

LZR[®] - RS310

3-DIMENSIONAL SAFETY SOLUTION FOR PLATFORM SCREEN DOORS

Commercial sheet



THE CONVENIENT SAFETY SOLUTION

DESCRIPTION

The **LZR[®]-RS310** is a LASER-based 3D safety solution, designed to monitor the area between the platform screen door and the railway vehicle door.

Very compact and competitive LASER safety sensor for this application .

Easy plug and go installation.

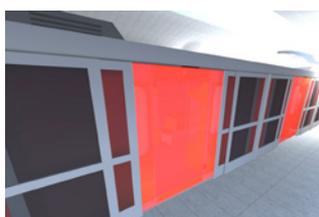


PERFORMANCE

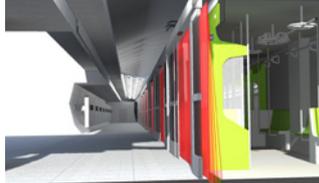
- Technology: time of flight measurement.
- Norm conformity: EN13849-1 PL“C”; EN 954-1 Cat.2; EN 62061 SIL2.
- Detection range typical (@ 2% remission factor): 10 m × 10 m .
- Detectable object size: typically down to 50 mm × 50 mm.
- Convenient alternative to light grids and infrared solutions.
- **LZR[®]-RS310** produces 4 planes to cover a given area in height, width and depth.
- Time of flight technology combined with a dedicated software guarantees an intrinsic immunity to environmental disturbances: sunlight, rain, snow, dust, etc.
- Integrated heating system.



LZR[®]-RS310 ■



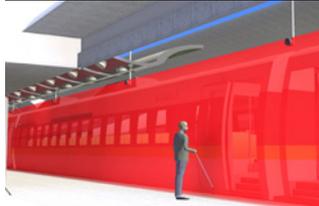
Platform Screen Doors



Platform Screen Doors



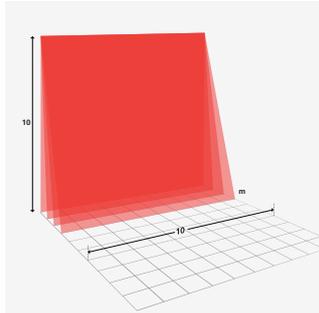
"Virtual" Platform Screen Doors



"Virtual" Platform Screen Doors



Track Safety Monitoring



10 m x 10 m @ 2 % remission factor

APPLICATIONS

- Monitoring of the area between the platform screen door and the railway vehicle door.
- Track safety monitoring.
- Virtual platform screen doors.

EASE OF INSTALLATION

- For easy installation, 3 visible red LASER beams can be activated to align the detection surface and adjust the tilt and rotation angles.
- Teach-in function: self-learning of the environment and background with automatic adjustment of the detection planes.
- Remote control to easily set the adjustable parameters.

TECHNICAL SPECIFICATIONS

Technology	LASER scanner, time of flight measurement
Detection mode	Presence
Max. detection range @ 2% remission factor	10 m x 10 m
Remission factor	> 2 %
Size of target	200 mm @ 10 m
Emission characteristics IR LASER	Wavelength 905 nm; max. output pulse power 75 W
Supply voltage	10-35V DC @ sensor terminal
Power consumption	< 5 W
Peak current at power-on	1.8 A (max. 80 ms @ 35 V)
Response time	Typ. 20 ms; max. 80 ms
Output Max. switching voltage Max. switching current	2 electronic relays (galvanic isolation - polarity free) 35V DC / 24V AC 80 mA (resistive)
Monitoring input Max. contact voltage Voltage threshold	1 optocoupler (galvanic isolated - polarity free) 30 V DC (over-voltage protected) Log. H: > 8 V DC ; Log. L: < 3 V DC
LED signals	1 blue LED: power-on status 1 orange LED: error status 2 bicoloured LEDs: detection / output status (green LED: no detection; red LED: detection)
Dimensions	125 mm (L) x 93 mm (D) x 70 mm (H) (with mounting bracket + 14 mm)
Material	PC/ASA (colour: black)
Mounting angles on bracket	-45°, 0°, 45°
Rotation angles on bracket	-5° to +5° (lockable)
Tilt angles on bracket	-3° to +3°
Protection degree	IP65 (avoid direct exposure to high pressure cleaning)
Temperature range	-30°C to +60°C powered ; -10 °C to +60 °C unpowered
Humidity	0-95 % non-condensing
Vibrations	< 2 G
Pollution on front screens	max. 30 %; homogenous
Expected lifetime	designed for a lifetime of min. 8 years
Norm conformity	2006/95/EC: LVD; 2004/108/EC: EMC; 2002/95/EC: RoHS; EN 60825-1; EN 60950-1; EN 60529; IEC60825; EN 61000-6-2: EMC - Industrial level; EN 61000-6-3: EMC - Commercial Level ; EN 62061:2005 SIL2; EN 954-1 Cat. 2; EN ISO 13849-1 PL "C" - Cat. 2, EN 61496-3 type II

Specifications are subject to change without prior notice.

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