

strain gauge sensor

Technical Description

The device is equipped with strain gauge sensors, an accelerometer, and a temperature sensor. Thanks to this combination of sensors, a single device can be used to measure axle loads, vibration levels, and rail temperature. The device is designed to withstand harsh environmental conditions while ensuring quick and reliable installation, eliminating the need for adhesive mounting.

The housing also incorporates an evaluation unit that processes the measured signals. The processed data can then be transmitted to a higher-level system via a digital output or an RS-485 communication interface.

Applications

- rail vehicle detection
- rail vehicle weight measurement
- wheel defect or track structure defect detection
- vibration level monitoring
- rail temperature measurement



Advantages

- quick and easy installation without adhesive bonding
- evaluation unit integrated within the sensor housing
- digital output and RS-485 communication interface for easy integration with supervisory systems