N10

Navigation & Obstacle Avoidance LiDAR

N10 LiDAR uses the TOF measurement principle to achieve 360° two-dimensional scanning and detection of the surrounding environment. It uses wireless power supply and optical communication internally, with an emission frequency of 4.5 KHz, a detection accuracy of ±1.5cm, and a maximum range of 15m.

It is mainly applied in scenarios requiring precise positioning and obstacle avoidance, such as indoor service robots, AGVs, cleaning and disinfection robots, and drones.

- Optimized algorithm for faster, more accurate mapping.
- Strong anti-light interference for robot mapping, navigation, and obstacle avoidance.
- Excellent detection of strong light, black and white objects, and high-reflectivity objects.
- Lightweight and compact design for embedding in various service robots.

Wavelength	905nm	Data Point Generating Rate	4,500 pts/sec
Laser Class	Class I	Communication Interface	Standard asynchronous serial port(Baud rate 230,400 bps)
Output Data	Distance、Angle、Intensity	Input Voltage	5V DC（4.75V~5.25V DC）
Detection Distance	0.02~12m@70%	Power Consumption	1W
Range Precision	±3cm(0~6m); ±4.5cm(⩾6m)@70%	Operating Temperature	-10℃~40℃
PRF	4.5KHz	IP Grade	IPX-4
Scanning Angle	360°	Anti-light	4K lux
FPS	6~12Hz	Weight	≈60g
Angular Resolution (H)	0.48° ~0.96°	Dimensions (DxH)	Φ52x36.1 mm