LZR®- i100

LASER SCANNER FOR TOLL GATES

Commercial sheet

EN

THE PREMIUM SOLUTION

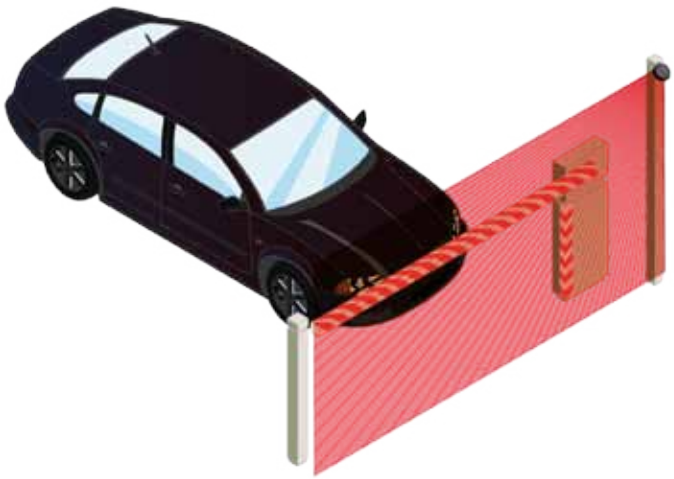
Up to 10 × 10 m

DESCRIPTION

The **LZR®-i100** works according to the principle of time of flight. This high-precision technology ensures optimal detection. The LASER scanner provides dense & precise detection with 4 planes.

FEATURES

- Maximal detection range : 9.9 m × 9.9 m.
- Fast deployment & easy installation thanks to the BEA remote control.
- Programmable object size & dimensions of detection field.
- Convenient alternative to light grids and infrared solutions.
- **LZR®-i100** produces 4 planes to cover a given area in height, width and depth, offering a very high accuracy able to detect small parts of vehicle (long trailer).
- 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®-i100

SENSORIO
sensors and more

Safety for barriers

Vehicles detection

Vehicles tailgating detection

Bus lane detection

APPLICATIONS

- Laser scanner for all types of vehicles detection.
- Ideal solution for tailgating applications (vehicles separations).
- The installation of two lasers next to each others provides unidirectionnal counting.
- Safety sensor for barriers

EASE OF INSTALLATION

- Easy, cost effective and fast installation on site compared to current light curtain solutions.
- Teach-in function, 3 visibles laser beams, self-learning of the environment and background with automatic adjustment of the detection planes.
- Remote control to easily set the adjustable parameters.
- Esthetical solutions improving the toll gate design.

TECHNICAL SPECIFICATIONS

Technology	LASER scanner, time-of-flight measurement
Detection mode	Presence (EN 12453 Type E)
Max. detection range	9.9 m × 9.9 m
Remission factor	> 2 %
Angular resolution	0,3516°
Typ. min. object size	2,1 cm @ 3 m / 3,5 cm @ 5 m / 7 cm @ 10 m (in proportion to object distance)
Testbody	700 mm × 300 mm × 200 mm (testbody A according to EN 12445)
Emission characteristics IR LASER Red visible LASER	 Wavelength 905 nm; max. output pulse power 75 W; Class 1 Wavelength 650 nm; max. output CW power 3 mW; Class 3R
Supply voltage	10-35V DC @ sensor terminal
Power consumption	< 5 W
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)
LED-signals	1 blue LED: power-on status 1 orange LED: error status 2 bi-coloured LED: detection/output status
Dimensions	125 mm (L) × 93 mm (D) × 70 mm (H) (mounting bracket + 14 mm)
Material	PC/ASA
Colour	Black
Rotation angles on bracket	-5° to +5° (lockable)
Tilt angles on bracket	-3° to +3°
Protection degree	IP65
Temperature range	-30 °C to +60 °C if powered
Humidity	0-95 % non-condensing
Vibrations	< 2 G
Norm conformity	2006/95/EC: LVD; 2002/95/EC: RoHS; 2004/108/EC: EMC; 2006/42/EC: MD; EN 12453:2000 chapter 5.1.1.6, chapter 5.5.1 Safety device E; EN 12978:2009; EN ISO 13849-1:2008 Pl "d"/ CAT2; EN 60529:2001; IEC 60825-1:2007; EN 60950-1:2005; EN 61000-6-2:2005; EN 61000-6-3:2006; IEC 61496-1:2009; EN 61496-3:2008 ESPE Type 2; EN 62061:2005 SIL 2; DIN 18650-1:2010 Chapter 5.7.4

Specifications are subject to change without prior notice.

A HALMA COMPANY

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