



## Wheel Detection

# Wheel Detection System RSR180-IMC

The Wheel Detection System RSR180-IMC can be used for a variety of different applications. Due to customer-specific adaptations, more than 70 configuration variants are already available.



### Information

Wheel detection (SIL 4)  
Direction (SIL 3 or SIL 4)



### Applications

Track vacancy detection  
Level crossing protection  
Switching tasks



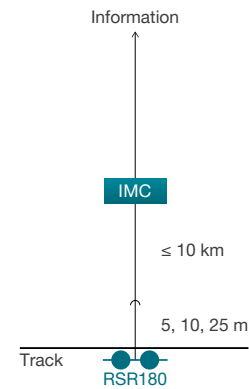
### Benefits

Universally applicable  
No need to adjust the wheel sensor  
Resistant to magnetic track brakes  
Suitable for grooved rail

# RSR180-IMC

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

The IMC evaluation board can selectively output safe system occupation and direction information via optocouplers or relays.



**IMC** Evaluation board  
**RSR** Wheel sensor

## Technical Data



	RSR180	IMC
<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>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
	<b>Optocoupler</b>	<b>Relay</b>
<b>Dimensions</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