

SOLUTION FOR TRACKING AND PROTECTING CONSTRUCTION EQUIPMENT

INTRO

Construction is a multi-billion dollar industry that not only adds significant value to the economy but is one of the fastest-growing sectors in most countries. Equipment is a vital part of the construction sector and needs to be managed effectively, not only to prevent theft but also to keep businesses profitable. Wireless technology, combined with autonomous Teltonika trackers, opens up new opportunities for managing construction sites.

CHALLENGE

Growing investment in infrastructure projects and demand for construction equipment are driving this market forward. According to [marketsandmarkets.com report](#), it is expected to reach USD 250.4 billion by 2026, growing at a [CAGR](#) of 3.8% during the forecast period. Nevertheless, the challenges faced by business owners persist.

Sadly, thefts of construction equipment are evident in many countries around the world, accounting for more than [USD 1 billion](#) annually. Losses of equipment are estimated at [EUR 1.5 billion](#) in European countries and around [USD 650 million](#) in Australia.

As expensive tools and equipment on construction sites can be left outdoors and unattended, it is, pretty much, a risk-free and lucrative job for thieves. Given that [less than 25% of stolen equipment is recovered](#) each year and some types of equipment cost up to EUR 150,000, the issue of theft needs to be addressed with seriousness.

Even more, the direct cost of replacing stolen equipment is just one of the few problems faced by construction companies. Project delays, wasted working hours, increased costs for equipment rental and insurance are among the main indirect costs that follow theft. Fortunately, these losses can be avoided with Teltonika Telematics tracking devices.



SOLUTION

To address the challenge, we choose the autonomous Teltonika asset tracker **TAT100** with a few distinctive features - certified **IP68 rating** robust casing, high-gain GNSS antenna, tamper detection scenario, universal mounting, and long-life swappable internal battery. Its lifespan is up to 1,000 records, or 3 years, while sending a record once per 24 hours. This model is ideal for tracking all sorts of valuable goods (including non-powered ones), pricey tools, a wide range of construction equipment, waste and debris skips, large containers or small crates with consumables and building materials. The device is also known as Asset Tracker EASY.

How it works - whether it's electrical or non-powered assets, the TAT100 should be mounted on any tool or machinery to be tracked and monitored - skid loaders, wheel loaders, bulldozers, cranes, excavators, pile drivers, telehandlers, scissor lifts, forklifts, generators, laser levels, ladders, wheelbarrows, cable reels, tool boxes, etc. Conveniently, Teltonika asset tracker has 4 mounting options to choose from: straps, double-sided tape, magnetic (extra TAT Holder is required) or screws. Regardless of the shape of the object or the material it is made of, site managers can choose the most suitable mounting method for each project.

The TAT100 is equipped with an internal high-gain GNSS antenna to ensure the accuracy of location tracking and sends real-time information to a dedicated server for analysis of the construction equipment depending on the selected settings in its **Configurator** tool. So, if a piece of equipment or tool leaves a specified location or area (for instance, a construction site or defined zone in it), an alarm notification would be initiated and transmitted to the server and online tracking platform, allowing appropriate actions to be taken to prevent theft and financial loss.

Yet more, if for some reason the communication with GNSS is lost or interrupted (e.g., satellite radio signal blockage due to concrete buildings, bridges, large trees, etc.), the TAT100 model has a **Location-Based Service** (aka LBS) scenario. This function is based on the location of an autonomous device as determined by its geographical location in real-time with the use of the mobile phone GSM network. Therefore, the location of each object of interest on the construction site will be known at all times.

