LZR®-WIDESCAN
MOTION, PRESENCE & SAFETY SENSOR FOR INDUSTRIAL DOORS

PRIMARY APPLICATIONS

DESCRIPTION
BEA’s LZR-WIDESCAN is a LASER-based, time-of-flight sensor used for motion, safety and presence detection in a variety of industrial door applications. This all-in-one solution offers the benefits of activation and safety, while reducing installation time.

This NEMA 4 rated sensor creates a volumetric detection area by generating seven angled LASER curtains. It has the ability to detect objects based on direction, speed, object size and height.

The LZR-WIDESCAN detection field operates independent of ground conditions, allowing for superior functionality in harsh environments.

FEATURES & BENEFITS
• Precise activation zones allows for installers to walk the desired detection area
• Promotes energy savings by reducing false detections / unnecessary door cycling, helping to regulate HVAC
• Virtual pull-cord function can differentiate between pedestrian and vehicle traffic and can provide pulse-on-stop activation
• Ideal for replacing costly / labor-intensive induction loop and pull-cord solutions
• Two visible LASER alignment spots ensure accurate pattern placement

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# TECHNICAL SPECIFICATIONS

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<th>Technology</th>
<th>LASER scanner, Time-of-Flight measurement (7 LASER curtains)</th>
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<td>Detection Mode</td>
<td>Motion and Presence</td>
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| Max. Detection Field | Width: 1.2 x mounting height  
                          Depth: 1.2 x mounting height  
                          (adjustable depending on user settings) |
| Thickness of First Curtain | $\frac{3}{4}$ inch per 3 feet of mounting height |
| Typ. Mounting Height | 6’6” – 19’6” |
| Typ. Minimum Object Size | 6” @ 19’6” (in proportion to object distance) |
| Test Body Dimensions | $27 \frac{1}{2}\times 11 \frac{3}{4}\times 7 \frac{3}{4}$” |
| Min. Reflectivity Factor | > 2 % (of floor and object) (measured at max. 19’6” in safety field) |
| Emission Characteristics |  |
| IR LASER | Wavelength 905 nm;  
               maximum output pulse power 75 W, Class 1 |
| Visible LASER | Wavelength 650 nm;  
                    maximum output CW power 3 mW, Class 3R |
| Supply Voltage | 12 – 24 VAC ±10%  
                    12 – 30 VDC ±10% @ sensor terminal |
| Power Consumption | < 2.5 W (heating: off)  
                     < 15 W (heating: eco or auto) |
| Response Time | Typ. 100 ms (max. 500 ms)  |
| Output | 2 solid-state relays (galvanic isolation, polarity free)  
            30 VDC (max. switching voltage) – 100 mA (max. switching current)  
            - in switching mode: NO/NC  
            - in frequency mode: pulsed signal (f= 100 Hz ±10%)  
            1 electro-mechanic relay (galvanic isolation, polarity free)  
            42 VAC (max. switching voltage) – 500 mA (max. switching current) |
| Input | 30 VDC (max. switching voltage)  
            low < 1 V  
            high > 10 V (voltage threshold) |
| LED-Signal | 2 tri-colored LEDs: Output status / Remote Control  
                  Response / Error Signals |
| Dimensions | 7 $\frac{3}{4}$” (H) x 6” (W) x 4” (D) (approx.) |
| Material / Color | PC/ASA / Black |
| Rotation Angles on Bracket | 45° to the right, 15° to the left (lockable) |
| Tilt Angles on Bracket | –10° – 5° |
| Degree of Protection | NEMA 4 / IP65 |
| Temperature Range | –22 ºF – 140 ºF (–30 ºC – 60 ºC) |
| Vibrations | < 2 G |
| Cable Length | 360 in (30 ft) |
| Norm Conformance | IEC 61000-6-2, IEC 61000-6-3, IEC 60950-1, IEC 60825-1,  
                      ISO 13849-1 P1 “d” CAT2, IEC 62061 SIL 2, IEC 61496-1 ESPE Type 2 |

# RELATED PRODUCTS

10LZR-WIDECAN MOTION, PRESENCE & SAFETY SENSOR
10.1311 WIDECAN ADAPTER KIT
20.5402 50 FT CABLE
20.5399 30 FT CABLE