

LZR[®]-i110 LZR[®]-i100 LZR[®]-h100

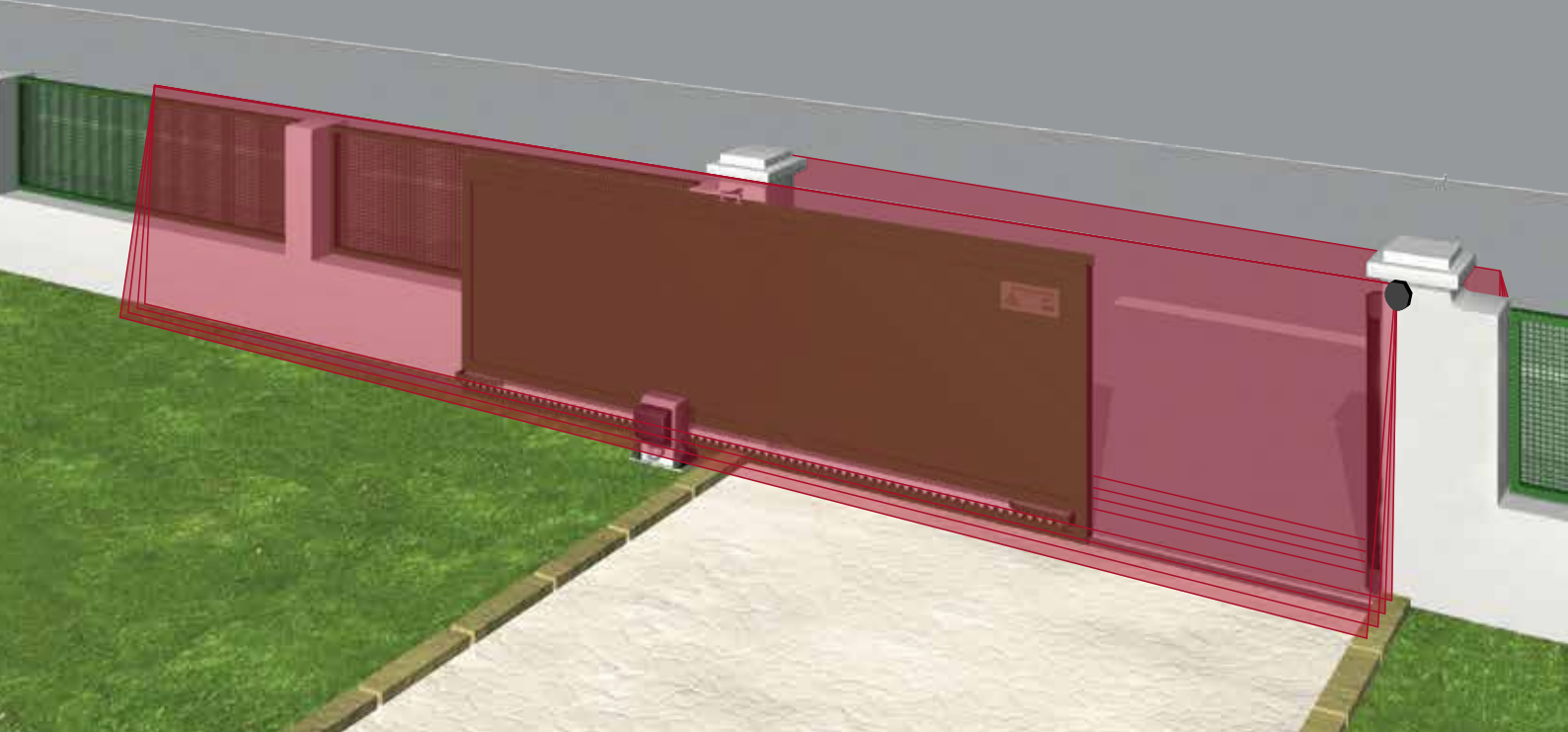
LASER SAFETY SENSORS FOR AUTOMATIC GATES, DOORS AND BARRIERS



THE PREMIUM SAFETY
SOLUTION THAT MEETS
EN SAFETY STANDARDS



CAME 



LZR®-I110 / LZR®-I100

LASER SAFETY SENSORS FOR AUTOMATIC GATES & DOORS

The LZR®-I110 and LZR®-I100 work according to the principle of time of flight. This high-precision technology, together with the dynamic orientation of the LASER beams on four planes, offer optimal safety on the gate or door threshold and its proximity. The sensor is adapted to industrial environments and has a maximum detection range of 9.9m × 9.9m.



