

duration.*

TrailerSentry®

Technical Information



Technical Information



Connectivity

LTE-M / NB-IoT Nordic nRF9160 Modem operates on all major global LTE-M and NB-IoT bands.

Supported LTE bands: LTE-M (Cat-M1): B1, B2, B3, B4, B5, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B66

NB-IoT (Cat-NB1/NB2): B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B66

Batteries

User-Replaceable Batteries 2 x AA cells

Supported Battery Types Alkaline

Lithium (LiFeS2) Ultimate Lithium - recommended for best performance.

*Battery Life estimates Once Daily location updates = 8+ years

Movement-Based location updates = 3+ years

Hourly location updates = 2.5 years

*Battery life estimates are influenced by several factors including temperature, installation and orientation of the device, the frequency of location updates, network coverage, sensor integrations, peripherals, accelerometer settings, and more.



Location

GNSS Module uBlox Max-M10.

Constellations used GPS (US), GLONASS (Russian federation), Galileo (EU), QZSS (Japan), BeiDou (China)

GNSS almanac for greater sensitivity and position accuracy. **GNSS** Assistance

GPS signals are filtered and boosted by a SAW filter and low-noise amplifier (LNA). Low Noise Amplifier

Cell Tower Location Cell tower location fallback for positioning when GNSS can't get a fix.

Horizontal ~ 1.5m CEP. *Location Accuracy

*Positioning accuracy specifications are provided by the GNSS supplier and reflect ideal conditions. Device configuration, installation, environmental conditions, augmentation services, and many other factors may lead to variations in positioning accuracy.



Power

2.2V - 3.6V Input Voltage

<10uA - Average current in lowest power configuration Sleep Current



Mechanics /Design

Slim form factor IP68 Rugged housing to IK07 Casing

Dimensions 149 x 51 x 21 mm (5.9 x 2 x 0.8 in)

Operating Temperature -30°C to +60°C For operation in extreme temperature, use lithium batteries. 3-Axis Accelerometer 3-Axis Accelerometer to detect movement, high G-force events, and more...

Store weeks of records if device is out of cellular coverage. Storage capacity for over 2 Flash Memory

weeks of 2 minute logging.

Magnetic Switch Magnetic switch enables quick activation and tamper detection

Device reports internal temperature which provides an indication of ambient temperature On-Board Temperature

but may not always be precise.



Security

Data Security Military-level AES-256 Encryption from device to Device Manager to protect the integrity

and confidentiality of telematics data.

Data forwarded to third-party systems is sent via HTTPS for end-to-end security.





One of the most significant benefits of the TrailerSentry® tracker is its seamless integration with the Telematics Guru platform, a premium trailer tracking system for anyone looking to monitor and secure their valuable trailers.

TrailerSentry® and Telematics guru are made by the same company so work perfectly together, unlocking many extra useful features.

Available on desktop, tablet, or mobile app, Telematics Guru allows you to locate your trailer assets easily in Google's Map or Satellite Views. With its powerful customisable reporting and alerts, you can explore, schedule, and download vital reports for analysis, optimisation, or billing.



Geofences

Geofences are virtual boundaries that you can set around specific areas to monitor your trailer's movements and warn of un-authorised movement or theft.

Whenever a trailer enters or exits a designated geofence, you'll receive an alert by email or in-app notifications to your phone.
This is especially useful for tracking trailers hired out to higher-risk customers, recording time spent on

hire for billing purposes, and notifying arrival or departure at important locations.



Alerts

One of the most powerful features of TrailerSentry® is the ability to send alerts whenever something important happens.

We have an Alerts Wizard to help set alerts on many things, such as:

- Un-authorised Movement Alerts Having built in movement sensors (3d accelerometer) gives you the ability to set an un-authorised movement alert, particularly useful if geofences are not suited to your use case, and for temporary extra protection.
- Out of Hours Alerts Get notified of any unauthorised movements of assets.
- Low Battery Warnings Get plenty of warning to swop out batteries as they become depleted, ensuring continued protection of the asset.
- Geofence Protection Alerts Used in conjunction with geofences, it forms a powerful way to get exception alerts when you need them, as they happen, or just for the record.

 Service Reminders - Automatically alert you when the trailer is nearing a service based on mileage done or
- Tamper Detection A magnetic switch provides an alert if the device is removed from your asset.



Smart features

TrailerSentry® is a very capable adaptive tracking device that incorporates built in temperature and movement sensors. It can be configured and customised for many situations you wouldn't normally associate with a tracking device. Working in conjunction with our Telematics Guru platform you can:

Manage Users & Permissions - Quickly add and invite new users, assign roles and manage permissions, access to devices, reports or specific features. Set up partner or subsidiary organisations.

Access Historical Trip Data for Insights

With the Barra GPS you have access to valuable historical trip data that can help you monitor routes, mileage, speed, and more. This information is invaluable for optimising your operations, analysing usage patterns, and ensuring your assets are being utilised efficiently.

Run hour Monitoring - Capture run hours of towed plant or equipment based on movement, to improve or analyse utilisation, trigger events or service reminders.

Theft Recovery - Put the TrailerSentry® tracker into recovery mode allowing for the device to report more frequent location updates if it is stolen or lost.

Collaborate and Share Location Information

TrailerSentry® offers a small form factor that is perfect for discreet tracking. You can provide time-limited access to the police through our smartphone app or browser software in the event of theft.

Simplify Reporting and Analysis

Our cloud-based platform offers custom automated reporting, allowing you to explore, customise, schedule, and download vital reports. From utilisation and trip lists to low battery alerts and speeding incidents, you can generate reports that provide valuable insights for analysis, optimisation, or billing. You can even create your own reports tailored to your specific needs.



TrailerSentry® is a trusted solution used by many people and businesses throughout Europe. Our system is scalable, and packed with lots of professional features. You can integrate into your own systems using our web hooks and API's, further enhancing the

flexibility and usefulness of TrailerSentry® trailer tracker.

Don't leave the security and management of your trailers to chance. Choose TrailerSentry® for a comprehensive and user-friendly trailer tracking solution



0208 092 2236 sales@nortrak.co.uk

