

2D Navi Pro

AB-LD-B01-R50-DM12

ATOMBOTIX



- 360 ° (angle)
- 50m (distance)
- 0.018 ° (angular resolution)
- ± 20mm (absolute accuracy)
- 6 × NPN (input), 4 ×NPN (output), RS485 (Modbus RTU), CANopen, TCP/UDP
- 50/100/150/200Khz (scanning frequency)

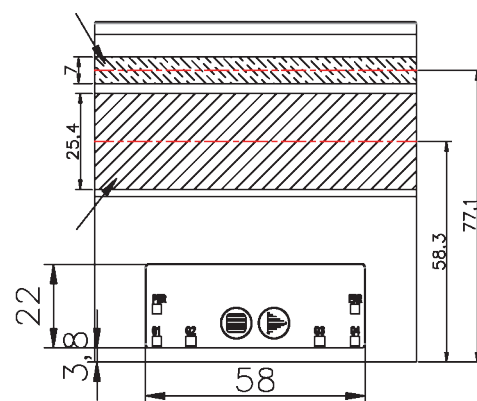
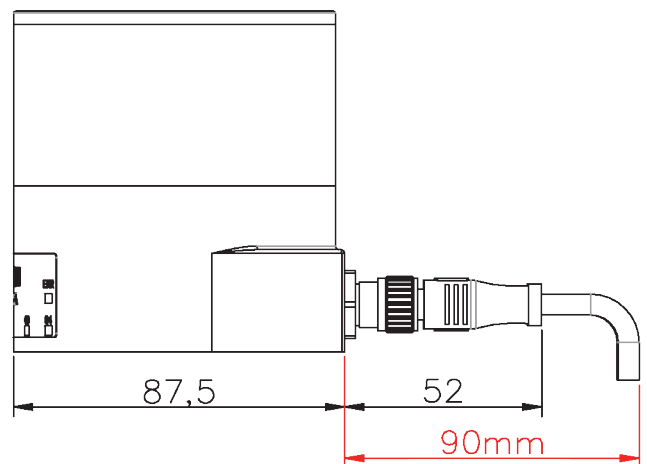
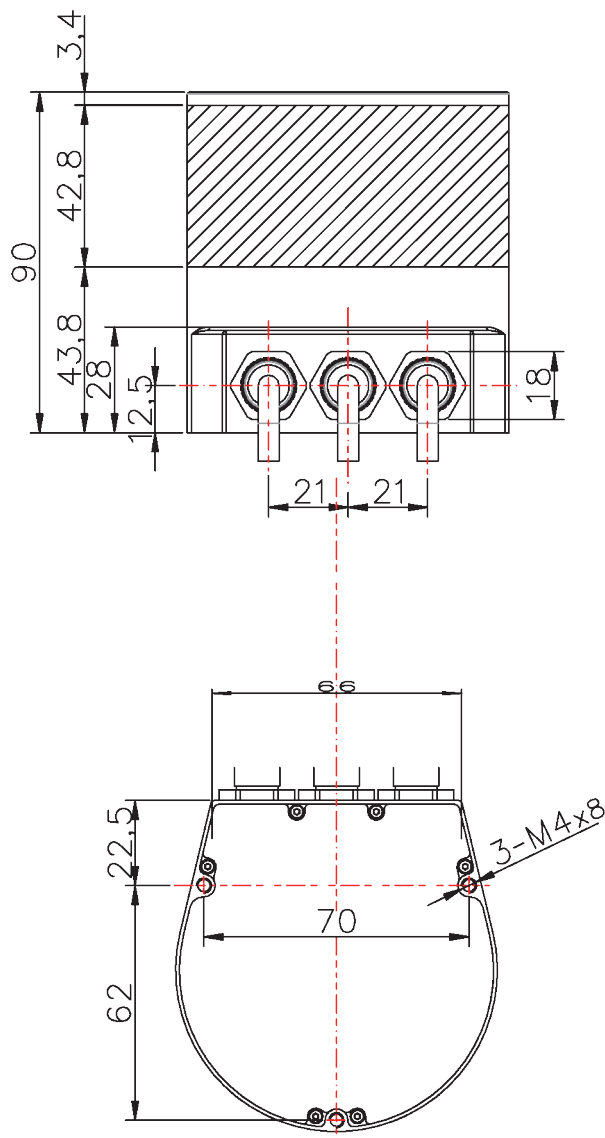
Model	AB-LD-B01-R50-DM12
Performance Parameters	
Detection Distance	0.05 m – 20 m (reflectivity 2%) 0.05 m – 50 m (reflectivity 90%)
Detection Angle	360°(2D)
Scan Frequency	50K, 100K, 150K, 200K
Angular Resolution	0.018° (determined by scanning frequency, motor speed, and single-point sampling count)
Scanning Motor Speed	10Hz, 15Hz, 20Hz, 25Hz, 30Hz (five configurable speeds)
Single Point Sampling Frequency	1-50 Hz (adjustable)
Recognizable Object Shape	Almost any shape
Measurement Resolution	1 mm
Absolute Accuracy	±20 mm
Measurement Noise	±10 mm
Repeatability	±10 mm
Essential Parameters	
Communication	CANOpen, Ethernet, RS485, TCP/UDP
Switching input	6 × NPN
Switching Output	4 × NPN
Number Of Regional Protections	3
Number Of Obstacle Avoidance Channels	64 (each channel provides 3 independent detection ranges)
Indicator (display) Light	Green (power indicator light) Red (fault status indicator light) Red, yellow, orange, orange (output status indicator light) Red (window display light 24 x 360 pixels)
Cable	M12-4 Female cable (Ethernet port) M12-6 Female Head Cable (Power and Communication Ports) M12-12 Female cable (IO port)
Material	Aluminum Alloy, Scan Window/PMMA
IP Ratings	IP65

Electrical Parameters

Working Voltage	DC 18 - 60V
Rated Power	<6 W
Light Source Wavelength	905 nm

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)



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