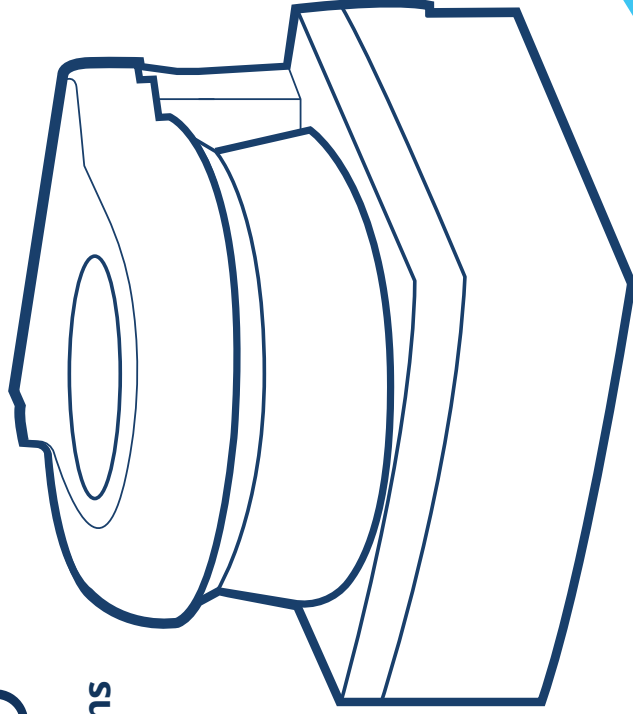


LZR®

# VISIOSCAN RD

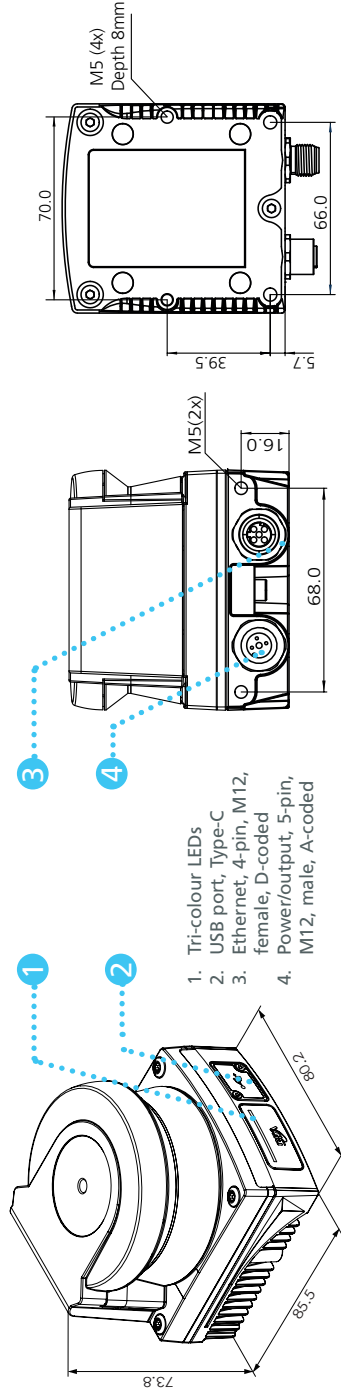
Factory & Logistic Automation Solutions

Quick guide



## ① Description

The LZR®-VISIOSCAN RD is a laser scanner that scans a single curtain over a scanning angle of 275°. The scanner outputs accurate measurement data at a high scanning frequency through Ethernet communication, which can be processed to achieve various applications in factories and logistic automation solutions, such as navigation and obstacle avoidance for AGV/AMRs.

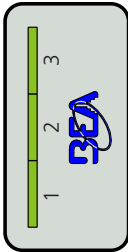


## ② Safety



- The device emits Class 1 laser radiations (certified according to IEC 60825-1). The laser is eye-safe.
- Only trained and qualified personnel may install and adjust the sensor.
- Do not open the housing.
- Keep the optical window clear.
- Do not use aggressive products to clean the optical window.
- Fix the USB covers firmly after installation to ensure IP67 ingress protection.
- Ensure functional grounding via the shield of the connection cable.

③ LED Indication



- 1. Power Status
- 2. Ethernet Connectivity
- 3. Error Status

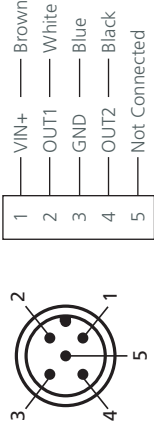


LED1/2/3 flashes 1 time/second, contamination warning on the left/centre/right side of the optical window.

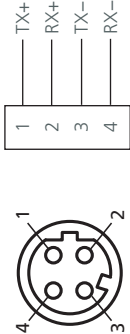
LED1/2/3 flashes 3 times/second, contamination error on the left/centre/right side of the optical window.

④ PIN Assignment

Power/output: A-coded



Ethernet: D-coded



Ethernet Connection

Default IP address: 192.168.1.2  
Port: 3050

LED 1	LED 2	LED 3
Power off. No supply voltage. 	No ethernet connection. 	Power off. No supply voltage. 
Power on. 	Ethernet connection established, no measurement data transfer. 	Normal operation, no error. 
External power supply error. 	Ethernet measurement data transmission x 3 (default off). 	Internal error. 
		Fatal error. 

⑤ Technical Specifications

Technology

Laser scanner, time-of-flight measurement;

Output power < 0.1 mW; Class 1 (IEC/EN 60825-1)

**Scanning range** 0.08 – 25 m; 7 m @ 1.8% reflectivity, 15 m @ 10% reflectivity;

**Scanning angle** 275°

**Angular resolution** 0.2° @ 80 Hz, 0.1° @ 40 Hz

**Operating voltage** 12 – 24 V DC, - 10% / + 30%

Measurement accuracy

Systematic error

± 20 mm\*

Statistical error (1σ)

≤ 6 mm (0.08 – 7 m); ≤ 10 mm (7 – 10 m); ≤ 15 mm (10 – 15 m)\*

≤ 6 mm (0.08 – 25 m) for reflectors

Ambient conditions

Ambient light immunity 100,000 lux ambient light; 3,000 lux (IEC 61496-3)

Operating temperature - 30 °C to + 60 °C

**Enclosure** IP67

**Ethernet** TCP / UDP

**USB** USB 2.0, Type-C

\* Typical value at 10% reflectivity up to 7 m scanning range or as specific; real values depends on ambient conditions and the target object.

Specifications are subject to changes without prior notice. All values measured in specific conditions.



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This product should be disposed of separately from unsorted municipal waste/waste.