

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 times (adjustable)
Recognizable Object Shape	Almost any shape
Measurement Resolution	1 mm
Absolute Accuracy	±20 mm
Measurement Noise	±20 mm
Repeatability	<10 mm
Essential Parameters	
Communication	I/O, CAN, Ethernet
Light Source Wavelength	905 nm
Switching Output	4 × NPN
Number Of Regional Protections	3
Number Of Obstacle Avoidance	16
Pulse Time	5 ns
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)