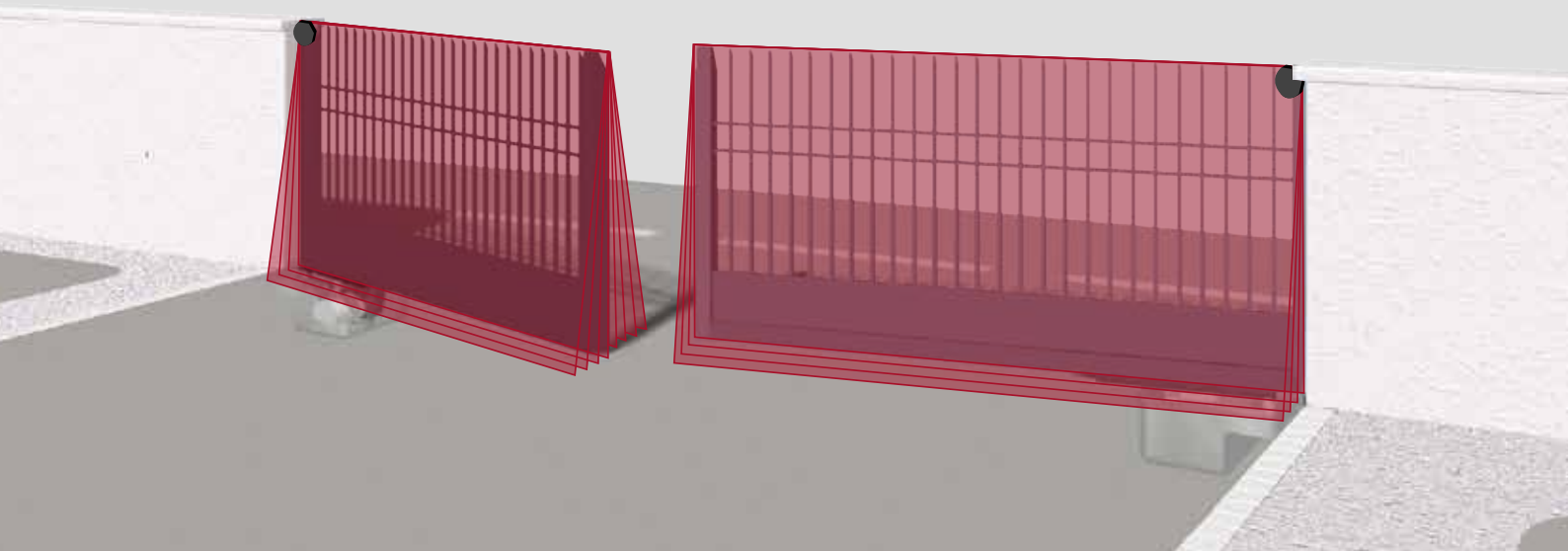
- **Two separate detection areas offering safety at the opening and the closing of the door or gate.**
- **Creates two virtual push buttons to open a door.**
- **IP65, 10m cable, filters door leaf deformation by wind force, filters door vibrations and environmental interferences.**
- **Replaces the existing solutions, such as contact edges, light beams and lightgrids.**

PERFORMANCE

- Easy installation and ideal for a retrofit.
- Maximum detection range of up to 9.9m × 9.9m.
- Detection of small objects.
- High level of safety with a complete three-dimensional detection in front of the gate.
- Variable depth of plane (up to 1m) according to the installation height.
- Certified PL "d"/ CAT 2 according to EN ISO 13849-1 and Type E according to EN 12453.



Contact your local CAME BPT branch for more information on our LZR offers or to place your order today!



LZR® - i110

MAXIMUM DETECTION RANGE: 5M X 5M



2 YEAR WARRANTY

£625.00 each (Net + VAT)

Save **£100** when buying **2 LZR i110's**

£1,150.00 (Net + VAT)



LZR® - i100

MAXIMUM DETECTION RANGE: 10M X 10M



2 YEAR WARRANTY

£750.00 each (Net + VAT)

Save **£100** when buying **2 LZR i100's**

£1,400.00 (Net + VAT)



To achieve Solution E: EN 12453 for swing gates, four radar units would be required.

LASER technology delivers the highest ever level of safety, working according to the principle of time of flight. The sensor sends an intense light impulse in a defined direction and measures the time until the signal returns. By analysing this information over a very short period of time, it is easy to determine the shape, speed and direction of any object.



LZR[®]-H100

AN INNOVATIVE ALTERNATIVE TO INDUCTION LOOPS

The LZR[®]-H100 offers a real alternative to induction loops: time gain during installation, detection of all types of vehicles and greater adaptability. This laser sensor for rising barriers is used to open, secure and/or detect a presence. It offers great flexibility in defining the width and depth of the detection zones.

PERFORMANCE

- Double function: opening, maintenance of presence and/or safety**.
- Installation of the product without any impact on the surrounding ground.
- Detects all types of vehicles: electrical vehicles, vehicles made of composite materials, trucks with trailers, etc.
- It is possible to detect the vehicle's trajectory as it is approaching or moving away.
- Screens pedestrians in the opening area.
- Maximum detection field of 9.9m x 9.9m.
- Independent of the ground surface and the environment.
- It is possible to switch off the LED indicators in order to make the equipment more discreet.
- Unrestricted and easy definition of the detection fields independently of one another (walking teach-in).

