



Solution Brief

IoTgo[®] Track-Solar rail

Built for railways. Ready for anything.

Specifically engineered to withstand the rigorous conditions of railway environments, G+D's IoTgo[®] Track-Solar rail redefines the benchmarks in asset tracking technology. Featuring a rugged and compact design, a strategically angled solar panel for enhanced energy capture, and an IP69k-rated enclosure, this device is crafted to resist continuous motion, severe weather conditions, shocks, vibrations, and even acts of vandalism. The outcome is over 10 years of maintenance-free performance—eliminating the need for cables or recharging.

The Track-Solar rail integrates high-precision GPS, 4G Cat-M1 connectivity, and event-based tracking capabilities (including motion detection, shock sensing, and door status monitoring) into a single, modular unit that is easy to install and integrate. Adhering to stringent rail and environmental standards, the device is a trusted choice for railway operators. It is equally suited for other demanding industrial settings, ranging from construction sites to heavy logistics thanks to the resilient and adaptable design.



Key benefits



Increased Productivity

Optimizing routes and automated tracking of inventory allows for more precise scheduling and planning, reducing delays and increasing overall operational efficiency.



Cost Savings

Identify inefficiencies and bottlenecks within the supply chain and reduce operational costs, such as fuel expenses, warehousing costs, and inventory carrying costs, cutting down untracked fleets by 12%.



Supply Chain Visibility

Quickly adapt to changes in demand or supply conditions. This agility can be a competitive advantage, allowing for faster response to market changes or customer needs.



Extended Longevity

The use of solar panels helps to cut down on waste such as frequent battery replacement and charging thanks to the longevity of the batteries.



Maintenance-free

Devices are in operation for more than 10 years and complemented by trusted services which are guaranteed to perform throughout the entire expected lifespan.

With IoTgo® Track-Solar rail, you'll be able to:



Leverage self-sustaining tracking with solar panel for energy harvesting and self-cleaning



Reduce operational costs and optimize fleet efficiency



Track rail wagons with the highest GPS accuracy



Minimize damage and vandalism while adhering to rigorous rail certifications (EN 50121-3-2, EN 45545-2, and EN 61373)

Use Cases and Applications



Rail



Road



Ocean



Airport



Construction

Why Choose Our Solution?



Asset tracking that lasts

- 10+ years of longevity of service guaranteed
- Solar powered for long-term autonomous operation



Fits any type of tracking scenario

- Extreme high precision location tracking
- Large backup battery ensures that, even without sunlight, Track-Solar can still provide short cycle tracking for more than 6 months



Unmatched durability suited for any conditions

- Robust and resilient material designed to withstand rigorous rail conditions i.e. high fire protection level
- Dust and water ingress protection – IP69k
- Special tilted design to optimize energy harvesting



Detailed data for optimal fleet efficiency

- Inbuilt sensors and auto-start of GPS ensures you always know the location and condition of your assets
- Additional temperature sensor provides insight into inventory condition – ideal for sensitive shipments



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