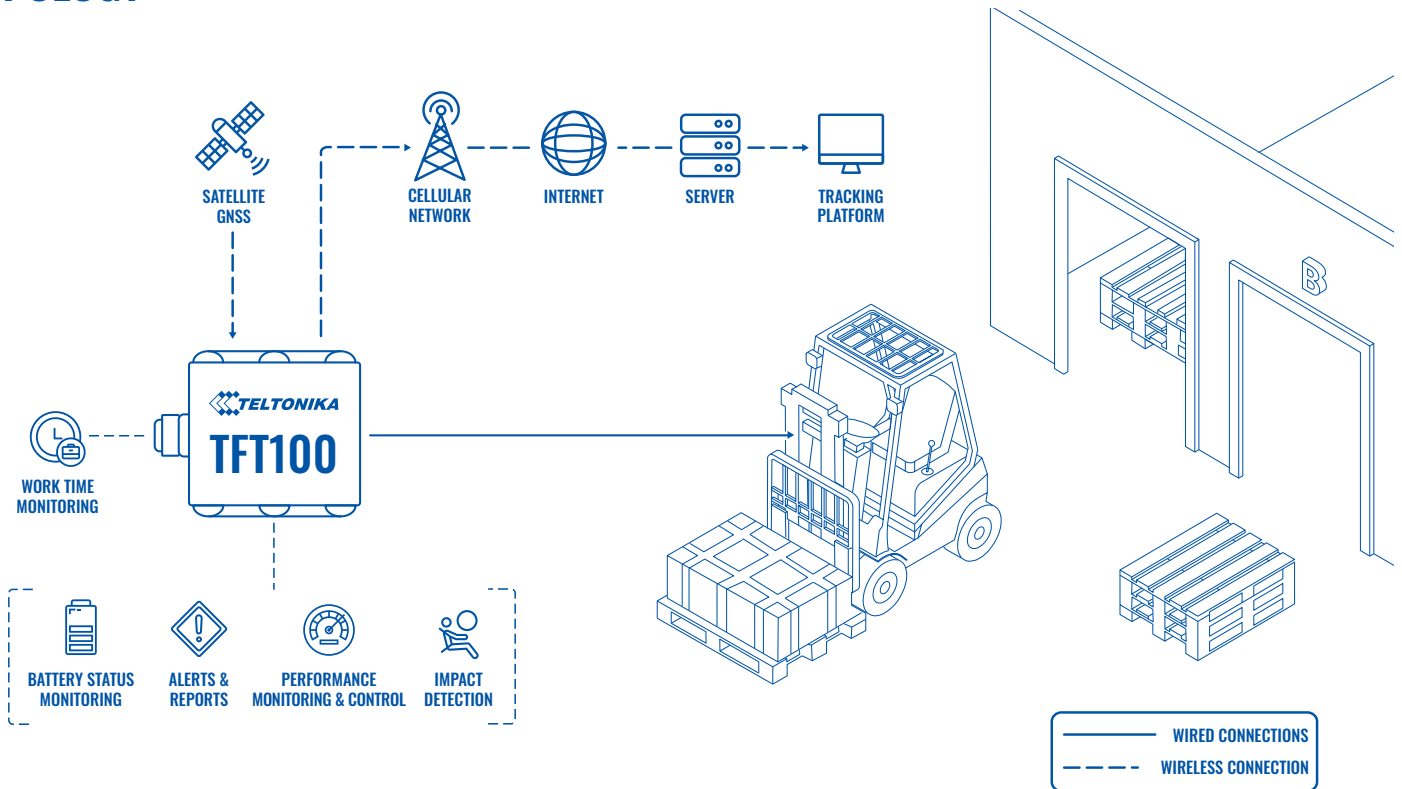
The versatility of the TFT100 makes it ideal for a variety of electric vehicles, including e-forklifts, providing valuable information such as distance driven, exact location coordinates in real-time, speed monitoring, battery status, working time logging, etc. All of this data can be conveniently accessed via a dedicated software application, allowing you to monitor e-fleet from a single location or any smart device with an internet connection.

How it works - to take advantage of the TFT100, it is necessary to install and configure it on each electric forklift. Once set up, the tracking device uses satellite-based technologies to collect multiple real-time metrics, including location, movement, electric battery level, CAN bus data, etc. The TFT100 transmits this information via a GPRS network to a dedicated server to monitor and manage fleet performance. This allows managers to track each forklift in their fleet in real time while gathering information for any necessary events and optimising daily operations.

Even more, the Manual CAN feature, which allows to manually configure the device to read specific data, makes the TFT100 GPS tracker an indispensable part of an e-forklift fleet. By providing the actual data about the performance of each vehicle, unexpected breakdowns can be minimised or avoided. In addition, predictive maintenance ensures timely and effective management of any size fleet, significantly minimising downtime and saving company resources.

Electric battery life monitoring is also made easy with this solution, which can provide accurate battery status on demand for specific tasks. Going further, [iButton](#) and [Immobilizer](#) scenarios help authenticate forklift operators, allowing managers to track employee hours, productivity, and behaviour. In the event of an accident, the Crash detection and Fall-Down scenario provide valuable information about an accident, helping to identify the cause, prevent future incidents, and improve workplace safety.

TOPOLOGY



BENEFITS

- **Proactive maintenance scheduling** - Teltonika TFT100 can help you schedule planned maintenance for each forklift and keep track of equipment efficiency, preventing unexpected downtime and ensuring higher productivity.
- **Improved e-fleet utilisation** - real-time forklift location tracking and in-depth analysis of user operations, forklift hours, its movements and order completion can facilitate data-driven workflow improvements, optimising fleet utilisation and reducing downtime.
- **Optimised battery management** - Teltonika GPS tracker helps to better monitor and manage electric forklift batteries, resulting in longer battery life, faster replacement, and optimised fleet size.
- **Improved safety and compliance** - the TFT100 can help monitor and manage e-forklift speed, hard acceleration, and hard braking, reducing the risk of accidents and ensuring better compliance with safety regulations.
- **Improved visibility and coordination** - real-time location data from GPS tracking can improve daily operation planning and coordination, reducing the risk of delays or other disruptions, resulting in cost savings and increased efficiency.
- **Reduced operating costs** - GPS tracking device TFT100 can help optimise routes and improve overall e-fleet efficiency, resulting in lower fuel consumption and reduced overtime costs.

WHY TELTONIKA?

Having successfully addressed and solved the challenges of tracking and monitoring e-forklifts, we offer a practical choice from Teltonika - a TFT100 tracker with a robust IP67-rated casing, easily adaptable to a wide range of IoT projects with extended usage scenarios, helping to efficiently manage electric fleets in the manufacturing and distribution industries.

With over 24 years of experience in the telematics industry and a staggering 21 million IoT devices produced, Teltonika Telematics is a recognised leader in providing high-quality certified vehicle GPS trackers, asset trackers, and accessories to customers around the world. We believe that our expertise and knowledge make us the perfect business partner for companies who need to achieve their goals. Our team has been helping thousands of businesses and organisations succeed for over two decades - saving them time, money, and hassle.

FEATURED PRODUCT

TFT100

