

MINI NAVI PRO

AB-LD-B01-R50-DRJ45

ATOMBOTIX



- 360° (angle)
- 50 m (distance)
- 0.025° (angular resolution)
- ± 20mm (absolute accuracy)
- 4 × NPN (input), 4 × NPN (output), Ethernet, CAN
- Multiple echoes

Model	MINI NAVI PRO
Performance Parameters	
Detection Distance	0.05 m - 10 m (reflectivity 2%) 0.05 m - 50 m (reflectivity 90%)
Detection Angle	360° (2D)
Scan Frequency	540 Hz
Angular Resolution	0.025°/0.05°/0.1°/0.25°/0.5° (determined by scanning frequency, scanning motor speed, and single point sampling frequency)
Scanning Motor Speed	12.5 Hz: 750 r/min (0.025°, 0.05°, 0.1°, 0.25°, 0.5° angle resolution) 25.0 Hz: 1500 r/min (angular resolution of 0.05°, 0.1°, 0.25°, 0.5°) 50.0 Hz: 3000 r/min (0.1°, 0.2°, 0.5° angular resolution)
Single Point Sampling Frequency	1-50 Hz (adjustable)
Recognizable Object Shape	Almost any shape
Measurement Resolution	1 mm
Absolute Accuracy	±20 mm
Measurement Noise	±5 mm
Repeatability	±10 mm
Essential Parameters	
Communication	I/O, CAN, Ethernet
Light Source Wavelength	905 nm
Pulse Time	5 ns
Switching Output	4× NPN
Number Of Regional Protections	3
Number Of Obstacle Avoidance Channels	16
Indicator (display) Light	Green (power) Red (fault status) Yellow, Orange, Red (Output Status)
Material	Aluminum Alloy, PMMA
IP Ratings	IP65

Electrical Parameters

Working Voltage	DC 10 V - 30 V
Rated Power	<3.4 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)

