LakiBeam1L

Industry-grade remote version single LiDAR, Small Size, Zero Blind Spot, High Quality-price Ratio

Introduction

LakiBeam1 is a long-range single-line LiDAR developed by Richbeam for medium and low-speed scenes, which is designed based on the principle of pulsed time of flight (pToF). The product is composed of lasers, photodetectors, optical systems, and timers, etc. The laser uses the invisible 940nm band and meets the Class 1 level specified by the IEC60825-1 standard to ensure the safety of the human eye when the product is working. Its industrial-grade sophisticated design makes the product compact, small in size, stable in performance, supports ultra-high frequency sampling and optional angular resolution, and achieves zero blind spots within the detection range. The high-quality motor and lightweight scanning mirror design ensure that the product can work stably for a long time and create maximum value for users.

Applications

LakiBeam1L can be used in industrial automation, port automation. It is widely used in AGV obstacle avoidance as the main laser of indoor robots and the oblique laser of outdoor robots for mapping and obstacle avoidance.

Core Parameters

Sensor			
Scanning Principle	Mechanical Rotation	Rotating Frequency	5Hz~30Hz
Range Principle	TOF	Range Accuracy	±2cm
Range	0-40m	Distance Resolution	1cm
Protection Distance	≥40m@70% reflectivity； ≥20m@10% reflectivity	Horizontal FOV	270°
Data Sample Rate	45KHZ	Horizontal Resolution	0.03°~0.18°
Output			
Data Transmission	UDP/IP Ethernet (100 Mbps)		
Data Output Format	UDP/USB		
Data Output	Distance, Angle, Echo Intensity, Time		
Time Source	Internal Timestamp		
Physical Parameters			
Laser Class	Class 1 Eye Safe	Dimension	60mm*60mm*80mm(D*W*H)
Wavelength	940nm	Environmental Protection	IP65
Operating Temperature	(-25°~60°)	Operating Voltage	6~36V
Storage Temperature	(-40°~75°)	Power Consumption	≤2.5W
Weight	160g		

About Richbeam

Richbeam(Beijing) Technology Co., Ltd., formerly known as Yinbing Technology, was founded in 2016 and is an integrated chip LiDAR solutions provider.

The founding team developed the world's first integrated LiDAR based on nearly 20 years of scientific research experience in top universities. From the core technology, we continue to innovate and develop a variety of products. The products can be widely used in Autonomous Driving, Smart Transportation, Robotics, Industrial Automation, Smart Home and other fields. Richbeam has a complete intellectual property certification system, and now has more than 30 patents.