

## **LZR®-S600**

# LASER SCANNER FOR BUILDING AUTOMATION AND SECURITY

#### **DESCRIPTION**

BEA's **LZR®-5600** is a LASER-based Time-of-Flight sensor. This high precision technology ensures accurate detection. The product configuration provides four LASER-based curtains offering a three dimensional presence detection zone.

BEA's LZR®-S600 represents the largest detection field offered in our LASER Time-of-Flight product portfolio. This sensor is ideal for perimeter security protection, industrial automation

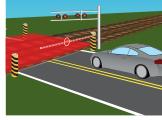
and large industrial door / gate applications that require a wide field of detection.

The **LZR®-S600** is housed in an IP65 rated enclosure and can be installed in outdoor, industrial and other harsh environments. Three visible LED spots provide accurate reference points when adjusting the tilt angle. Parameter adjustments can be made with a BEA universal remote control.

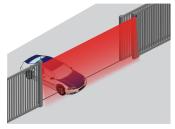
### **APPLICATIONS**



Security



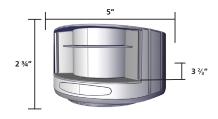
Warning Indication



Large Industrial Gate



Mass Transit





#### **TECHNICAL SPECIFICATIONS**

TECHNICAL SPECIFICATIONS	
Technology:	LASER scanner, Time-of-Flight measurement
Detection mode:	motion and presence
Detection range:	Default: 33' x 33' @ 2% remission factor (max. 82 ft x 82 ft)
Angular resolution:	0.3516°
Min. detected object size (typ.):	0.8 in @ 10 ft 1.4 in @ 16 ft 2.8 in @ 33 ft 6.9 in @ 82 ft
Emission characteristics	
IR laser:	wavelength 905 nm; output power 0.10mW (CLASS 1)
Red visible laser:	wavelength 635 nm; output power 0.95mW (CLASS 2)
Supply voltage:	10 – 35 VDC @ sensor side
Power consumption:	< 5 W
Peak current @ power-on:	1.8 A (max. 80 ms @ 35 V)
Cable length:	33'
Response time:	typ. 20 ms (max. 80 ms) + output activation delay
Output:  Max. switching voltage: Max. switching current: Switching time: Output resistance: Voltage drop on output: Leakage current:	2 electronic relays (galvanic-isolated – polarity-free) 35 VDC / 24 VAC 80 mA (resistive) $t_{\text{ON}} = 5 \text{ ms; } t_{\text{OF}} = 5 \text{ ms}$ typ 30 $\Omega$ < 0.7 V @ 20 mA < 10 $\mu$ A
Input: Max. contact voltage:	2 optocouplers (galvanic-isolated – polarity-free) 30 VDC (over-voltage protected)
Voltage threshold:	Log. Active High: > 8 VDC Log. Active Low: < 3 VDC
Response time monitoring input:	< 5 ms
LED signal:	1 blue LED: power-on status 1 orange LED: error status 2 bi-colored LEDs: detection/output status (green = no detection, red = detection)
Dimensions:	$3\frac{5}{8}$ " × $2\frac{3}{4}$ " × $5$ " (W × H × D) mounting bracket: $+\frac{1}{2}$ "
Material:	PC/ASA
Color:	Black
Mounting angles on bracket:	-45°, 0°, 45°
Rotation angles on bracket:	-5 – 5° (lockable)
Tilt angles on bracket:	-3 – 3°
Protection degree:	NEMA 4 / IP65
Temperature range:	powered: -22 – 140 °F (-30 – 60 °C) unpowered: 14 – 140 °F (-10 – 60 °C)
Humidity:	0 – 95% non-condensing
Vibrations:	< 2G
Pollution on front screen:	max. 30%, homogenous
Norm conformity:	2006/95/EC: LVD; 2002/95/EC: RoHS; 2004/108/EC: EMC; IEC 60529:2001; IEC 60825-1:2007; IEC 60950-

**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



1:2005; IEC 61000-6-2:2005; IEC 61000-6-3:2006