



LZR®-FLATSCAN SW

STAND-ALONE, DOOR MOUNTED
SAFETY SENSOR FOR SWING DOORS



VIDEO



[Watch the product video](#)

TECHNOLOGY



CERTIFICATIONS



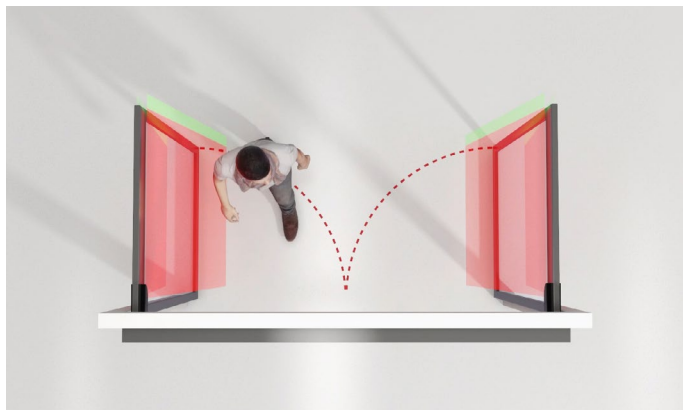
DESCRIPTION

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.



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 (guiderails, walls, weather)

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

Reduced Components

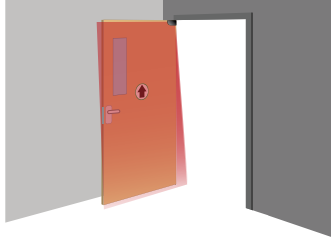
Hub-less system offers fewer components for easier setup and installation

Reduced Uncovered Zone

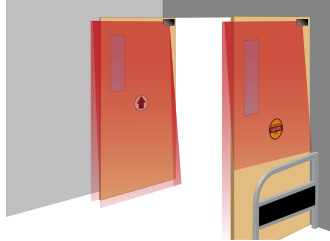
LASER technology provides a reduced uncovered zone of down to 3/4 inch

*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.

APPLICATIONS



Low Energy



Double Swing



Dual Egress



Single Swing

TECHNICAL SPECIFICATIONS

Technology	LASER scanner, Time-of-Flight measurement
Detection Mode	Presence
Max. Detection Range	13' (diagonal) with reflectivity of 2% (e.g. at (W) × 5' > max. (H) × 12'), see Page 15 of Users Guide
Detection Area	
Door Leaf Safety	90°
Pinch Zone Safety	16°
Angular Resolution	
Door Leaf Safety	1.3°
Pinch Zone Safety	0.2°
Typ. Min. Object Size	
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)
Emission Characteristics	
IR LASER	Wavelength 905 nm; max. output pulse power 25 W; Class 1
Supply Voltage	12 – 24 VDC ±15%
Power Consumption	≤ 2 W
Response Time	
Door Leaf Safety	max. 50 ms
Pinch Zone Safety	max. 90 ms
Test Input	30 VDC (max. switching voltage) low < 1 V high > 10 V (voltage threshold)
Output	2 electronic relays (galvanic isolation - polarity free)
Max. Switching Voltage	42 VAC / VDC
Max. Switching Current	100 mA
LED Signals	
Red	Swing side detection
Green	Approach side detection
Yellow	Error
Dimensions	5 ½" (W) × 3 ⅓" (H) × 1" (D) (mounting bracket adds ¼")
Material / Color	PC / ASA / Black, White or Silver
Tilt Angles	2 – 10° (without mounting bracket)
Degree of Protection	IP54 (EN 60529)
Temperature Range	-22 – 140 °F (if powered)
Humidity	0 – 95% non-condensing
Vibrations	< 2 G
Min. Door Leaf Speed	2° / s
Norm Conformity	ISO 13849-1 PI "d"/ CAT2; IEC 60825-1; IEC 60950-1; IEC 61000-6-2; IEC 61000-6-3; IEC 62061 SIL 2

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.

10LZRFLATSCAN-LB	Left sensor, Black
10LZRFLATSCAN-LELB	Low energy safety system for left door mount, Black
10LZRFLATSCAN-LELS	Low energy safety system for left door mount, Silver
10LZRFLATSCAN-LELW	Low energy safety system for left door mount, White
10LZRFLATSCAN-LERB	Low energy safety system for right door mount, Black
10LZRFLATSCAN-LERS	Low energy safety system for right door mount, Silver
10LZRFLATSCAN-LERW	Low energy safety system for right door mount, White
10LZRFLATSCAN-LS	Left sensor, Silver
10LZRFLATSCAN-LW	Left sensor, White
10LZRFLATSCAN-RB	Right sensor, Black
10LZRFLATSCAN-RS	Right sensor, Silver
10LZRFLATSCAN-RW	Right sensor, White
10LZRFLATSCAN-SWB	Full energy swing door safety system, Black
10LZRFLATSCAN-SWS	Full energy swing door safety system, Silver
10LZRFLATSCAN-SWW	Full energy swing door safety system, White
10LZRFLATSCANGDA	Glass door accessory
20.5416	Control harness
35.0213	Replacement cover, Black, Left
35.0214	Replacement cover, Black, Right
35.0220	Replacement cover, White, Left
35.0221	Replacement cover, White, Right
35.0242	Replacement cover, Silver, Left
35.0243	Replacement cover, Silver, Right
35.1329	Primary / secondary harness
70.5745	Sentrex retrofit accessory
70.5751	Spacer, White
70.5752	Spacer, Silver
70.5753	Spacer, Black

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