

SENSING BY RANGING – MISSION 2D

2D LASER SCANNER R2000

- Gapless all-around vision due to measuring angle 360°
- Accurate position detection with small, but highly precise PRT sensor
- Suitable for fast application due to high scanning frequency of 50Hz
- Small light spot allows detection of very small objects (2mm @ 2m) or an accurate edge detection
- Simple alignment due to red transmitting light
- Interactive all-around display provides a comfortable operation and commissioning without any auxiliary material



TOP5



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Based on Pulse Ranging Technology (PRT), the 2D laser scanner R2000 provides a high sensor performance and immunity as well as an exceptional functionality.

The measuring principle PRT together with the rotating measuring head allows a gapless all-around vision of 360° and ensures that the scanner has a direct view on the environment at any measuring angle.

This allows the small size and a consistent geometry of the light spot with an always consistent imaging and sensor behavior.

The 360° display integrated into the light exit makes new displaying and operating concepts possible. Thus, for example, status reports can be generated or application-specific information like distance values, measuring profiles etc. can be displayed.

TECHNICAL DATA

Measuring range	0,2 ... 10 m to white object / 0,2 ... 50 m to reflector
Measuring speed	250,000 measurements /s
Measuring laser	Red light, Laser class 1
Diameter of the light spot	< 20 mm at 10 m
Scanning frequency	10 ... 50 s ⁻¹
Resolution	1 mm
Angular resolution	< 0,08 °
Interface	Fast Ethernet, TCP/IP, UDP/IP, HTTP
Dimensions	106 mm x 106 mm x 116,5 mm
Mass	800 g

POSSIBLE APPLICATIONS

The compact 360° scanner R2000 with high measuring frequency, small angular resolution, accurate light spot, visible measuring beam and the all-around display is suitable for a variety of uses. This includes in addition to traditional markets like logistics, transport and industrial conveyors also new applications like monitoring tasks in building automation, transportation and many more.



The small light spot allows an accurate position detection of the autonomous vehicle without additional sensors and interpolation procedures.

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