LZR®-H100

LASER SCANNER FOR GATE & BARRIER APPLICATIONS

VIDEO

Watch the product video

TECHNOLOGY

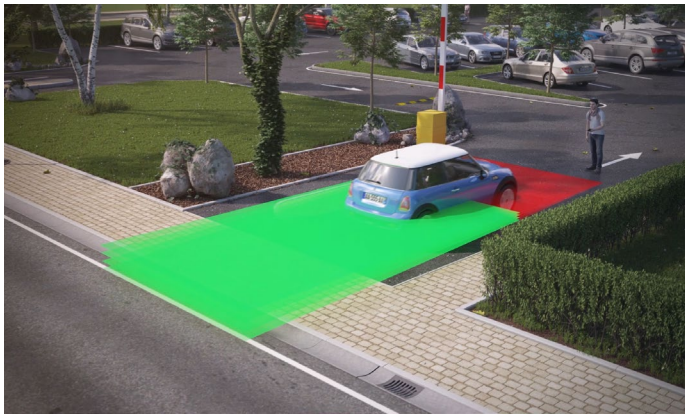
CERTIFICATIONS

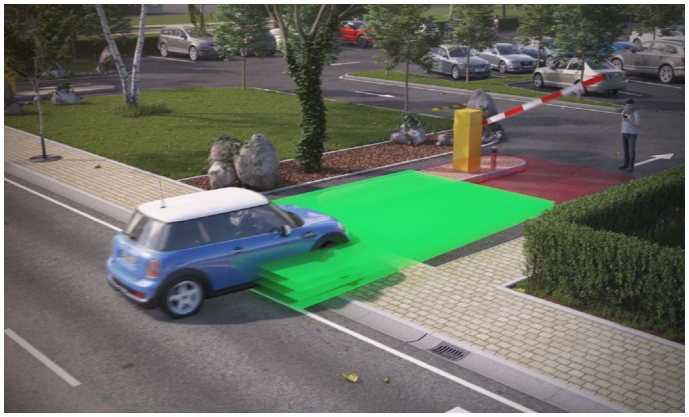
DESCRIPTION

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

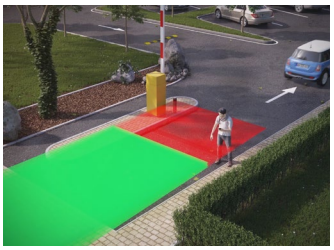
Maximum detection field of 9 ¾ m × 9 ¾ m (32 × 32 ft)

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

Technology	LASER scanner, Time-of-Flight measurement
Detection Mode	Motion & Presence
Max. Detection Range	32′ × 32′ (9 ¾ m)
Remission Factor	> 2%
Angular Resolution	0.3516°
Emission Characteristics	
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)
Supply Voltage	10 – 35 VDC @ Sensor Terminal
Peak Current at Power-On	1.8 A (Max. 80 ms @ 35 V)
Power Consumption	< 5 W
Response Time	
Motion Detection	typ. 200 ms (adjustable)
Presence Detection	typ. 20 ms (max. 80 ms)
Output	2 electronic relays (galvanic isolated – polarity free)
Max. Switching Voltage	35 VDC / 24 VAC
Max. Switching Current	80 mA (resistive)
Switching Time	t_{ON} = 5 ms; t_{OFF} = 5 ms
Output Resistance	typ 30 Ω
Voltage Drop on Output	< 0.7 V @ 20 mA
LED-Signal	1 Blue LED: Power–on 1 Orange LED: Error status 2 Bi-colored LEDS: Detection / Output Status (Green = no detection, Red = detection)
Dimensions	3 ⅝″ (W) × 2 ¾″ (H) × 5″ (D) mounting bracket: + ½″
Cable Length	33′
Material	PC / ASA
Color	Black
Rotation Angle on Bracket	±5° (lockable)
Tilt Angle on Bracket	±3°
Degree of Protection	NEMA 4 / IP65
Temperature Range	-22 – 140 °F powered (-30 – 60 °C powered); 14 – 140 °F unpowered (-10 – 60 °C unpowered);
Humidity	0 – 95% non-condensing
Vibrations	< 2 G
Pollution on Front Screens	Max. 30%; Homogenous
Norm Conformity	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

10LZRH100
LZR-H100 sensor

10BR3X
BR3-X logic module

10LBA
LZR mounting bracket accessory

10REMOTE
BEA universal remote control

10LIGHT-XX
LED signal modular light series

10LZBRGATE1200
L & Z Mounting bracket

10GL1200R
1200 lb / Front mount for sliding gate

10GL1200SR
1200 lb / Side mount for swinging door / gate

10PSMDR2024
100 – 240 VAC,
24 VDC power supply

10PSST242
242VDC 2A Plug-in Power supply

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