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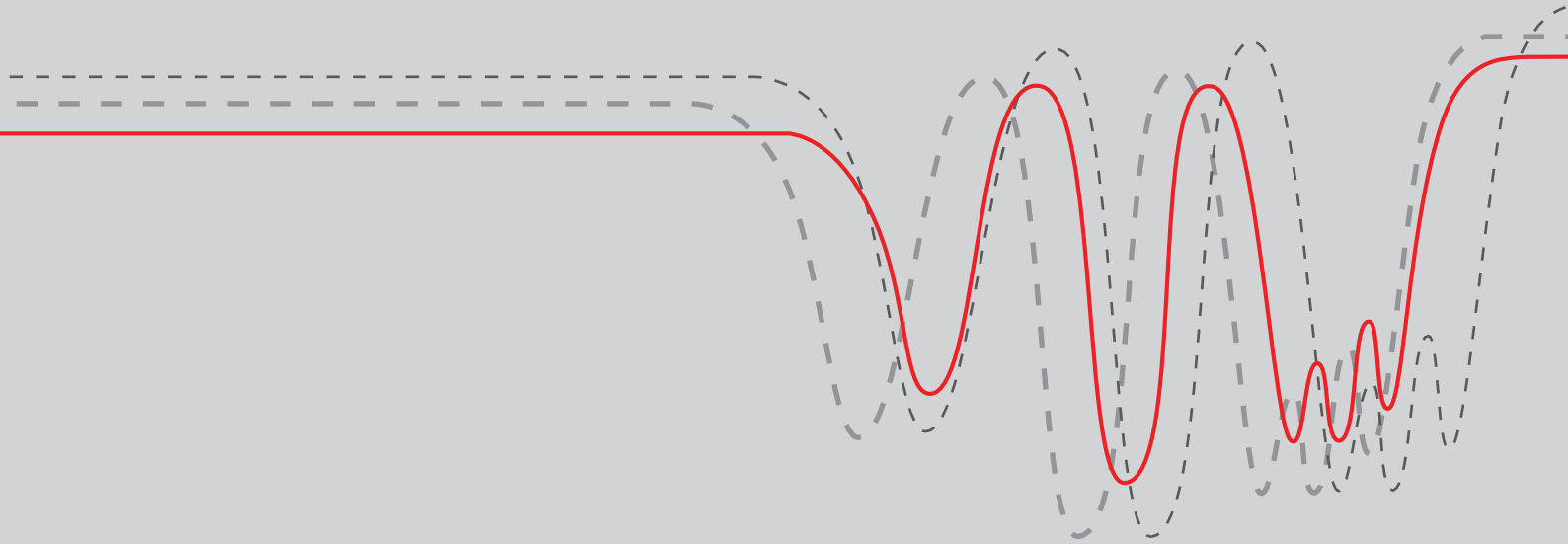
SiWIM® bridge WIM system

Technical data sheet



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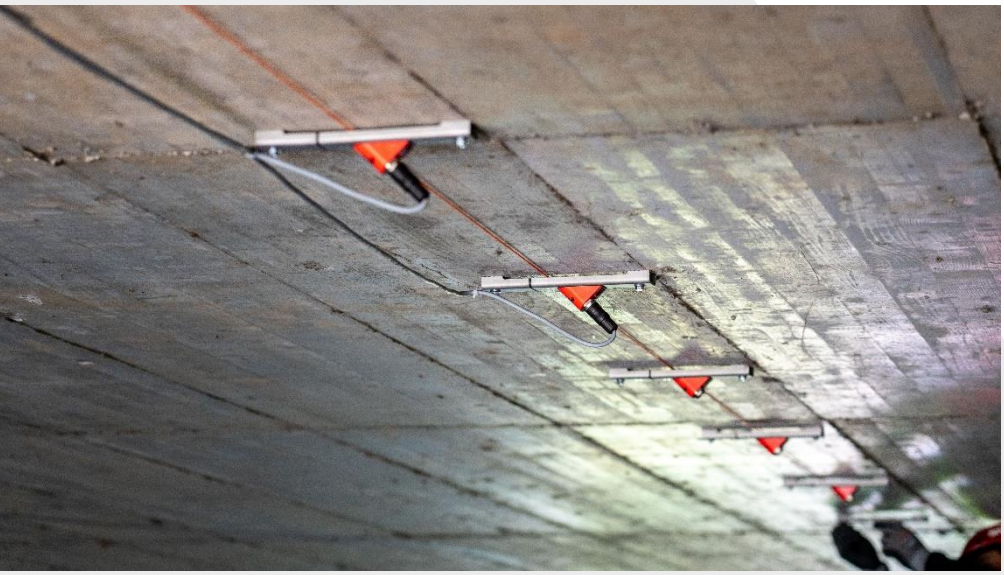

