



# LZR®-FLATSCAN 3D SW

FOUR CURTAIN STAND-ALONE,  
DOOR-MOUNTED SAFETY SYSTEM WITH  
VIRTUAL PUSH BUTTON FUNCTIONALITY



## LEARN MORE



▲ click or scan

## TECHNOLOGY



## CERTIFICATIONS



## DESCRIPTION

BEA's **LZR-FLATSCAN 3D SW** is a four-curtain, door-mounted, safety system for automatic swing doors. Using LASER Time-of-Flight technology, its three-dimensional detection field guarantees full-safety coverage of the opening area. Ideal for environments in healthcare, education, and commercial settings.

The deep detection pattern reduces sudden door movements, preventing contact as a person walks through the doorway, benefitting individuals with limited mobility, and reducing the wear and tear of the door. Additional safety features include Leading Edge Safety for detection beyond the door leaf and

coverage of the hinge area with Finger Detection Technology™.

Technicians can reduce installation and setup time with Hand Gesture Setup and the built-in knowing act device. Instead of coordinating and wiring activation devices, utilize Virtual Push Buttons for a non-contact form of door activation. Convenient in settings that rely on hygienic solutions, like surgical environments.

The **LZR-FLATSCAN 3D 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.



## Easy Setup

Hub-less system offers fewer components for a more straightforward setup and installation. While Hand Gesture Setup™ reduces configuration time of the detection field width.

## Advanced Safety

The four detection curtains ensure a full-safety coverage of the leaf, hinge area and leading edge of the door, exceeding all industry standards.

## UL10B/C Listed

Fire rated for up to one hour

## Built-in Knowing Act Device

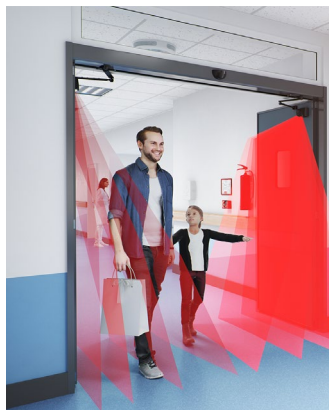
Two Virtual Push Buttons per sensor provide a non-contact form of door activation without wiring or installing in-wall switches.

## Adaptive Sensing

High-resolution detection curtains create a reliable solution with the ability to self-adapt as the door opens, preventing false detections from guide rails and tight corridors.

## Background Independence

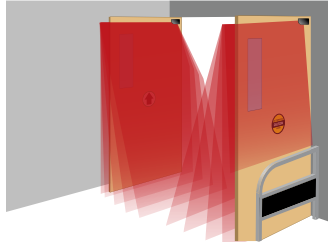
LASER technology ensures independence of all types of flooring (pedi-mats, carpet, reflective flooring, wet surfaces, etc.) and the surrounding environment (weather and lighting).



## APPLICATIONS



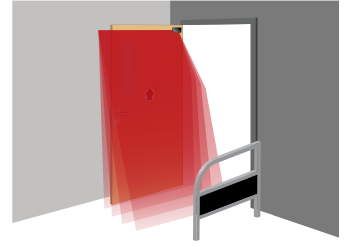
Low Energy



Double Swing



Dual Egress



Single Swing

## TECHNICAL SPECIFICATIONS

### TECHNOLOGY / PERFORMANCE

<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 5' width, max. H = 12'
<b>Recommended mounting height</b>	75 – 98"
<b>Opening angle</b>	Door leaf safety: 80° Pinch zone safety: 20°
<b>Angular resolution</b>	Curtain 1: 0.2° Curtain 2: 1° Curtain 3: 1.7° Curtain 4: 2.5°
<b>Tilt angles</b>	0 – 5°
<b>Typ. min. object size</b>	¾" @ 13' in curtain C1
<b>Min. door leaf speed</b>	2"/sec
<b>Emission characteristics (IEC 60825-1)</b>	IR LASER: wavelength 905 nm; output power < 0.1mW; Class 1

### ELECTRICAL

<b>Supply voltage *</b>	12 – 24 VDC ±15% (to be operated from SELV-compatible power supplies only)
<b>Power consumption</b>	< 2 W
<b>Response time</b>	Typ. <120 ms (max. 220 ms)
<b>Output</b>	3 electronic relays (galvanic isolation - polarity free)
max. switching voltage	42 VAC/VDC
max. switching current	100 mA

### PHYSICAL

<b>Dimensions</b>	5 ¾" (L) x 3 ½" (H) x 2 ½" (D) mounting base: D + ¾" spacer: D + 1 ½"
<b>Material - Color</b>	PC/ASA - black
<b>Protection degree</b>	IP44 (IEC 60529)
<b>LED signals</b>	1 RGB LED: detection/output status
<b>Temperature range</b>	-13 – 140 °F
<b>Humidity</b>	0 – 95% non-condensing
<b>Vibrations</b>	< 2 G

### COMPLIANCE

<b>Compliance</b>	ISO 13849-1 Pl "d"/ CAT2; IEC 60825-1; IEC 62061 SIL 2 UL10 – file # R39071
-------------------	--

\* 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

<p><b>10LZRFLATSCAN3D-SWBK</b> Left and right sensor kit</p>	<p><b>10LZRFLATSCAN3D-LBK</b> Single sensor kit, left</p>	<p><b>10LZRFLATSCAN3D-RBK</b> Single sensor kit, right</p>
<p><b>10LZRFLATSCAN3D-SWBKU</b> Left and right sensor kit w/ power supply</p>	<p><b>10LZRFLATSCAN3D-LESWBK</b> Sensor kit for low-energy doors</p>	<p><b>10LZRFLATSCAN3D-LELBK</b> Sensor kit for low-energy doors, left</p>
<p><b>10LZRFLATSCAN3D-LERBKIT</b> Sensor kit for low-energy doors, right</p>		

<b>10LZRFLATSCAN3D-LB</b>	Replacement Sensor, left
<b>10LZRFLATSCAN3D-RB</b>	Replacement Sensor, right
<b>10LZRFLATSCAN3D-GA</b>	Glass Door Accessory
<b>35.0287</b>	LZR-FLATSCAN 3D SW Replacement Cover, left
<b>35.0288</b>	LZR-FLATSCAN 3D SW Replacement Cover, right
<b>35.0236</b>	LZR-FLATSCAN 3D SW Replacement Base, left
<b>35.0237</b>	LZR-FLATSCAN 3D SW Replacement Base, right
<b>70.5753</b>	Spacer
<b>35.1329</b>	Primary / Secondary Harness
<b>20.5433</b>	LZR-FLATSCAN 3D SW Control Harness
<b>70.5745</b>	Sentrex Retrofit Accessory

## RELATED PRODUCTS

<p><b>MS31 SERIES</b> Microwave, touchless actuators with adjustable range and relay hold time</p>	<p><b>MS41 SERIES</b> Stainless steel, touchless actuators with adjustable range and relay hold time</p>	<p><b>MS51 SERIES</b> Battery-powered, touchless actuators</p>
--	--	--

**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.