



RT Onboard

Rolling Stock Tag System for Real Time In Motion Control

TOP FEATURE

Automatic Early
Derailment Detection.
Huge savings!



HIGHEST RETURN
ON INVESTMENT

RT Onboard® is part of our **ATRAC®** system. RT stands for “RailTracker”. RT Onboard is a rolling stock mounted tag-based system providing both driving crew and traffic dispatching with real time train information (including train composition and train integrity), featuring permanent monitoring of in-motion rolling stock technical behavior.

Prevention, Innovation, Savings

Key Features

RT Onboard® provides valuable information such as :

- Automatic train composition
- Permanent train integrity check
- End Of Train clearance
- Early derailment detection with real-time alarm
- On-wagon payload information
- Hot box detection *
- Real time dynamic weighing *
- Centralized event-driven information management
- On-board and central “black-box” functionality

* Under development

Sophisticated, Easy to Use

Main Components

RT Onboard® is composed of :

- A multifunctional RFID tag mounted on each wagon (dynamic tag)
- A master tag mounted on the locomotive controlling data communications with wagon tags
- A radio-based communication protocol along the train
- An on-board computer (OBAS) serving as a hub for data to and from the tag chain, other manufacturers’ OBCs, and central traffic dispatching, and managing the driver console
- A driver console (DMI/HMI)
- *Optional:* A central software RailTracker Plus® storing operational, commercial and technical data, providing on-line tools to manage the rolling stock fleet

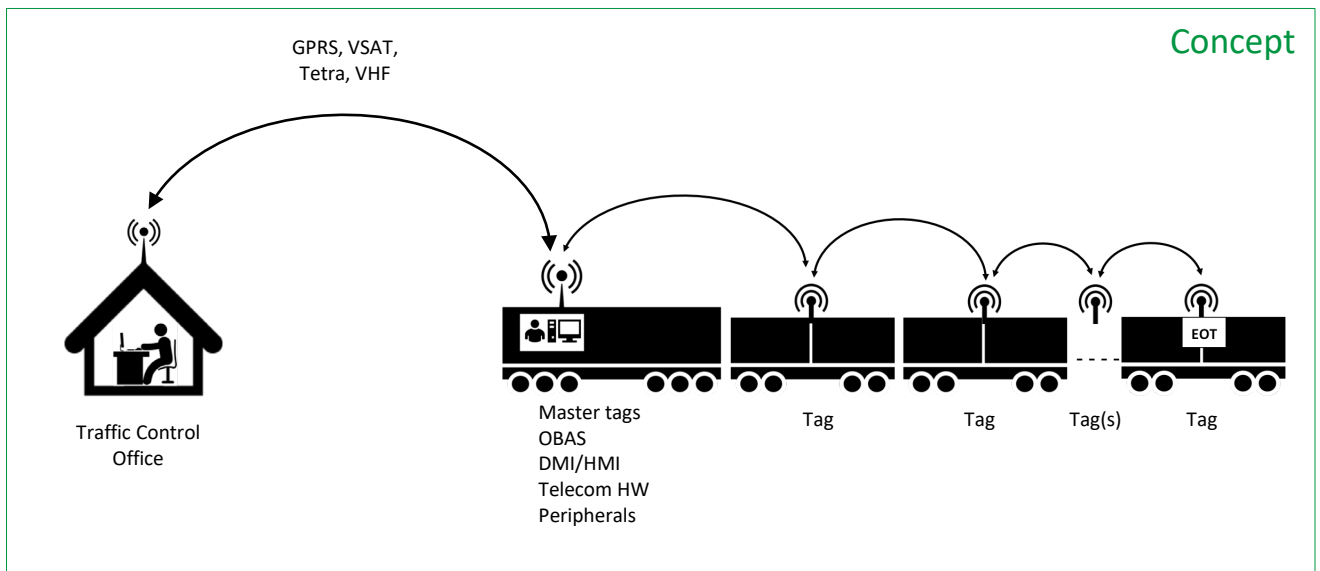
Economic, Strategic, Innovative.

Main Characteristics

ATRAC On-Board® has been designed to meet challenging operating conditions:

- **State-Of-The-Art** technology
- **Strategic:** providing critical functionality such early derailment detection allowing significant cost/damage reduction in case of derailment, as well as other safety-related indicators
- **Robust:** on-board real time technology, no costly and theft-prone track side equipment
- **Energy-low consumer:** RFID tag protocol designed for low power consumption
- **Innovative:** radio protocol with full redundancy, encryption and fault tolerance
- **Connectivity:** may integrate other operational systems such as:
 - TAWS® (Train Approaching Warning System)
 - Train control system ("TCS") providing safe line clearance/authority to proceed
 - Automatic level crossings
 - Motorized rail switches

MONITOR THE TRAFFIC IN REAL TIME



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

RT Onboard® was developed in collaboration with our partners: railway engineering companies and operators in Africa and South America.

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