

RANGER SLIM

AB-LD-B01-R05-DRJ45 (Raw Data) &
AB-LD-B01-R05-DI/O (IO Signal)

ATOMBOTIX



- 120° (12° in perpendicularity, 4 lines)
- 4 m (measurement frequency)
- 0.1° / 0.2° (angular resolution)
- ± 40 mm (measurement accuracy)
- 4 × NPN (output), TCP/UDP
- 64 (number of channels)

Model	AB-LD-B01-R05-DRJ45 & AB-LD-B01-R05-DI/O
Performance Parameters	
Detection Distance	0.05 m - 1.5 m (reflectivity 10%) 0.05 m - 4 m (reflectivity 90%)
Detection Angle	120° (4-line vertical angle of 12 °)
Scan Frequency	10 Hz × 4
Min. Resolution for Obstacle Detection	0.5°
Angle Resolution	0.1°/0.2°
Absolute Accuracy	±40 mm
Detect Output Delay	0-500 ms Configurable
Detect Maintain Delay	0-500 ms Configurable
Essential Parameters	
Communication	I/O, USB, RS232, RS485, CAN, Ethernet
Light Source Wavelength	905 nm
Pulse Time	5 ns
Output Raw Measurement Data	Optional
Status Indicators	Green (power indicator light) Yellow (output signal 1 indicator) Orange (output signal 2 indicator) Red (output signal 3 indicator)
Cable	1.5 m
Number of Obstacle Avoidance Channels	64
IP Ratings	IP65
Electrical Parameters	
Working Voltage	DC 18V - 30V
Rated Power	<1.2 W
Environmental Parameters	
Object Reflectivity	2 - 1000%
Ambient Light	<80000 Lux (resistant to sunlight)
Usage Environment	-10 °C - 50 °C (indoor use), <80% RH (no frost, no condensation)

