

LZR[®] - U901

LASER MEASUREMENT DEVICE

Commercial sheet



VERY COMPACT RAW DATA LASER SCANNER

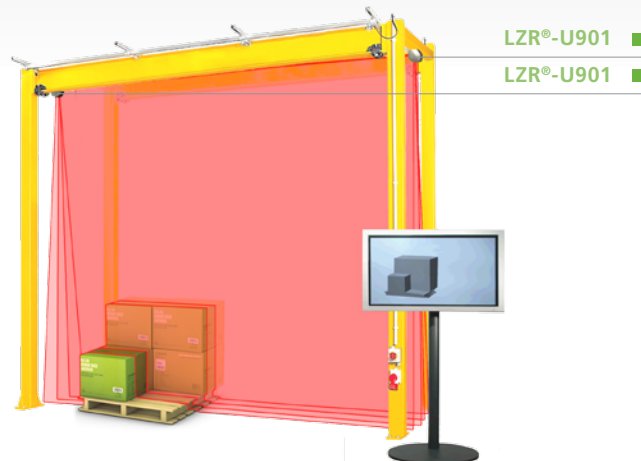
DESCRIPTION

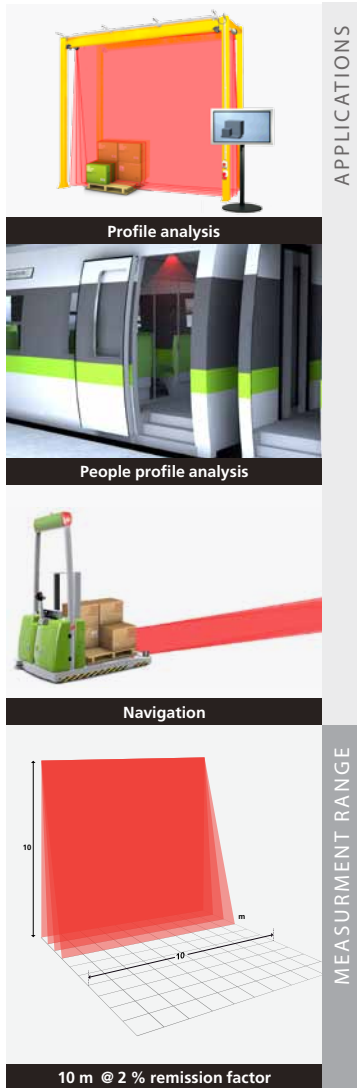
The **LZR[®]-U901** is a LASER-based measurement device measuring distances on up to 4 planes. The **LZR[®]-U901** can be installed to scan in any direction. This version is designed to provide the user with the highest degree of flexibility. It communicates the raw measurement data for further calculation or control tasks. Very compact and competitive LASER scanner.



PERFORMANCE

- Non-contact optical measurement.
- Background or substrate has almost no effect on measurements.
- Measurement range (@ 2% remission factor): up to 10 m.
- Field of view: up to 96°.
- Standard RS485 bus communication.
- Low power consumption (< 5 W), thus adapted to autonomous systems.
- No external illumination of target object necessary compared to camera systems.
- Integrated heating system.





APPLICATIONS

- Profile detection / Profile analysis.
- Navigation of Automated Guided Vehicles.
- Navigation monitoring.
- Object measurement.
- Position measurement.

EASE OF INSTALLATION

- For easy installation, the tilt and rotation angles can be adjusted.
- Standard RS485 bus communication.

TECHNICAL SPECIFICATIONS

Technology	LASER scanner, time of flight measurement
Measurement range	10 m @ 2% remission factor
Number of planes	4
Number of points/plane	274
Angular resolution	0.3516°
Angular coverage	96.3281°
Rotating speed	900 min ⁻¹
Remission factor	> 2 %
Emission characteristics	IR LASER (CLASS 1) Wavelength 905 nm; max. output pulse power 75 W
Power supply	10V - 35V DC @ sensor side; 5 W
Serial communication	Type Asynchronous Interface RS 485 Communication mode Half-duplex Transmission speed 460800 bit/sec Topology Point to point Symbol coding 1 start bit, 1stop bit, no parity bit File type 8 bits
LED signal	1 blue LED: power-on status; 1 orange LED: error status
Dimensions	125 mm (L) × 93 mm (D) × 70 mm (H) (with mounting bracket + 14 mm)
Material	PC/ASA ; colour: black
Mounting angles on bracket	-45°, 0°, 45°
Rotation angles on bracket	-5° to +5° (lockable)
Tilt angles on bracket	-3° to +3°
Protection degree	IP65 (avoid direct exposure to high pressure cleaning)
Temperature range	-30°C to +60°C powered ; -10°C to +60°C unpowered
Humidity	0-95 % non-condensing
Vibrations	< 2 G
Expected lifetime	Designed for a lifetime of min. 8 years
Norm conformity	2006/95/EC: LVD; 2004/108/EC: EMC; 2002/95/EC: RoHS; EN 60529; EN IEC 60825; EN 60950-1; EN 61000-6-2: EMC - Industrial level; EN 61000-6-3: EMC - Commercial Level

Specifications are subject to change without prior notice.

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