

Fig.: Installation situation

CHARACTERISTICS OF THE TRACKER

Description

Position tracking of rail vehicles is done via GPS receiver, powered by an integrated generator. The position data is transmitted to a server via GSM modem at regular intervals. The server makes vehicle position data, along with a set of other important parameters available to the user on the Internet.

Advantages

- Visual unflashy remote monitoring of the freight wagon
- Determination of the real vehicle mileage travelled to optimize the maintenance interval
- Power supply for other external systems
- Optimization of the management of the rolling stock via real time pin pointing
- Retracing of events (e.g. passed locations, parking position, used track lines, usage behaviour, vehicle theft, etc.)
- Possibility of retrofitting existing freight car fleets with low effort

Characteristics

- Supports GSM/GPRS 850/900/1800/1900 MHz
- Pin pointing of a vehicle with integrated GPS/GSM module
- Tracking of the vehicle
- Customized signal sending interval during movement
- Operating temperature from -20 °C to 85 °C

Optional

- Transfer of analog indicators
- Feeding external sensors from the generator
- Internal battery for localization during stops

HOW TO CONTACT US

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Position tracking



with integrated generator



WaggonTracker

Vs 01/13

WAGGONTRACKER PLATFORM

Easily position tracking - with the PJM WaggonTracker. The tracking system with independent power generation is designed specifically for freight cars. It allows long-term and reliable monitoring of the current position and mileage of freight wagons as well as transferring vehicle parameter.

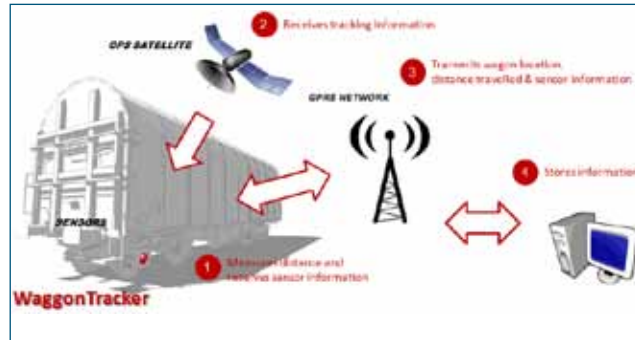


Fig.: WaggonTracker data transmission

In contrast to commercially available systems, the WaggonTracker is integrated into the axle-box of the wagon and provides maximum protection from environmental influences. The WaggonTracker is a robust and durable system for the freight car industry.



Fig.: WaggonTracker - integrated in different bearing caps

WAGGONTRACKER PORTAL

The WaggonTracker data are recorded and transferred to a server via GPRS at regular, individually adjustable intervals. Information is available 24/7 to the user via web portal www.my.waggontracker.com. The user has the ability to manage and visualize current and historical data of his units.

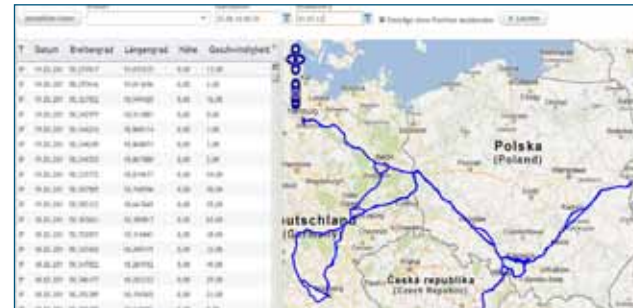


Fig.: WaggonTracker internet portal

SYSTEM VARIANTS

The WaggonTracker is available in four different system variants.

	Power Supply	Mileage Counter	GPRS Modem	GPS Module	Sensor System
WaggonTracker PS -Power Supply	<input checked="" type="checkbox"/>				
WaggonTracker MC -Mileage Counter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
WaggonTracker STD -Standard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
WaggonTracker ADV -Advanced	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

GENERAL ARRANGEMENT

The WaggonTracker unit is integrated in the axle box. The drawing below shows the WaggonTracker in the axle bearing housing box of a Y25 bogie. Power supply for the GPS receiver and the GSM modem is provided by a hub generator. The generator's stator (2) is installed in the cap of the axle bearing housing. The rotor (1) of the generator is mounted onto the wheel set axle. GSM/GPRS modem (3), GPS receiver (4), GPS antenna (6) and GSM antenna (7) are attached to the cap of the axle bearing housing. Optional accessories like rechargeable batteries (5) and electronics for charging (5) are placed in the same compartment. Depending on the available space, different arrangements of the components are possible.



Fig.: Components

- 1** rotor of the generator without bearing
- 2** stator of the generator without bearing
- 3** GSM modem
- 4** GPS receiver
- 5** rechargeable batteries and electronics (optional)
- 6** GPS antenna
- 7** GSM antenna