



LZR®-U9xx

Laser measurement device

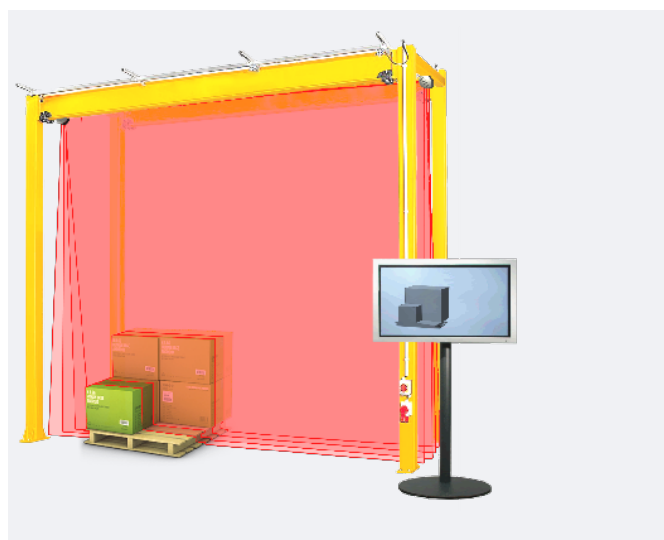


TECHNOLOGY

Laser

DESCRIPTION

The **LZR®-U9xx** are LASER-based measurement devices measuring distances on up to 4 planes. The LZR®-U9xx can be installed to scan in any direction. This family is designed to provide the user with the highest degree of flexibility. It communicates the raw measurement data for further calculation or control tasks. Very compact and competitive LASER scanner with a measurement range up to 65 m.



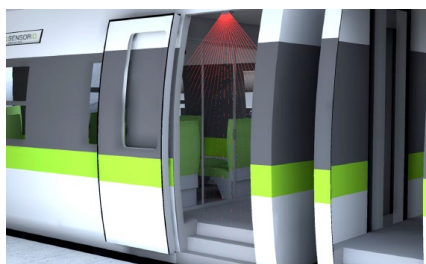
Alternative to camera

No external illumination of target object necessary compared to camera systems.

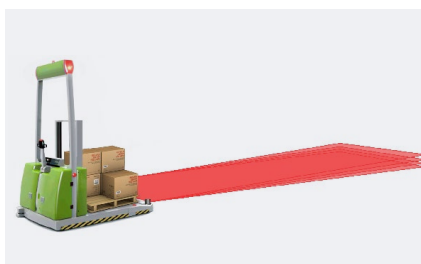
Bus communication

Standard RS485 bus communication (unidirectional or bidirectional).

APPLICATIONS



People profile analysis



Navigation

ACCESSORIES



BEA REMOTE CONTROL

Universal remote control for the adjustments of our sensors.

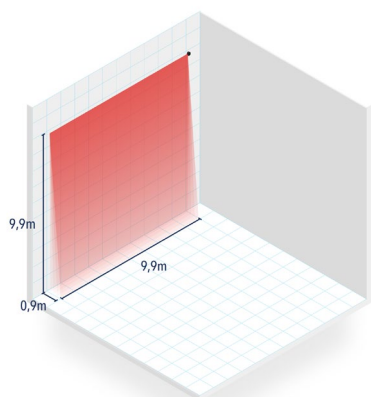
INSTALLATION

- Standard RS485 bus communication

VERSIONS

- LZR@-U920 : Sensor with bidirectional bus communication, 15 Hz system
- LZR@-U921 : Sensor with bidirectional bus communication, 60 Hz system

TECHNICAL SPECIFICATIONS



Technology	LASER scanner, time-of-flight measurement
Measurement range	max 65 m 10 m @ 2% remission factor, 30 m @ 10% remission factor
Number of planes	LZR@-U920: max. 4*; LZR@-U921: 1
Number of points/plane	max. 274*
Angular resolution	min. 0.3516 °*
Rotating speed	900 turns/min
Scanning frequency	LZR@-U920: 15 Hz; LZR@-U921: 60 Hz
Remission factor	> 2 %
Laser emission characteristics (IEC/EN 60825-1)	wavelength 905 nm; output power <0.10 mW (CLASS 1) wavelength 635 nm; output power <1 mW (CLASS 2)
Supply voltage	10-35 V DC @ sensor side (to be operated from SELV compatible power suppliers only)
Power consumption	< 5 W
Peak current at power-on	1.8 A (max. 80 ms @ 35 V)
Serial communication	see AN LZR@-U920/-U921 Protocol (available for download on our website)
Type	asynchronous
Interface	RS 485
Communication mode	half-duplex
Transmission speed	460800 bit/sec (max: 921600 bit/sec)
Topology	point to point
Symbol coding	1 start bit, 1 stop bit, no parity bit
File type	8 bits
Input	1 optocoupler (galvanic isolated - polarity free)
Max. contact voltage	30 V DC (over-voltage protected)
Voltage threshold	Log. H: >8 V DC; Log. L: <3 V DC
LED-signal	2 bi-coloured LEDs: function status; 1 blue LED: power-on status; 1 orange LED: error status
Dimensions	125 mm (D) x 93 mm (W) x 76 mm (H)
Material	PC/ASA
Colour	black
Protection degree	IP65
Temperature range	-30 °C to +60 °C if powered; -10 °C to +60 °C unpowered
Humidity	0-95 % non-condensing
Vibrations	< 2 G
Pollution on front screens	max. 30 %; homogenous

Standard RS485 bus communication (unidirectional or bidirectional).
* These parameters can be configured via the RS 485 communication interface.
For more information on the existing options, see AN LZR@-U920/-U921 Protocol.

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