

# RPLiDAR S2L 360 Degree Laser Range Scanner - 18M Range

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## Feature

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- **360 Degree DToF Laser Ranging Scanner:** Generate 2D point cloud map information up to 18m radius, within 30mm precision
- **Stunning Sampling Capability:** Up to 32KHz measurement frequency, 10Hz rotational speed, resist up to 80000 lux light
- **Prolong Operation Life:** Apply OPTMAG light magnetic fusion technology for support up to five years of reliable running
- **Suitable for Anywhere:** IP65 high ingress protection, small and compact, capable of every indoor and outdoor deployment
- **Certified Output Laser Power:** Safe as IEC-60825 Class One eye safety rating

RPLIDAR Model	S2M1	S2L	<u>S2E</u>
<b>Recommended applications</b>	Commercial robot,	Commercial robot,	Commercial robot,
	Outdoor robot	Outdoor robot	Outdoor robot

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<b>Measuring Range</b>	0.05m - 30m	0.05m - 18m	0.05m - 30m
<b>Sampling Frequency</b>	32K	32K	32K
<b>Rotational Speed</b>	10Hz	10Hz	10Hz
<b>Angular Resolution</b>	0.12°	0.12°	0.12°
<b>OPTMAG Supported</b>	√	√	√
<b>Motor</b>	Brushless	Brushless	Brushless
<b>Motor Driving Supported</b>	√	√	√
<b>Dimensions</b>	77 x 77 x 38.5 mm	77 x 77 x 38.5 mm	77 x 77 x 38.5 mm
<b>Weight</b>	190g	190g	190g
<b>Connect</b>	TTL UART Serial (3.3 voltage level)	TTL UART Serial (3.3 voltage level)	Ethernet UDP
<b>System Voltage</b>	5V	5V	12V
<b>System Current</b>	400mA	400mA	200mA
<b>Power Consumption</b>	> 2W	> 2W	> 2W
<b>Temperature Range</b>	-10°C - 50°C	-10°C - 50°C	-10°C - 50°C
<b>Angular Range</b>	360°	360°	360°
<b>Scan Field Flatness</b>	±1.5°	±1.5°	±1.5°

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<b>Range Resolution</b>	13mm	13mm	13mm
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<b>Accuracy</b>	≤30mm	≤30mcm	≤30mm
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## Part List

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RPLiDAR S2L 360 Degree Laser Range Scanner	x1
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USB adapter	x1
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Micro-USB cable	x1
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Power cable	x1
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