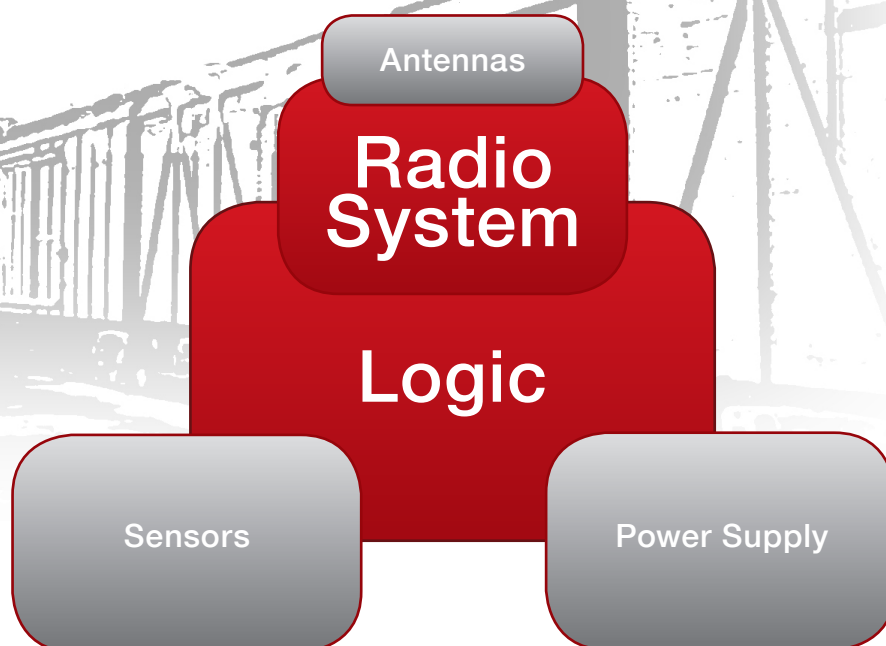


# VarOBU

A first step towards the „intelligent“ freight wagon

## Variable On-Board Unit for the all-purpose use of freight wagon

- Connection to customer specific sensors
- Retrofits for most wagon types
- Integrated electric power supply
- No wiring to the wheel for the electric power supply
- Wireless radio transmission between freight wagon and locomotive
- Independent from other radio systems (e.g. GSM)
- Optimized software for wireless data transmission to increase the operation time
- Immediate display of sensor data at the train driver cabin
- Local or central storage of all relevant data on the server
- Direct coupling to the logistics system
- Small effort for maintenance



## Field of Application

- Automatic rail brake test
- Hot box detection
- Detection of handbrake position
- Wheel flat detection
- GPS vehicle location
- Automatic load control
- Calculation of mileage for each wagon

## Benefit for the costumer

- Increase of security ( e.g. use case automatic rail brake test: request of brake system condition during the ride on the track)
- Decrease of maintenance costs of the vehicles by early detection in case of failure (predictive maintenance)
- Provision of data of the equipped wagons for continuative reporting
- Documentation (e.g. results of automatic rail brake test)

## Use case: Automatic rail brake test

The automatic rail brake test conduces to time reduction for safety checks, increase of security and automatic documentation of the rail brake test.

The wagon list will be provided to the train driver either manual or via a coupled logistics system. After successful visual inspection, the test to apply and release the brake blocks will be performed automatically. In that process, the train driver will be guided through the system. The individual results of the wagons are shown directly on a notebook.

The monitoring of the system pressure (pressure in the brake pipe and in the master cylinder) can also be executed during the ride. The determined results can be saved locally for instance on a notebook or archived on a central server via GSM.

## Short company overview of AIS Automation Dresden GmbH

For more than 20 years AIS Automation Dresden GmbH has been supplying software solutions for the traffic and railway technology. Multiple marshalling and shunting yards have been equipped with the rail brake control system (VarGBS). We will support you over the entire life cycle – from specification, via installation up to customer service.

135 experienced and committed engineers create, develop and install our software solutions in close collaboration with you.