



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

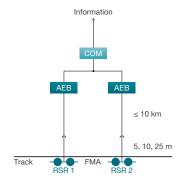
Low maintenance

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.



COM Communication board
AEB Evaluation board
FMA Track section
RSR Wheel sensor

Technical Data

	FAdC®
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