

WHEEL DETECTION

# Wheel Detection System RSR180-AEB



The Wheel Detection System RSR180-AEB can be used for a variety of different applications. A special feature is the flexible software interface, which can be extended by a hardware interface.



## INFORMATION

Wheel detection (SIL 4)  
Direction (SIL 4)  
Number of axles  
Diagnostic data



## APPLICATIONS

Track vacancy detection  
Level crossing protection  
Switching tasks



## BENEFITS

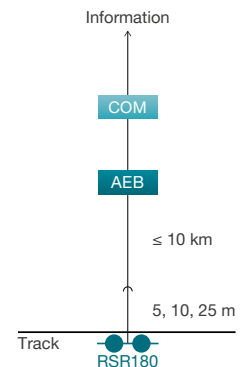
Universally applicable  
No need to adjust  
the wheel sensor  
Software interface,  
optocoupler or relay  
Suitable for grooved rail

## RSR180-AEB

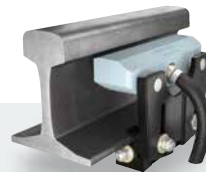
Proven technology distinguishes the universal Wheel Sensor RSR180. It is not necessary to adjust the sensor. The Wheel Detection System RSR180-AEB is resistant to disturbances caused by magnetic rail brakes and can also be used in grooved rails.

The AEB evaluation board in combination with COM communication board has a flexible software interface. This can be adapted to customer-specific systems and can be extended by a hardware interface.

**COM** Communication board  
**AEB** Evaluation board  
**RSR** Wheel sensor



## Technical Data



### RSR180

### AEB

<b>Interfaces</b>		Flexible software interface (COM) Optocoupler or relay via IO board
<b>Safety level</b>		SIL 4
<b>Temperature</b>	-40 °C to +85 °C	-40 °C to +70 °C
<b>Humidity</b>	Up to 100%	Up to 100% (without condensation or ice formation for the entire temperature range)
<b>Electromagnetic compatibility</b>	EN 50121-4	EN 50121-4
<b>Further conditions</b>	UV resistance: yes Protection class: IP65 / IP68 to 8 kPa/60 min. Wheel diameter: 300 mm to 2 100 mm Speed: 0 km/h (static) to 450 km/h	Mechanical stress: 3M2 in accordance with EN 60721-3-3
<b>Dimensions</b>	Height: 60 mm Width: 230 mm Depth: 77 mm	Format: 19" housing for 100 mm x 160 mm boards Width: 4 width units Height: 3 height units

### Optocoupler

### Relay

<b>Signal limits</b>	Max. C-E voltage: 72 V DC Max. switching current: 17 mA	Max. voltage: 110 V DC or 120 V AC Max. switching current: 50 mA (inductive at 110 V DC) depending on the max. switching voltage
<b>Power supply</b>	Voltage: +19 V DC to +72 V DC Power: approx. 3 W per counting head Insulation voltage: 3 100 V	Voltage: +19 V DC to +72 V DC Power: approx. 3 W per counting head Insulation voltage: 3 100 V