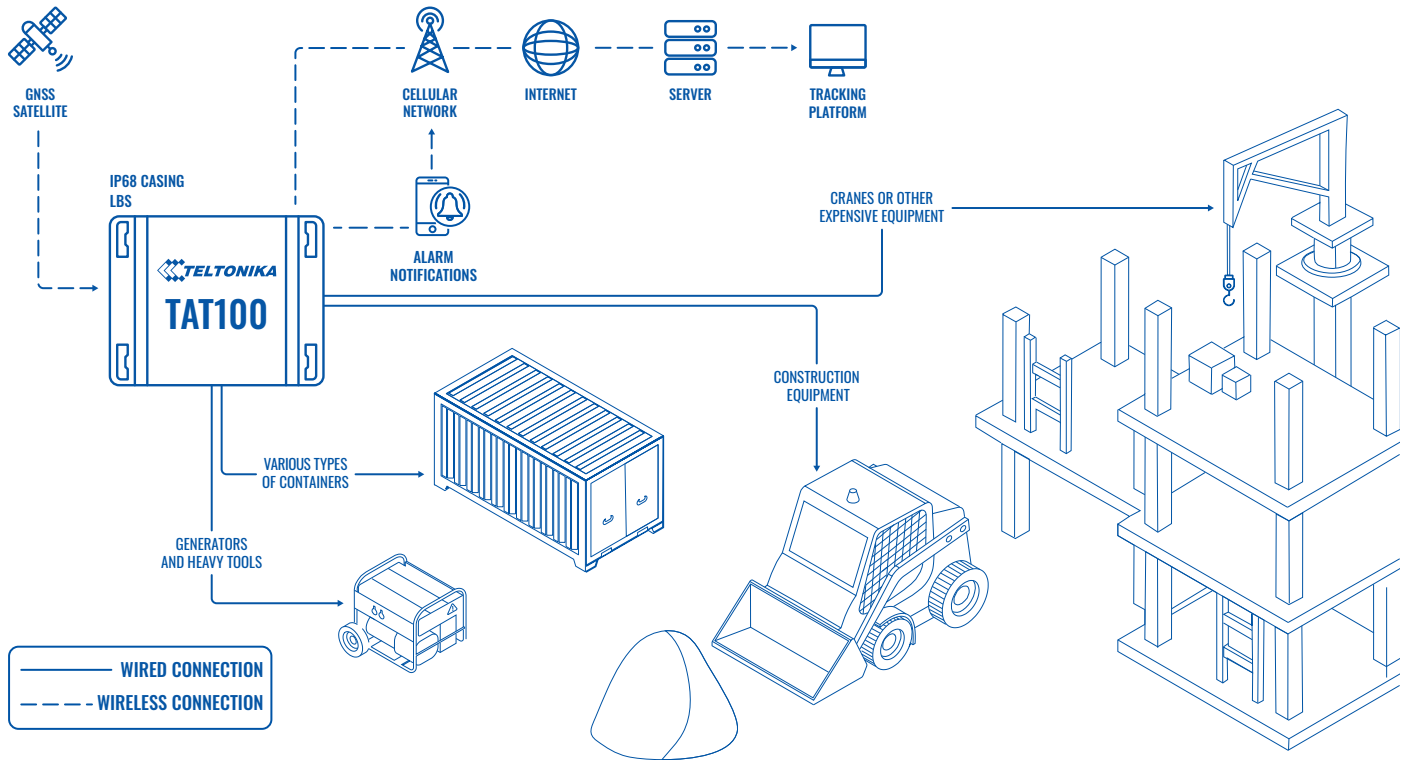
In addition, an enhanced tamper detection function will alert a person in charge, if the tracking device has been removed from the holder or if it has been completely dismantled with the holder. This handy feature helps to ensure that all construction assets accounted for at the site are continuously tracked and that managers are in control of the situation and the work process.

Still more, rigorously tested robust and waterproof casing makes certain the solution will work even in demanding climatic environments and challenging weather, e.g., sandstorms and/or dusty winds in regions such as the Middle East, Northern Africa, Central Asia and the like, monsoon seasons, humid subtropical or oceanic climate in Western

Amazon basin countries, South Asia, Africa, Australia, and the Pacific coast of Central America, etc.

Finally, the autonomous Teltonika TAT100 firmware updates and configuration changes can be made remotely using the [FOTA WEB](#) tool - a powerful software solution helping to manage these devices with maximum efficiency while saving precious time and company resources.

TOPOLOGY



BENEFITS

- **Reliable tracking in challenging weather conditions** - thanks to its certified IP68-rated casing, the TAT100 model can be used in a wide range of harsh environments, including construction sites, as it is robust, 100% dustproof and protected against temporary submersion in water.
- **Tracking any construction assets of interest** - the autonomous device is ideal for tracking all sorts of valuable equipment, electrical or non-powered, and objects of any shape thanks to its various mounting options. Avoiding theft on construction sites - the thefts of pricey tools, equipment, materials, and machinery can be prevented, significantly reduced or detected during the process, allowing time to take appropriate action.
- **Ensures continuous location tracking of items** thanks to internal high-gain GNSS antenna, handy LBS scenario, and easy-to-swap internal batteries.
- **It promotes labourers' discipline and proper tool usage habits** - continuous monitoring and control of employee routines, combined with the right motivation system, will improve the company's reputation, optimise workflow and operational costs.
- **More projects and business opportunities** - the versatility and durability of the autonomous Teltonika TAT100 tracker allows it to be deployed in a wider range of markets and regions, even in adverse weather and driving conditions, leading to more projects, more revenue and a considerable competitive advantage.

WHY TELTONIKA?

To successfully address and resolve construction equipment tracking and monitoring challenges in any climatic conditions, we offer a popular choice from Teltonika – the autonomous asset tracker TAT100 with robust and certified IP68 rating casing, a few mounting options, tamper detection, and a swappable high-capacity internal battery helping effectively manage construction sites and their assets.

We are the right place to get all you need to succeed - the most abundant variety of top-quality certified GPS trackers, asset trackers, accessories, and solutions for any use case imaginable telematics industry. From the start of the company 24 years ago until today, Teltonika 2,500 strong and growing team has manufactured over 20 million IoT devices, helping to succeed thousands of customers and partners in over 160 countries across the globe.

FEATURED PRODUCT

ASSET TRACKER EASY

