

BRIDGE

The heartbeat of smart connected assets.

TRANSFORM FREIGHT: SMART CONNECTED ASSETS

The heartbeat of Wabtec's Railcar Telematics solution is the Bridge, an industry proven communications and location device that brings railcar and tank container assets to life. The Bridge delivers critical information about the near real time location of freight car assets as well as collecting and transmitting the data from all Wabtec sensors on the asset. The result – it turns ordinary rail assets into smart connected assets.

Built for the rugged railroad environment, the Bridge is designed with robust protection against environmental elements and long life. Its solar panel and rechargeable battery allow it to use frequent reporting intervals and be operational for over ten years.

BENEFITS

Asset Visibility:

- Track and trace your freight and rail assets.
- View railcar status and connected sensor measurements every 10 minutes when moving and every 12 hours when idle.
- Create event driven notifications based on real time location and status.
- Gain access to first and last mile data.
- Track routes and monitor mileage for predictive maintenance

Customer Satisfaction:

- Enhance customer communications through informative insights and status notifications.
- Provide customer access to an easy-to-use web-based portal that visualizes and details the status of railcar and tank container assets.

Productivity & Operational Efficiency:

• Learn how assets are being utilized. Analyze mileage and other data to drive operational improvements.

TURN INSIGHTS INTO IMPROVED OUTCOMES







KEY ATTRIBUTES

- Highly Accurate Location Data: Using GPS, GLONASS, Beidou and Galileo.
- **Broad Cellular Connectivity**: LTE Cat 1 bis modem for maximum coverage.
- **Rugged Enclosure**: Designed to IP 67 and IP 66K.
- **Solar Panel**: high performance monocrystalline solar panel.
- **Durable Battery**: 25 Wh capacity, 12 years typical battery life to keep battery capacity at 80% of initial value.
- Large Internal Memory: buffering of more than 5,000+ messages, including external sensor data.
- Wide Operating Temperature Range: -40°F to 185°F (-40°C to 85°C).

MECHANICAL

- Dimensions (LWH), without mounting flanges: 7.5x3.9x2.3 in. (190x99x58 mm), with mounting flanges: 10.5x3.9x2.3 in. (267x99x58 mm)
- Weight: 2.2 pounds (1.0 Kg)
- Enclosure: Durable glass filled nylon housing
- Mounting: RailPulse universal bracket compatible

CONTACT US

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COMMUNICATIONS

- **RF Transmitter**: multi protocol (Bluetooth, IEEE 802.15.4) 2.4 GHz transceiver, ITSS IF2 ready.
- Cellular: LTE Cat 1 bis modem integrated for worldwide connectivity.
- Data Security: Sensor and server data are all processed conforming to the ISO 27001 and ISO 27017 data security standards.
- Remote Update: The firmware of the Bridge and connected sensors can be updated overthe-air.

APPROVALS

ANRI

Certifications in process.

- IECEx International Standards applied for explosion protection:
 - IEC 60079-0: 2017 - IEC 60079-11: 2011 II 2 G Ex ib IIC T4 Gb
 - Ta: -40°F to 140°F (-40°C to 60°C)
- ATEX European Standards applied for explosion protection:
 - EN IEC 60079-0: 2018
 - EN60079-11: 2012