LZR[®]-h100

MAXIMUM DETECTION RANGE: 10M X 10M

2 YEAR WARRANTY

£725.00 each (Net + VAT)

Save **£100** when buying **2 LZR H100's**

£1,350.00 (Net + VAT)

Contact your local CAME branch for more information on our LZR offers or to place your order today!

TECHNICAL FEATURES

TYPE	LZR®-I110 / LZR®-I100	LZR®-H100
Technology	LASER scanner, time-of-flight measurement	LASER scanner, time-of-flight measurement (4 laser curtains)
Detection mode	Motion and presence (EN 12453 Type E)	Motion and presence
Max. detection range	LZR®-I110: 5m × 5m LZR®-I100: 9.9m × 9.9m	LZR®-H100: 9.9m × 9.9m
Remission factor	> 2%	> 2%
Angular resolution	0.3516°	0.3516°
Min. detected object size (typ.) (in proportion to object distance)	LZR®-I110: 2.1cm @ 3m; 3.5cm @ 5m LZR®-I100: 2.1cm @ 3m; 3.5cm @ 5m; 7cm @ 10m	-
Testbody	700mm × 300mm × 200mm (testbody A according to EN 12445)	-
Emission characteristics IR LASER: Visible LASER:	Wavelength 905nm; max. output pulse power 75W (Class 1) Wavelength 650nm; max. output CW power 3mW (Class 3R)	Wavelength 905nm; max. output pulse power 75W (Class 1) Wavelength 650nm; max. output CW power 3mW (Class 3R)
Supply voltage	10-35 V DC @ sensor side (to be operated from SELV compatible power supplies only)	10-35 V DC @ sensor side
Power consumption	< 5 W	< 5 W
Peak current at power-on	1.8 A (max. 80ms @ 35 V)	1.8 A (max. 80ms @ 35 V)
Cable length	10m	5m (standard), max. 10m
Response time	Typ. 20ms; max. 80ms	Motion detection: Typ. 200ms (adjustable) Presence detection: Typ. 20ms; max. 80ms
Output Max. switching voltage: Max. switching current: Switching time: Output resistance: Voltage drop on output: Leakage current:	2 electronic relays (galvanic isolated - polarity free) 35 V DC / 24 V AC 80 mA (resistive) t _{ON} =5 ms; t _{OFF} =5 ms Typ. 30 Ω < 0.7 V @ 20 mA < 10 µA	2 electronic relays (galvanic isolated - polarity free) 35 V DC / 24 V AC 80 mA (resistive) t _{ON} =5 ms; t _{OFF} =5 ms Typ. 30 Ω < 0.7 V @ 20 mA < 10 µA
Input Max. contact voltage: Voltage threshold:	2 optocouplers (galvanic isolated - polarity free) 35 V DC (over-voltage protected) Log. H: > 8 V DC; Log. L: < 3 V DC	1 optocoupler (galvanic isolated - polarity free) 30 V DC (over-voltage protected) Log. H: > 8 V DC; Log. L: < 3 V DC
Response time monitoring	< 5 ms	-
LED-signals	1 blue LED: power-on status; 1 orange LED: error status; 2 bi-coloured LEDs: detection/output status (green: no detection; red: detection)	1 blue LED: power-on status; 1 orange LED: error status; 2 bi-coloured LEDs: detection/output status (green: no detection; red: detection)
Dimensions	125mm (L) × 93mm (D) × 70mm (H) (mounting bracket + 14mm)	125mm (L) × 93mm (D) × 70mm (H) (mounting bracket + 14mm)
Material	PC/ASA	PC/ASA
Colour	Black / White	Black
Mounting angles on bracket	-45°, 0°, 45°	-45°, 0°, 45°
Rotation angles on bracket	-5° to +5° (lockable)	-5° to +5° (lockable)
Tilt angles on bracket	-3° to +3°	-3° to +3°
Protection degree	IP65	IP65
Temperature range	-30°C to +60°C if powered	-30°C to +60°C if powered; -10°C to +60°C unpowered
Humidity	0-95% non-condensing	0-95% non-condensing
Vibrations	< 2 G	< 2 G
Pollution on front screens	Max. 30%; homogenous	Max. 30%; homogenous
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	EN 61000-6-2; EN 61000-6-3; EN 60825-1; EN 60950-1; EN 50581

Specifications are subject to change without prior notice - All values measured in specific conditions.



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CAME.COM/UK

*Subject to a correct risk assessment and installation. **Monitored sensor with point of reference.
All orders arrive next working day if the order is placed before 1pm Monday to Friday. Subject to normal stock availability. E&EO.