

INDUSTRIAL PRODUCT DATASHEET

RPLiDAR S2 Low Cost 360 Degree Laser Range Scanner - 30M Range

RPLiDAR S2: Low-cost 360° laser scanner with 30m range for versatile robot navigation and environmental mapping.

SKU

114992738

UPDATED

2026-06-10 12:21:46

PRICE

\$399.00(Excl. VAT)



Overview

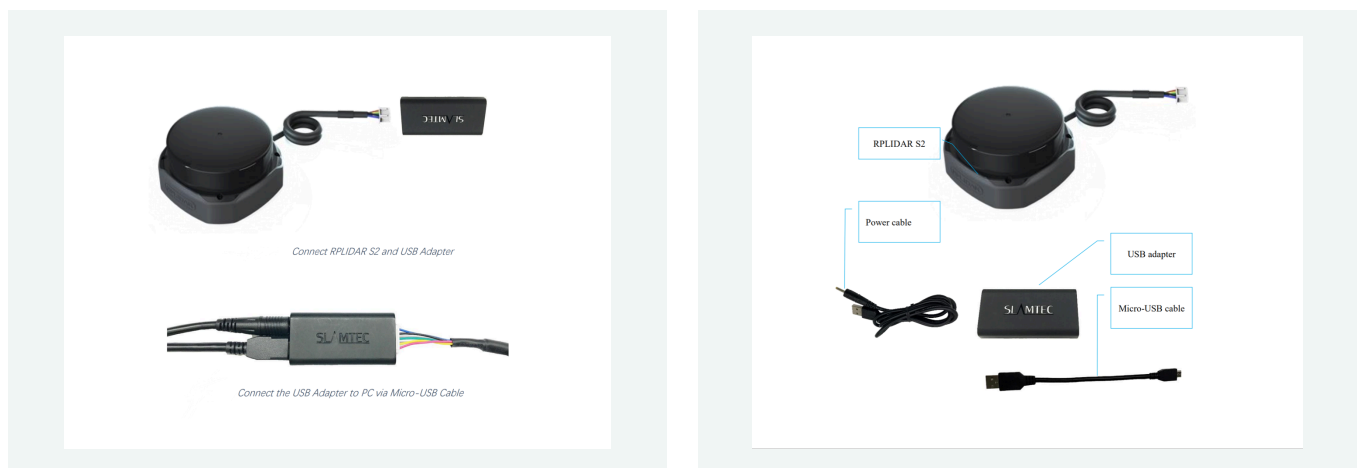


The RPLiDAR S2 is a low-cost 360° laser range scanner providing high-speed sampling at 32,000 times per second and a 30-meter radius coverage for reliable, eye-safe operation in both indoor and outdoor environments. Ideal applications include SLAM, 3D reconstruction, and long-duration navigation for service robots, home care robots, and industrial automation.

Key Features

- High-speed laser ranging sampling capability of 32,000 times per second
- Non-contact energy and signal transmission technology
- Reliable and stable operation for a long time
- Coverage area with a radius of 30 meters on a two-dimensional plane
- 360° omnidirectional laser ranging scanning
- Excellent application in both indoor and outdoor environments
- Built-in speed detection and adaptive system
- Cost reduction because there is no need to provide a complex power supply system
- The emitted laser power complies with IEC-60825 Class 1 human eye safety level

Product Gallery



Specification

Parameters	Details
Measuring distance	White object : 30m
	Black object : 10m
Sampling frequency	32kHz
Scanning frequency	10Hz
Angle resolution	0.12°
Communication interface	TTL UART
Communication rate	1M
Measurement accuracy	±5cm
Supply voltage	5V
Supply voltage ripple	20-50mV

System startup current	1500mA
Supply current	40mA(5V power supply, during sleep)
	400mA(5V power supply, working)
Communication interface input and output voltage	3.3V
Range of working temperature	-10°C to 50°C
Weight	190g

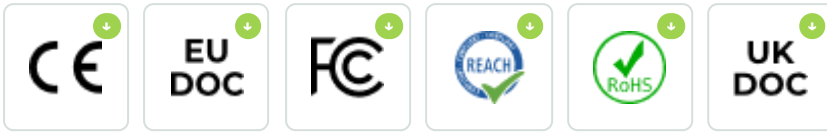
Applications

- **Universal simultaneous positioning and mapping (SLAM)**
- **Environmental scanning and 3D reconstruction**
- **Service robots and industrial fields that need to work continuously for a long time**
- **Navigation and positioning of home care/cleaning robots**
- **General robot navigation and positioning**
- **Positioning and obstacle detection of smart toys**

Part List

RPLIDAR S2 module (built-in PWM motor driver)	1
USB adapter	1
Micro-USB cable	1
Power cable	1

Compliance & Logistics



HSCODE	9031499090
USHSCODE	9031499000
UPC	
EUHSCODE	9013101000
COO	CHINA

FCC Requirement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
 - (2) this device must accept any interference received, including interference that may cause undesired operation.
- 15.21

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy.

If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Resource Links

- <https://www.seeedstudio.com/RPLiDAR-S2-Low-Cost-360-Degree-Laser-Range-Scanner-30M-Range-p-5198.html>
- [Slamtec Lidar Documentation Hub](#)

Seeed Technology Co.,Ltd.

9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676

Web: www.seeed.cc

Shop: www.seeedstudio.com