

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.

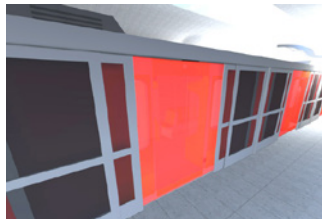


PERFORMANCE

- 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



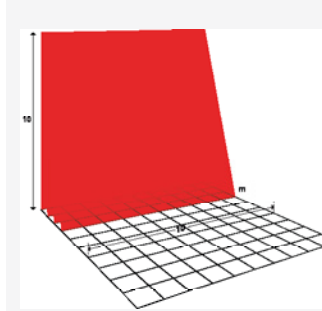
"Virtual" Platform Screen Doors



"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	EMC 2014/30/EU; LVD 2014/35/EU; MD 2006/42/EC; ROHS 2 2011/65/EU; EN 60825-1; EN 60950-1 ; EN 60529 ; IEC60825 ; EN 61000-6-2 ; EN 61000-6-3 ; EN 62061SIL2 ; 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.

DISCLAIMER This document as well as all other enclosed documents (quotation / specification / other) are provided «as is» without warranties of any kind, either expressed or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. / Information is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use. In no event will BEA be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information from this document or the products to which the information refers. / BEA has the right without liability to change descriptions and specifications at any time. / Prices, shipping and availability are subject to change without prior notice.

