

UNIVERSAL TRAIN-WHEEL SENSOR - UTD

UTD is EN 50617-2 compatible detector device used for reliable and accurate train wheel detection, designed for simple installation and maintenance.

Safety Orientated Design:

- Programmable Logic Design
- Internal monitoring of system integrity and functions
- Power Line Carrier (PLC) Design enables the use of just one pair of wires for both power and communication for total cable/infrastructure monitoring
- 1 of 1, 1 of 2, 2 of 2 and up to 4 units in configuration on short rail sections

Accurate and Robust Sensing Technology:

- Electromagnetic field Amplitude sensing
- Electromagnetic field Phase sensing
- Robust Signal Processing
- Very high resistance to accidental or deliberate false activation

Simple and Fast Installation:

- Clamped on the rail without the need for special tools, drills or welding machines
- Simple setup procedure
- Self calibrating upon start-up
- Directly replaces mechanical, magnetic, or other electronic detectors, using the existing cable/infrastructure
- No need for any construction of specialised foundations and equipment cabinets
- "Ready To Run" in cca. 10 minutes

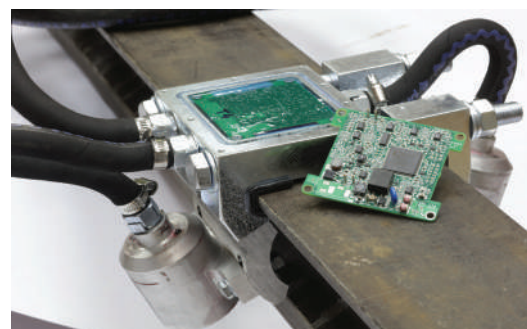


Virtually Maintenance Free:

- No mechanical adjustment needed throughout the lifetime of the device
- Visual inspection and manual system reset recommended every 12 to 24 months depending on the working conditions and rail usage

Added Value:

- Can operate in parallel with any other rail devices
- Can operate in parallel with any other rail devices enabling infrastructure modernisation through regular maintenance (e.g. UTD can operate in parallel with Magnetic or any other wheel detector at the same detection point)
- It can be installed as a single or double wheel detector, and used in axle counting system, safe closing and opening of level crossings, direction detector, speed detector or used in any other railway application requiring accurate wheel detection.





Technical characteristics

Operation frequency	50kHz to 80kHz (CCS TSI Index 77)
Maximum wheel detection speed	350km/h
Detection of any known wheel diameters and types	
Maximum power consumption	1,5 W
Nominal supply voltage	30VDC
Protection	IP 68 (EN 60529)
Operational temperature range	-40 °C to 80 °C (EN 60068-2-1, EN 60068-2-2, EN 60068-2-30)
Up to 250g impact resistance	EN 50125-3
Up to 28g vibration resistance	EN 50125-3
EMC compatible	EN 50121-4, EN61000
Voltage and current protection	EN 50124-2
Voltage and current protection	integrated



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