SPL12 LiDAR

SPL12 is a single-point ranging LiDAR based on TFmini upgrade. The blind zone is shortened to 10cm, the outdoor performance and accuracy of different reflectivity are improved, it can achieve stable, accuracy, sensitive and high frequency range detection.

Main Features

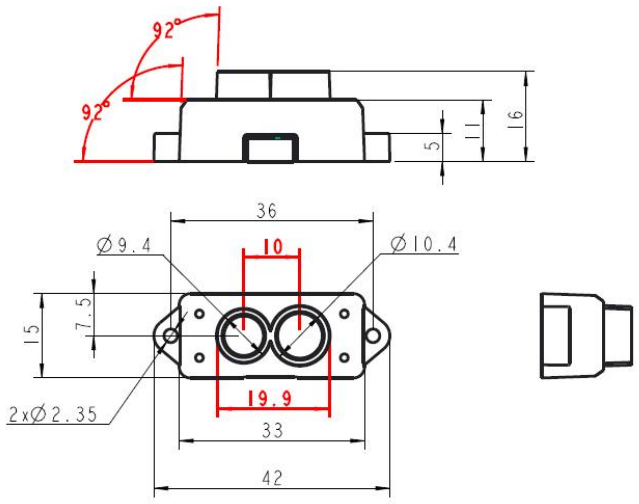
- Small size
- Light weight
- Low power consumption
- High frame rate(up to 1000Hz)

Main application scenarios

- Pedestrian detection
- Vehicle detection
- Intelligent barrier gate
- Altimeter

SPECIFICATIONS

Parameters		Typical Value
Product Performance	Operating Range	0.1m~12m@90%Reflectivity 0.1~7m@10% Reflectivity 0.1m~12m@90%Reflectivity（70Klux） 0.1~7m@10% Reflectivity（70Klux）
	Accuracy	±6cm@（0.1-6m）±1%@（6m-12m）
	Distance resolution	1cm
	Frame rate	1-1000Hz (default 100Hz)
	Ambient light resistance	70Klux
	Protection Level	/
	Operation temperature	0℃~60℃
Optical parameters	Photobiological safety	Class 1（EN60825）
	Central wavelength	850nm

Parameters		Typical Value	
	Light source	VCSEL	
	FoV	2°	
Electrical parameters	Supply voltage	5V±0.1V	
	Average current	≤140mA	
	Power consumption	≤0.7W	
	Peak current	200mA	
	Communication level	LVTTL（3.3V）	
	Communication interface	UART, I²C, I/O	
Others	Dimension	42mm*15mm*16mm(L*W*H)	
	Housing	PC/ABS	
	Storage temperature	-20℃~75℃	
	Weight	5g±0.3g	
	Cable length	10cm	
Communication interface	**UART**		**I2C**
	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	0x01~0x7F
Dimensions			
		UART	**I²C**

Parameters			Typical Value		
Configurable Parameters	**Parameters**	Description	Default setting	Description	Default setting
	Communication interface	UART,I2C and I/O	UART	UART,I2C and I/O	I2C
	Frame rate	Adjustable, 1-1000Hz	100Hz	Adjustable, 1-100Hz	/
	Baud rate	Adjustable, 9600-921600	115200bps	Fast mode (400kbps)	/
	Reset of default	Reset all the settings to default	/	Reset all the settings to default	/

PS: Refer to user manual for more information

1.Accuracy was calculated based on a standard white board with 90% reflectivity in indoor condition(25℃), changes in conditions may cause errors to increase

2.This is a theoretical reference value, there is a certain deviation in the actual angle value.