



PJ Messtechnik GmbH



Position tracking



with integrated generator



Waggon Tracker

www.pjm.co.at

CHARACTERISTICS OF THE TRACKER

Description

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

Advantages

- Visual unremarkable remote monitoring of the freight wagon (Position, temperature of the bearing, etc.)
- Determination of the real vehicle miles traveled to optimize the maintenance interval
- theft protection for freight wagons and 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
- Real-time tracking of the vehicle via Google maps
- Customized signal sending interval during drive
- Operating temperature from -30 °C to 85 °C

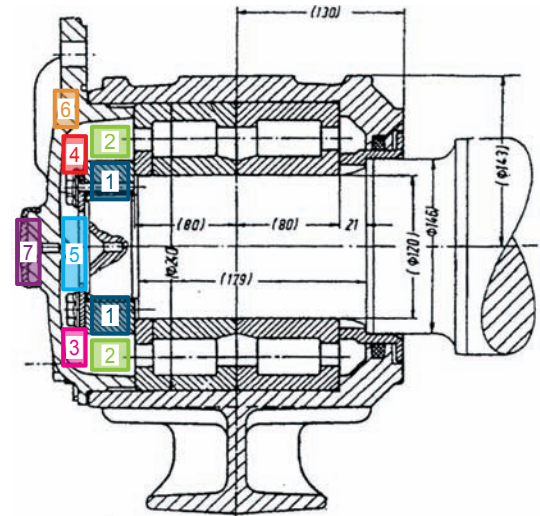
Optional








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



GENERAL ARRANGEMENT

The Waggon Tracker unit is integrated in the axle box. The drawing below shows the Waggon Tracker 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 without bearings. The generator stator (2) is installed under the cover of the axle bearing housing. The rotor (1) of the generator is mounted onto the wheel set axle. GSM modem (3), GPS receiver (4), GPS antenna (6) and GSM antenna (7) are attached to the cover of the axle bearing housing. Optional accessories like rechargeable batteries (5) and electronics for charging (5) are placed in the same compartment. The function of the charged electronics (5) is to power the GSM modem (3) and the GPS receiver (4). Depending on the available space, different arrangements of the components are possible.



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

HOW TO CONTACT US

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