



Single-line Mechanical LiDAR

C1 single-line mechanical LiDAR uses the time-of-flight measurement mechanism to achieve a high-speed 360° scan of the surrounding environment, with a detection distance of up to 150m and an accuracy of ±3cm. It is mainly used in indoor service robots, AGVs and UAVs that require precise positioning and obstacle avoidance.



Wavelength	905nm	FPS	5Hz / 10Hz / 20Hz
Laser Class	Class I	Data Point Generating Rate	Single Echo 20,000 pts/sec Dual Echo 40,000 pts/sec
Channels	1	Communication Interface	Ethernet, PPS
Detection Method	TOF	Input Voltage	9V~32V DC
Detection Range	150m@70%, 110m@10%	Power Consumption	7W (10Hz)
Precision	±3cm	IP Grade	IP67
Range Accuracy	±1cm	Working Temperature	-20℃~60℃
Horizontal FOV	360°	Vibration Test	5Hz-2000Hz, 3G rms
Vertical FOV	N/A	Shock Test	500m/sec ² , lasting for 11ms
Horizontal Resolution	0.09°/ 0.18°/ 0.36°	Weight	1050g
Vertical Resolution	N/A	Dimensions (DxH)	Φ102x77.9 mm