Axle Counting

Frauscher Advanced Counter FAdC®

Thanks to the software interface, the axle counter FAdC can be optimally integrated into higher-level systems. This provides the highest flexibility in design. Both system integrators and railway operators benefit equally from significant advantages.

Information
- Clear/occupied status (SIL 4)
- Direction (SIL 4)
- Number of axles
- Speed
- Wheel diameter
- Diagnostic data

Applications
- Track vacancy detection
- CBTC fallback
- Level crossing protection
- Switching point protection

Benefits
- Simple and flexible configuration
- Software interface
- Flexible architecture
- Low maintenance
- Simple project management
Connection to a high-performance electronic interlocking is possible either via a vital customer-specific interface or the Frauscher Safe Ethernet FSE protocol.

All processes – from planning, engineering and configuration, to diagnostics, maintenance and adaptation – are supported by innovative software tools. By means of logic application, methods such as Supervisor Track Section or Counting Head Control further increase system availability.

### Technical Data

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<th><strong>FAdC®</strong></th>
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| **Interfaces** | Vital, customer-specific protocol  
Frauscher Safe Ethernet FSE protocol and/or  
vital output via optocoupler or relay interface |
| **Safety level** | SIL 4 (communication according to EN 50159, category 2) |
| **Temperature** | Outdoor equipment: -40 °C to +85 °C  
("outside" climatic class TX of EN 50125-3)  
Indoor equipment: -40 °C to +70 °C  
("in cabinet" climatic class T2 of EN 50125-3) |
| **Humidity** | Outdoor equipment: 100%, IP68  
Indoor equipment: up to 100% (without condensation or ice formation for the entire temperature range) |
| **Electromagnetic compatibility** | EN 50121-4 |
| **Mechanical stress** | 3M2 according to EN 60721-3-3  
suitable for use in compact outdoor cabinets close to the track |
| **Speed** | 0 km/h (static) to 450 km/h |
| **Dimensions** | Format: 19” housing for 100 mm x 160 mm boards  
Width: board rack with 42 or 84 width units  
Height: 3 height units |
| **Power supply** | Voltage: +19 V DC to +72 V DC  
Power: approx. 4.5 W per counting head  
Isolation voltage: 3 100 V |