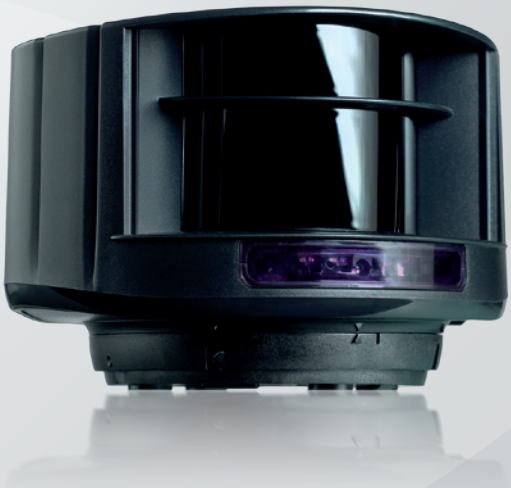
LZR®- W400

LASER SCANNER SYSTEM FOR POWER-OPERATED WINDOWS

Commercial sheet



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MAKE YOUR WINDOWS SAFE

DESCRIPTION

The **LZR®-W400** is a LASER-based 3D presence sensing device aimed at monitoring the dangerous areas of power-operated windows, i.e. window-facades.

One single sensor allows to monitor a complete window, i.e. a complete window façade.

PERFORMANCE

- Technology: time of flight measurement.
- Capacity to detect objects with a remission factor down to 2%.
- Typical detection range: 5 m × 5 m*.
- Capacity to detect objects in cm-range.
- 4 planes to cover a given area in height, width and depth.
- External monitoring available.
- Compact, light and competitive sensor.
- Retrofit opportunity due to easy and cost-effective installation.
- High immunity to environmental interferences due to time of flight with dedicated software.
- IP65 for external use.

* For further options, please contact Sensorio

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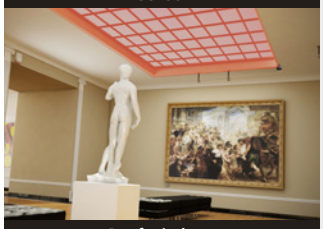
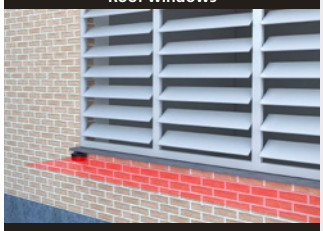
APPLICATIONS

Facade windows

School

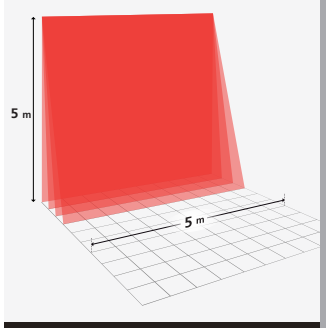


Roof windows



Horizontal protection

DETECTION AREA



5 m × 5 m @ 2 % remission factor

APPLICATIONS

- Presence sensing within dangerous areas of power-operated windows.
- Vertical or horizontal sensing area.

EASE OF INSTALLATION

- For easy installation, 3 visible red LASER beams can be activated to align the detection planes and adjust the tilt and rotation angles.
- Teach-in function: self-learning of both environment and background through an 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	Movement and presence
Max. detection range @ 2% remission factor	5 m × 5 m (For further options, please contact Sensorio)
Remission factor	> 2 %
Angular resolution	0,3516°
Size of target	2,1 cm @ 3 m / 3,5 cm @ 5 m (in proportion to object distance)
Emission characteristics IR LASER	 Wavelength 905 nm; max. output pulse power 75 W ; Class 1
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 isolated - polarity free) 35V DC / 24V AC 80 mA (resistive)
Input Max. contact voltage Voltage threshold	2 optocouplers (galvanic isolated - polarity free) 30V DC (over-voltage protected) Log. H: > 8V DC Log. L: < 3V DC
LED signals	1 blue LED : power-on status 1 orange LED : error status 2 bicoloured LED : detection/output status (green LED: no detection; red LED: detection)
Dimensions	125 mm (D) × 93 mm (W) × 70 mm (H) (mounting bracket + 14 mm)
Material	PC/ASA (colour: black or white)
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 if powered -10°C to +60°C unpowered
Humidity	0-95 % non-condensing
Vibrations	< 2 G
Norm conformity	2006/95/EC: LVD; 2002/95/EC: RoHS; 2004/108/EC: EMC; EN 60529:2001; IEC 60825-1:2007 Laser Class 1 & 3R; EN 61000-6-2:2005 EMC - Industrial level EN 61000-6-3:2006 EMC - Commercial level

Specifications are subject to change without prior notice.

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A HALMA COMPANY

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