



# LZR<sup>®</sup>-H100

LASER SCANNER FOR GATE AND BARRIER APPLICATIONS



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## TECHNOLOGY



## CERTIFICATIONS



### DESCRIPTION

BEA's **LZR-H100** is a LASER-based Time-of-Flight sensor designed for gate and barrier applications.

This solution provides four LASER-based curtains, offering a three-dimensional detection zone for accurate object detection. Its detection curtains are highly configurable and can be set up for activation and presence detection in vehicle-sensing applications.

The **LZR-H100** is an effective alternative to induction loops and is housed in an IP65-rated enclosure, further ensuring its performance in outdoor environments.



### Dual-Relay Activation

Two relays allow for activation via motion or presence

### Effective Alternative To Loop Detectors

Ideal for applications where cutting ground for loops is prohibited, impossible, or expensive

### Reliable And Constant Detection

Time-of-Flight, presence-based, opto-electronic sensor ensures accurate and immediate detection

### Trajectory Detection

Ability to detect vehicle trajectory during approach and departure

### Pedestrian-Traffic Rejection

Ability to detect or ignore pedestrian traffic

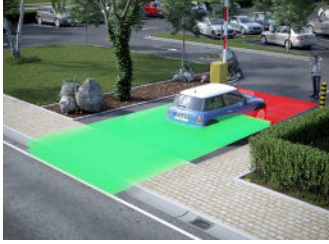
### Large Detection Field

Maximum detection field of 32 ft x 32 ft (9 ¾ m x 9 ¾ m)

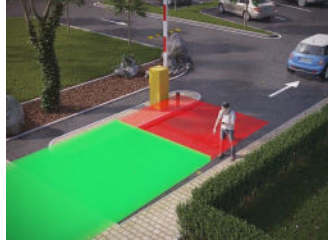
### Ease Of Installation

Teach-in setup via walk path or remote control configuration

## APPLICATIONS



Gate & Barrier Presence Detection



Pedestrian Presence Detection



Gate & Barrier Activation

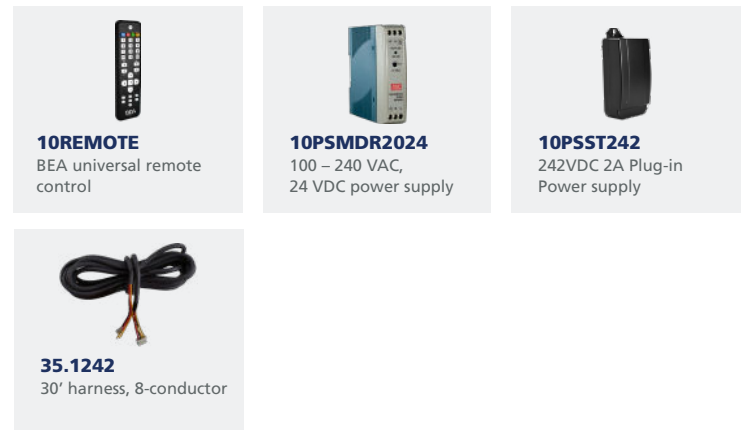
## TECHNICAL SPECIFICATIONS

<b>Technology</b>	LASER scanner, Time-of-Flight measurement
<b>Detection Mode</b>	Motion and presence
<b>Max. Detection Range</b>	32' x 32' (9 ¾ m)
<b>Remission Factor</b>	> 2%
<b>Angular Resolution</b>	0.3516°
<b>Emission Characteristics</b>	
IR LASER	Wavelength 905 nm; max. output pulse power 0.10 mW (CLASS 1)
Red Visible LASER	Wavelength 635 nm; max. output CW power 3 mW (CLASS 2R)
<b>Supply Voltage</b>	10 – 35 VDC @ sensor terminal
<b>Peak Current at Power-On</b>	1.8 A (max. 80 ms @ 35 V)
<b>Power Consumption</b>	< 5 W
<b>Response Time</b>	
Motion Detection	typ. 200 ms (adjustable)
Presence Detection	typ. 20 ms (max. 80 ms)
<b>Output</b>	2 electronic relays (galvanic isolated – polarity free)
Max. Switching Voltage	35 VDC / 24 VAC
Max. Switching Current	80 mA (resistive)
Switching Time	t <sub>ON</sub> = 5 ms; t <sub>OFF</sub> = 5 ms
Output Resistance	typ 30 Ω
Voltage Drop on Output	< 0.7 V @ 20 mA
<b>LED Signal</b>	1 blue LED: Power-on 1 orange LED: Error status 2 bi-colored LEDs: Detection / Output Status (green = no detection, red = detection)
<b>Dimensions</b>	3 5/8" (W) x 2 3/4" (H) x 5" (D) sensor base: + 1/2"
<b>Cable Length</b>	33'
<b>Material</b>	PC / ASA
<b>Color</b>	Black
<b>Rotation Angle on Bracket</b>	±5° (lockable)
<b>Tilt Angle on Bracket</b>	±3°
<b>Degree of Protection</b>	NEMA 4 / IP65
<b>Temperature Range</b>	
Powered	-22 – 140 °F (-30 – 60 °C)
Unpowered	14 – 140 °F (-10 – 60 °C)
<b>Humidity</b>	0 – 95% non-condensing
<b>Vibrations</b>	< 2 G
<b>Pollution on Front Screens</b>	Max. 30%; homogenous
<b>Norm Conformity</b>	2006 / 95 / EC: LVD; 2004 / 108 / EC: EMC; IEC 60825-1:2007; IEC 61000-6-2:2005; 2002 / 95 / EC: RoHS; IEC 60529:2001; IEC 60950-1:2005; IEC 61000-6-3:2006

## PRODUCT SERIES



## ACCESSORIES



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