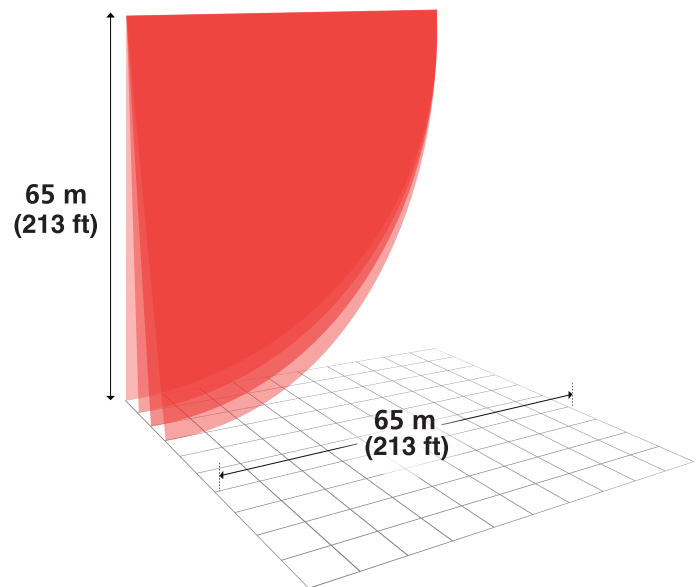


LZR[®]-U920 / U921

COMPACT RAW DATA LASER SCANNER



PRIMARY APPLICATIONS



DESCRIPTION

BEA's LZR[®]-U920 / U921 are laser-based measurement devices measuring distances on up to four planes. The LZR[®]-U920 / U921 can be installed to scan in any direction.

This family of sensors is designed to provide the user with the highest degree of flexibility. It communicates the raw measurement data for further calculation or control tasks.

FEATURES & BENEFITS

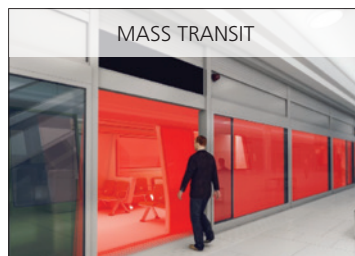
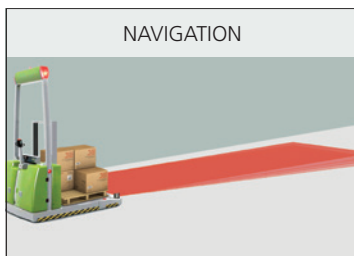
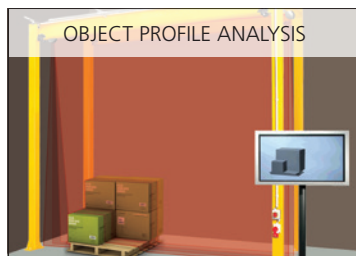
- Non-contact optical measurement
- Background or substrate has almost no effect on measurements
- Measurement range: up to 65 meters (213 feet)
- Field of view: up to 96°
- Standard RS485 bus communication (bidirectional)
- Low power consumption (< 5 W), adaptable to autonomous systems
- No external illumination of target object necessary as compared to camera systems



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Customer Service: 800.523.2462
Technical Support: 800.407.4545
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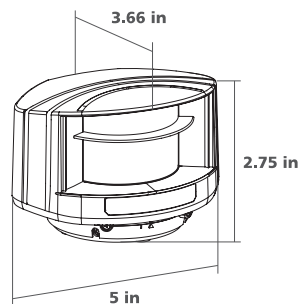
APPLICATIONS



TECHNICAL SPECIFICATIONS

Technology	LASER scanner, Time-of-Flight measurement
Measurement Range	Max. 65 m (213 ft) / 10 m (30 ft) @ 2% remission factor / 30 m (98 ft) @ 10% remission factor
Number of Points / Plane	Max. 274
Number of Planes	
LZR-U920	4
LZR-U921	1
Angular Resolution	Max. 0.3516°
Angular Coverage	Max. 96°
RPM	900 turns / min
Scanning Frequency	
LZR-U920	15 Hz
LZR-U921	60 Hz
Serial Communication	
Type	Asynchronous
Interface	RS 485
Communication Mode	Half-duplex (U920,U921)
Data Transmission Speed	921600 max.
Topology	Point-to-point
Symbol Coding	1 start bit, 1 stop bit, no parity bit
File Type	8 bits
Remission Factor	> 2%
Emission Characteristics	
IR LASER	Wavelength 905 nm; maximum output pulse power 75 W (CLASS 1)
Power Supply	
	Peak current at power-on: 1.8 A (max. 80 ms @ 35 VDC @ sensor side)
LED-Signal	
	1 Blue LED: Power-on Status 1 Orange LED: Error Status 2 Bi-colored LEDs: Function Status
Dimensions	5 in (W) × 2.75 in (H) × 3.66 in (D)
Material	PC / ASA
Color	Black
Degree of Protection	NEMA 4 / IP65
Temperature Range	
	-22 °F – 40 °F (-30 °C – 60 °C) if powered; 14 °F – 140 °F (-10 °C – 60 °C) unpowered
Humidity	0 – 95 % non-condensing
Vibrations	< 2 G
Expected Lifetime	Designed for a lifetime of min. 20 years
Norm Conformance	
	2006 / 95 / EC: LVD; 2011 / 65 / EU: RoHS 2; 2004 / 108 / EC: EMC; EN 60529:2001; IEC 60825-1:2007 Laser Class 1&3R; EN 60950-1:2005; EN 61000-6-2:2005 EMC - Industrial level; EN 61000-6-3:2006 EMC - Commercial Level

DIMENSIONAL DRAWINGS



RELATED PRODUCTS



10LZR-U920
BIDIRECTIONAL
4 CURTAIN SENSOR



10LZR-U921
BIDIRECTIONAL
1 CURTAIN SENSOR

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