

RSR4001 - RL4001

Laser scanner + Radar

comark

Laser + radar technologies combined, for counting, classification, speed & length data

RSR4001 and RL4001 are both vehicle detectors based on laser scanner and radar doppler technologies. The radar uses microwave technology and, in particular, the Doppler effect to measure the speed of vehicles with extreme precision. The laser scanner measures the profile of the vehicles allowing a precise classification of the transits.

RSR4001 is mounted in a single enclosure, while RL4001 is composed by the laser scanner and radar doppler in 2 different enclosures for a better orientation of each technology.

RSR4001 and RL4001 are able to distinguish up to 20 classes of vehicles including motorcycles, cars, vans, trucks, lorries, articulated lorries and, buses. The merge of two different technologies, enables the sensor to be very accurate and to measure all data about transit.

The sensor has been built both from the mechanical and firmware point of view to work outdoors even in adverse weather conditions. The firmware implements filters for rain and snow.

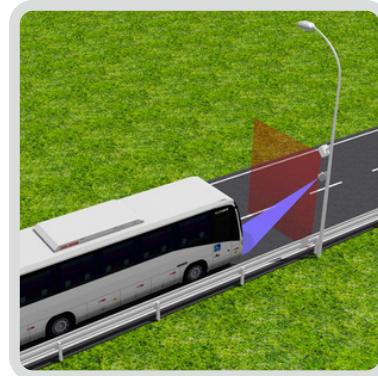
The scanner optics are made of two physically distinct areas for laser transmission and reception, making it particularly immune to the opacity produced by dust, water and pollution.

The microwave technology with the "patch" antenna and an opening angle of $9^{\circ} \times 18^{\circ}$ is very precise in the detection of speed.

The sensor is equipped with a CPU that processes the signals received from the scanner and the radar to obtain all the data related to the transited vehicle. Communication with the sensor takes place via an Ethernet line and the configuration can be performed using simple and intuitive web pages.



RSR4001



RL4001



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Technology 1	Laser scanner
Technology 2	Microwave radar
Emitted light	905 nm - not visible
Laser class	Class 1
Scan angle of laser	96°
Radar Frequency	24.15 Ghz - K Band
Communication line	Ethernet
Power consumption	< 6 W
Power supply	12 ÷ 28 Vdc
Protection	IP65
Temperature range	-20°C ÷ +60°C



RSR4001

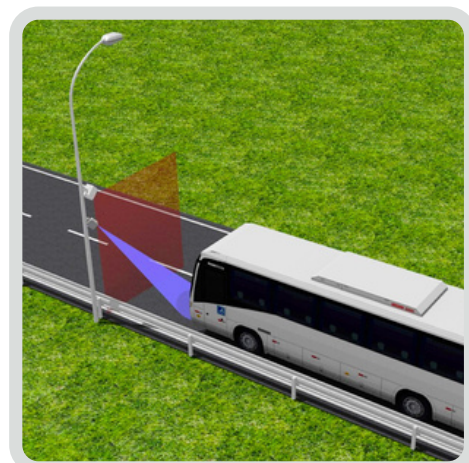
APPLICATIONS

- Toll
- Traffic monitoring (ITS)
- Vehicle profiling
- Maximum height relief
- Vehicle classification
- Trigger for cameras



ACCESSORIES

- Mounting Brackets
- Environmental Protections
- Stainless Steel Casing
- Router
- CO1010 Control Unit



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