



# LZR®-FLATSCAN SW

STAND-ALONE, DOOR MOUNTED  
SAFETY SENSOR FOR SWING DOORS



## LEARN MORE



click or scan

## TECHNOLOGY



## CERTIFICATIONS



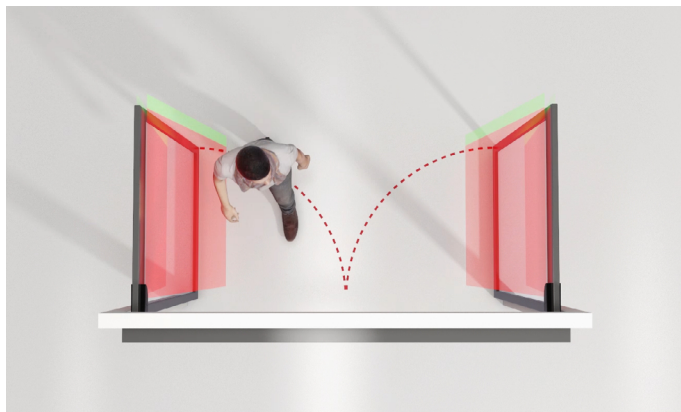
## DESCRIPTION

BEA's **LZR®-FLATSCAN SW** is a LASER-based Time-of-Flight presence sensor for use as a stand-alone safety sensor on automatic pedestrian swing doors. This solution can also be used as a reactivation sensor on the approach side of low energy doors.

This superior technology generates 170 detection points across a single curtain, which allows **LZR®-FLATSCAN SW** to cover the entire face of a single door leaf including the hinge area.

Finger Detection Technology™ utilizes 100 detection points within the hinge area of the door, protecting hands and fingers while the door is in motion.

The **LZR®-FLATSCAN SW** is capable of exceeding the 156.10 section 8.2.2.3 standard for detection area and meets section 8.1.4 for monitoring.



### Leading Edge Safety

Leading edge safety extends the detection area beyond the leading edge of the door for enhanced safety

### Hand Gesture Setup™

Easy door width programming using Hand Gesture Setup™ reduces configuration time

### UL10B/C Listed

Fire rated for up to one hour

### Reduced Components

Hub-less system offers fewer components for easier setup and installation

### Reduced Uncovered Zone

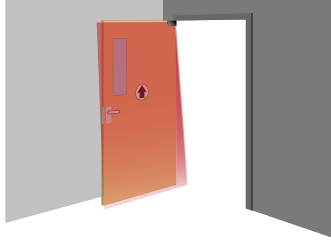
LASER technology provides a reduced uncovered zone of down to 3/4 inch

### Background Independence

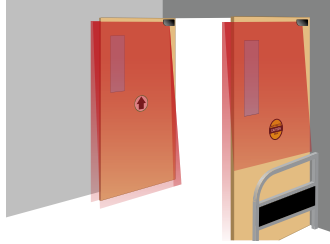
LASER technology ensures independence of all types of flooring (pedi-mats, carpet, reflective flooring, wet surfaces, etc.) and the surrounding environment of the door (guidrails, walls, weather)



