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INDUSTRIAL PRODUCT DATASHEET

RPLiDAR A2M12 360 Degree Laser Scanner Kit - 12M Range

RPLiDAR A2M12 360 Degree Laser Scanner Kit - 12M Range: 360-degree triangulation laser ranging with 12m radius, 0.225° angular resolution, up to 16KHz measurement frequency, and IEC-60825 Class One eye safety in a 4cm...

SKU	UPDATED	PRICE
114110128	2026-08-19 01:04:11	$229.00(Excl. VAT)



Overview



The RPLiDAR A2M12 360 Degree Laser Scanner Kit - 12M Range features a 360 Degree Triangulation Laser Sensor Ranging Scanner that generates 2D point cloud map information for a 12m radius with 0.225° angular resolution. It uses a high-speed RPVision3.0 range engine for up to 16KHz measurement frequency and 5 ~ 15Hz adjustable rotational speed, with OPTMAG light magnetic fusion technology for up to five years of reliable running and IEC-60825 Class One eye safety, in a cup-size design with a 4cm ultra-thin shell suitable for applications such as general robot navigation and localization, environment scanning and 3D re-modeling, SLAM, and home service/cleaning robot navigation and localization.

Key Features

- **360 Degree Triangulation Laser Sensor Ranging Scanner:** Generate 2D point cloud map information for 12m radius, 0.225° angular resolution
- **Distinguished Sampling Capability:** Equip high-speed RPVision3.0 range engine, for up to 16KHz measurement frequency, 5 ~ 15Hz adjustable rotational speed
- **Prolong Operation Life:** Apply OPTMAG light magnetic fusion technology for support up to five years of reliable running
- **Certified Output Laser Power:** Safe as IEC-60825 Class One eye safety rating
- **Cup-size Design:** Light & portable, 4cm ultra-thin shell, even can be placed on floor mopping robot

Product Gallery













Specification

Dimensions	76mm x76mm x41mm
Weight	G.W 190g
Battery	Exclude

Distance Range	0.2 - 12m, Based on white objects with 70% reflectivity
Angular Range	0-360 Degree
Distance Resolution	<0.5mm
Angular Resolution	0.225 degree
Sample Duration	0.25ms
Sample Frequency	16000Hz
Scan Rate	5~15Hz,Typical 10Hz

Applications

- **General robot navigation and localization**
- **Environment scanning and 3D re-modeling**
- **Service robots or industrial robots working for long hours**
- **Home service /cleaning robot navigation and localization**
- **General simultaneous localization and mapping (SLAM)**
- **Smart toy localization and obstacle avoidance**

Part List

A2M12 RPLIDA R （PWM motor driver embedded）	1
USB Cable	1
DC Cable	1
Adapter Driver Board	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-A2M12-360-Degree-Laser-Scanner-Kit-12M-Range-p-5482.html
- Slamtec Lidar Documentation Hub

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