

SPL8 LiDAR

SPL8 is a single-point ranging LiDAR, based on ToF principle. Mainly used for stable, accuracy and high-frame rate range detection.

The product is built with algorithms adapted to various application environments and adopts multiple adjustable configurations and parameters so as to offer excellent distance measurement performances in complex application fields and scenarios.



Main Product

Features

- Small size
- Light weight
- Low power consumption
- Low cost

Main Application

Scenarios

- Auxiliary focus
- Elevator projection
- Intrusion detection
- Level measurement

SPECIFICATIONS

Description		Parameter value
Product performance	Operating range	0.2m~8m(90%reflectivity indoor 0klux) ¹ 0.2m~2.5m(10%reflectivity indoor 0klux) ² 0.2m~8m(90%reflectivity outdoor 90klux) 0.2m~2.5m(10%reflectivity outdoor 90klux)
	Accuracy	±6cm@(0.2m-3m) ³ ±2%@(3m-8m)
	Distance resolution	1cm
	Frame rate	1-250Hz ⁴
	Ambient light immunity	70Klux
	Operation temperature	-10°C~60°C
	Enclose rating	/

Optical parameters	Light source		VCSEL	
	Central wavelength		850nm	
	Photobiological safety		Class1 (IEC60825)	
	FOV		2° ⁵	
Electrical parameters	Supply voltage		3.7V-5.2V	
	Average current		≤70mA	
	Power consumption		≤0.35W	
	Peak current		150mA	
	Communication level		LVTTTL(3.3V)	
	Communication interface		UART, I ² C, I/O	
Others	Dimension		35mm*21.25mm*12.5mm (L*W*H)	
	Housing		ABS+PC	
	Storage temperature		-20°C~75°C	
	Weight		<5g	
Communication Interface	UART		I ² C	
	Default baud rate	115200 (adjustable)	Max transmission rate	400kbps
	Data bit	8	Master/Slave mode	Slave
	Stop bit	1	Default address	0x10
	Parity	None	Address range	0x08~0x77
Dimensions				

1. Range based on the indoor test with the standard white board (90% reflectivity) at 25°C as the detection object;
2. Range based on the indoor test with the standard white board (90% reflectivity) at 25°C as the detection object;
3. Accuracy based on the indoor test with the standard white board (90% reflectivity) at 25°C as the detection object;
4. The Highest frame rate is 250Hz, the default frame rate is 100Hz. The customized update rate should be calculated by the formula: $500/n$ (n is more than 2),;
5. This is a theoretical reference value.