## APPLICATIONS



Low Energy



Simultaneous Pair



Dual Egress



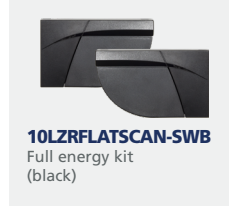
Single Swing

## TECHNICAL SPECIFICATIONS

<b>Technology</b>	LASER scanner, Time-of-Flight measurement
<b>Detection Mode</b>	Presence
<b>Max. Detection Range</b>	13' (diagonal) with reflectivity of 2% (e.g. at (W) x 5' > max. (H) x 12'), see Page 15 of Users Guide
<b>Detection Area</b>	
Door Leaf Safety	90°
Pinch Zone Safety	16°
<b>Angular Resolution</b>	
Door Leaf Safety	1.3°
Pinch Zone Safety	0.2°
<b>Typ. Min. Object Size</b>	
Door Leaf Safety	4" @ 13' (in proportion to object distance, DIP 2 = ON)
Pinch Zone Safety	¾" @ 13' (in proportion to object distance, DIP 2 = ON)
<b>Emission Characteristics</b>	Wavelength 905 nm; max. output pulse power 25 W; Class 1
<b>Supply Voltage</b>	12 – 24 VDC ±15% *
<b>Power Consumption</b>	≤ 2 W
<b>Response Time</b>	
Door Leaf Safety	max. 50 ms
Pinch Zone Safety	max. 90 ms
<b>Test Input</b>	30 VDC (max. switching voltage) low < 1 V high > 10 V (voltage threshold)
<b>Output</b>	2 electronic relays (galvanic isolation - polarity free) 42 VAC / VDC 100 mA
<b>LED Signals</b>	
Red	Swing side detection
Green	Approach side detection
Yellow	Error
<b>Dimensions</b>	5 ½" (W) x 3 ⅓" (H) x 1" (D) (mounting bracket adds ¼")
<b>Material / Color</b>	PC / ASA / black (white), or silver
<b>Tilt Angles</b>	2 – 10° (without mounting bracket)
<b>Degree of Protection</b>	IP54 (EN 60529)
<b>Temperature Range</b>	-22 – 140 °F (if powered)
<b>Humidity</b>	0 – 95% non-condensing
<b>Vibrations</b>	< 2 G
<b>Min. Door Leaf Speed</b>	2° / s
<b>Compliance</b>	ISO 13849-1 PL "d"/ CAT2; IEC 60825-1; IEC 60950-1; IEC 61000-6-2; IEC 61000-6-3; IEC 62061 SIL 2; UL 10B/C Fire-Rated 1 hour (file #R39071) - <i>black material only</i>

\* This sensor is powered by DC voltage only. If only VAC power is available, a 12V transformer paired with a rectifier must be used. Do not use a 24V transformer and rectifier as this will cause damage to the product.

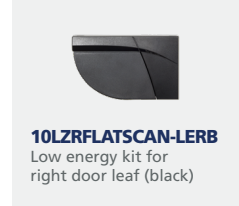
## PRODUCT SERIES



**10LZRFLATSCAN-SWB**  
Full energy kit (black)



**10LZRFLATSCAN-LELB**  
Low energy kit for left door leaf (black)



**10LZRFLATSCAN-LERB**  
Low energy kit for right door leaf (black)



**NOTE: Kits and replacement sensors are available in black, white, or silver.**

<b>10LZRFLATSCAN-LB</b>	Left sensor (black)
<b>10LZRFLATSCAN-LELB</b>	Low energy safety system for left door mount (black)
<b>10LZRFLATSCAN-LELS</b>	Low energy safety system for left door mount (silver)
<b>10LZRFLATSCAN-LELW</b>	Low energy safety system for left door mount (white)
<b>10LZRFLATSCAN-LERB</b>	Low energy safety system for right door mount (black)
<b>10LZRFLATSCAN-LERS</b>	Low energy safety system for right door mount (silver)
<b>10LZRFLATSCAN-LERW</b>	Low energy safety system for right door mount (white)
<b>10LZRFLATSCAN-LS</b>	Left sensor (silver)
<b>10LZRFLATSCAN-LW</b>	Left sensor (white)
<b>10LZRFLATSCAN-RB</b>	Right sensor (black)
<b>10LZRFLATSCAN-RS</b>	Right sensor (silver)
<b>10LZRFLATSCAN-RW</b>	Right sensor (white)
<b>10LZRFLATSCAN-SWB</b>	Full energy swing door safety system (black)
<b>10LZRFLATSCAN-SWBU</b>	Full energy swing door safety system + power supply (black)
<b>10LZRFLATSCAN-SWS</b>	Full energy swing door safety system (silver)
<b>10LZRFLATSCAN-SWW</b>	Full energy swing door safety system (white)
<b>10LZRFLATSCANANGDA</b>	Glass door accessory
<b>20.5433</b>	Control harness
<b>35.0213</b>	Replacement cover (black, left)
<b>35.0214</b>	Replacement cover (black, right)
<b>35.0220</b>	Replacement cover (white, left)
<b>35.0221</b>	Replacement cover (white, right)
<b>35.0242</b>	Replacement cover (silver, left)
<b>35.0243</b>	Replacement cover (silver, right)
<b>35.1329</b>	Primary / secondary harness
<b>70.5745</b>	Sentrex retrofit accessory
<b>70.5751</b>	Spacer (white)
<b>70.5752</b>	Spacer (silver)
<b>70.5753</b>	Spacer (black)

**DISCLAIMER** 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.

WWW.BEASENSORS.COM



BEA AMERICAS / RIDC Park West / 100 Enterprise Drive / Pittsburgh, PA  
T 1-800-523-2462 / F 1-888-523-2462 / E info-us@BEAsensors.com

A Halma company