

Evaluation board IMC

(with wheel sensor RSR180)

The integrated micro controller board IMC is used to power and evaluate a wheel sensor with two sensor systems either separated by galvanic coupling or combined. Depending on programming the integrated micro controller board IMC will perform the following tasks:

- level crossing protection systems,
- any railway applications where wheels are detected and information such as system pulse, direction pulse and number of axles are to be output,
- axle counting.

Additionally inputs for counting head control can be parameterised.



Dimensions	
Format	100 mm x 160 mm (Euroboard)
Width	4 pitch units
Height	3 height units
Power supply	
Voltage	+19 V bis +72 V DC
Power consumption at +19 V DC	225 mA
Power consumption at +72 V DC	60 mA
Insulation voltage	2500 V AC
Output signals	
Signal types (optocoupler)	Traversing of wheel sensor system 1 or 2 Traversing of wheel sensor in direction 1 or 2 Amount of traversings (axles) Diagnostics data RS232 (TTL)
General limits	
max. C-E-voltage	72 V DC
max. switching current	10 mA DC
Signal duration direction	adjustable from 0 ms to 60 s
Signal prolongation systems	adjustable from 0 ms to 60 s
Alternative signal delay	adjustable from 0 ms to 60 s
Insulation voltage between evaluation and output	2500 V AC
Ambient conditions	
Temperature	-40 °C to +70 °C
Humidity	Up to 100 % but without condensation and ice formation over the entire range of temperature
Mechanical stress	3M2 according to EN 60721-3-3
Electromagnetic compatibility	EN 50121-4
Applications (examples)	Railways in public transport on city lines and long-distance lines and in the industrial sector (Germany and Austria)
Further information	The IMC board was developed in conformity with the CENELEC standards and complies to the requirements set forth in EN 50126, EN 50128, EN 50129 and SIL/SSAS 4