# W-SPOT®

**TOP FEATURE**
Remote monitoring outside operational control zone


**W-SPOT®** is an ultra-light rail vehicle satellite-based tracking system, ideal for remote monitoring of assets movements outside direct operational control zone (e.g. cross-border wagon tracking for corridor operations)

## Main Features

- Battery-powered satellite tracker installed on each wagon interchanged with "foreign" network
- Ideal for cross-border movement monitoring of "private" wagon fleet
- Independent from locomotive and from network owner
- Using orbital satellite system, this solution is more effective than geo-stationary satellites, providing seamless operation along rail corridors.
- More reliable and better telecom coverage than any multi-national GPRS (gsm) solution.
- Easy **cost control** through well adapted data subscription scheme.
- Direct agreement with satellite communication primary provider (no intermediate service provider).
- Cloud-based information centre and/or local server
- Real-time wagon position sent as per customized transmission pattern:
  - Every x hours (e.g. every 2 hours)
  - One position minimum 1 / day (even if not moving)
  - Every time a wagon stops for more than x minutes (e.g. more than 10 minutes)
  - Every time a wagon starts moving again after above-referred stoppage time
- User-friendly operator platform to access operational parameters (wagon id, position, speed, etc.); tracking data available to final user under tailor-made format on its own PC terminal (internet-based)
- User interface using a robust and secure (banking sector approved) messaging software (Xantus, www.xantus.com) that can be customized to client's requirements.

## Technical Specifications

Specifications:

- IP68
- Unit dimensions : 6.85 cm x 8.25cm x 2.54 cm
- Vandal-proof bracket fitted to wagon skeleton
- Regular AAA batteries (estimated replacement time : 6 to 12 months based on data subscription set up)
- Friendly user interface (software)
- Secured server hosting (e.g. outsourced)
- Balise certification: ANATEL, CE Mark (EU), FCC CFR, COFETEL, etc.

Options:

- Solar tag : powered by solar panel (lifetime : 8 years) but higher risk of vandalism if the tracking device is positioned at eye-catching height (ideal for box wagons)
- Additional sensors such as wagon derailment/flip over detection (vibrations)

**W-SPOT®** was designed and is produced by FUTURE RESOURCES sa, a Belgian company developing innovative and cost effective solutions for small to medium size railways.

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