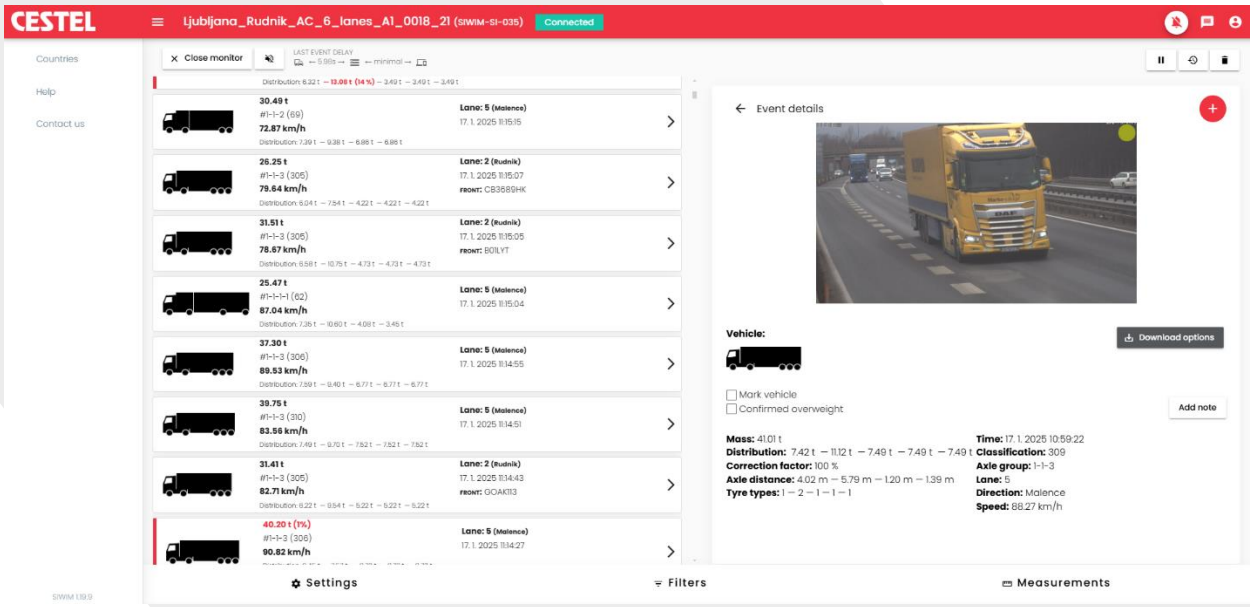

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Basic information

System components	Two cabinets, up to 32 strain transducer sensors, peripheral devices (SHM sensors, cameras, router, traffic counter, etc.)
Cabinets' size	700 mm x 500 mm x 350 mm
Cabinets' weight	System cabinet: 24 kg Electronics cabinets: 19,5 kg
IP rating	IP65
Package containing full system (two cabinets, 32 sensors, 4 cameras, router, cables)	Package size: 800 mm × 1,200 mm × 900 mm Weight: 150 kg
Storage conditions	Humidity: 5% to 95% Temperature: from 12 °C to 30 °C

System cabinets

Package with a complete bridge WIM system

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Power supply

System voltage	12 V DC (11,5 V to 14,5 V)
Power supply options	Electrical grid Methanol fuel cell (for short-term measurements) Fuel cell with solar panel
Power consumption (approximate values)	
Bridge WIM (16 sensors)	32 W
Bridge WIM (24 sensors)	36 W
Bridge WIM (32 sensors)	44 W
ANPR/overview camera	11 W
IR illuminator	59 W (only when taking night photos)
Example: 4-lane motorway, 2 overview cameras, 2 ANPR cameras, 2 IR illuminators for night photos	≈ 150 W

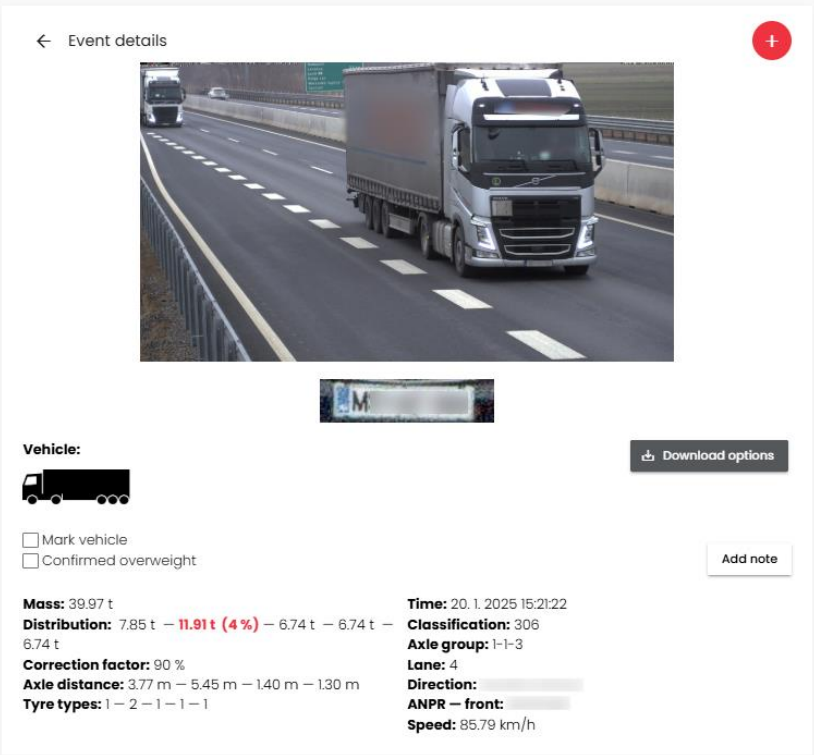
Cameras and IR illuminators

Solar panel at a bridge WIM measuring site

Data

Bandwidth	7 Mbps/7 Mbps
Overview photo	250 KB/vehicle
ANPR photo	5 KB/vehicle
Other (event transfer to the online app, maintenance, etc.)	200 KB/vehicle
Example: 2.000 HGVs per day	910 MB of data each day of the measurement

The system can operate normally without the internet connection. The data is then saved on an internal disk.



Vehicle card from the online app

Router