



## Hokuyo URG-04LX-UG01

The Hokuyo URG-04LX-UG01 Scanning Laser Rangefinder is a small, affordable and accurate laser scanner that is perfect for robotic applications. The URG-04LX-UG01 is used for area scanning and localization of autonomous robots and automated material handling systems (AMHS). It's the ideal solution for academic and R&D start-up applications. It acts as the "eyes" for mobile robots in guide path planning and obstacle detection within unknown environments and has a light-weight, compact design that uses USB bus power.



### Features

- Light weight(160g).Best for robot!
- Low-power consumption(2.5W) for longer working hours.
- Wide-range(5600mm×240°).
- Accuracy(±30mm).\*
- Distance and angle data output with high angular resolution(0.352°).
- High quality product under Total Quality Management. Designed, manufactured and inspected by HOKUYO.

\* For distance above 1,000mm, accuracy is ±3%.

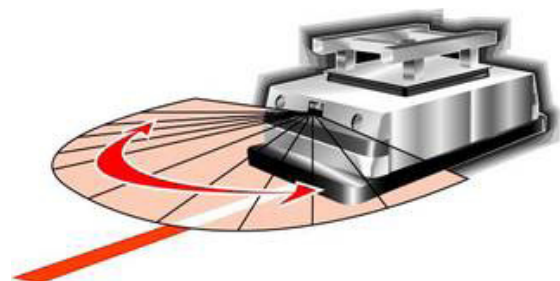
### Robot's Eye, No. 1 share

- Revolutionarily low price!!
- Laser range finder for autonomous robot.
- Best for students and researchers who are involved in robotics.
- Smart to run on USB bus power.

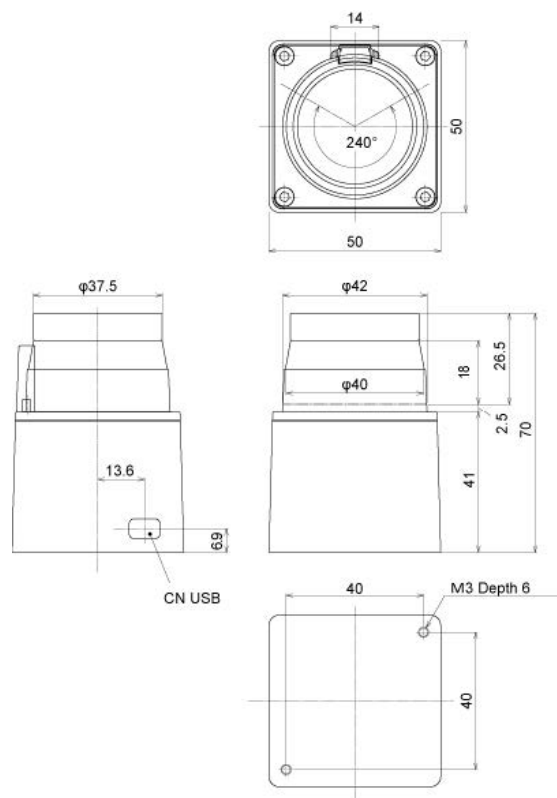
### Applications

Technology frontier and No.1 market share in Japan for service robots!

Wide applications, from robot vision sensor to Automatic Material



## External



## Connection



- Cable URG-C001

\*During booting, 500mA current is required. If the sensor can not be started with a single USB port, please use 2 USB cables(not included) for power supply from 2 USB ports. Please connect to 2 independent USB ports which can supply 500mA.

PC's motherboard could be broken if the sensor is connected to the USB ports which are not able to supply 500mA×2. TheGNDlines connected to theUSBare all shorted.

## Specifications

<b>Model no.</b>	URG-04LX-UG01
<b>Power source</b>	5 VDC ±5% (USB bus power)
<b>Light source</b>	Semiconductor laser diode ( $\lambda = 785 \text{ nm}$ ), laser safety class 1
<b>Measuring area</b>	20 to 5,600 mm (white paper with 70 mm × 70 mm), 240°
<b>Accuracy</b>	60 to 1,000 mm: ±30 mm, 1,000 to 4,095 mm: ±3% of measurement
<b>Angular resolution</b>	Step angle: approx. 0.36° (360°/1,024 steps)
<b>Scanning time</b>	100 ms/scan
<b>Noise</b>	25 dB or less
<b>Interface</b>	USB 2.0/1.1 [Mini B] (full speed)
<b>Command system</b>	SCIP ver. 2.0
<b>Ambient illuminance</b>	Halogen/mercury lamp: 10,000 lux or less, Fluorescent: 6,000 lux (max)
<b>Ambient temperature/humidity</b>	-10 to +50 degrees C, 85% or less (not condensing, not icing)
<b>Vibration resistance</b>	10 to 55 Hz, double amplitude 1.5 mm each 2 hour in X, Y and Z directions
<b>Impact resistance</b>	196 m/s <sup>2</sup> , each 10 time in X, Y and Z directions
<b>Weight</b>	Approx. 160 g

## Contact Hexagon | AutonomouStuff

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For the most recent details of this product visit [autonomoustuff.com](http://autonomoustuff.com)

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