

# NEW PRODUCTS

**HOKUYO**

SCANNING LASER RANGE FINDER FOR ROBOTICS

**URG-04LX**

## The Next Generation Area Detecting Sensor



Compact Design!

L:50, W:50, H70mm

Light Weight!

160g

Lower Power Consumption!

2.5W

High Accuracy!

$\pm 10\text{mm}$

High Resolution!

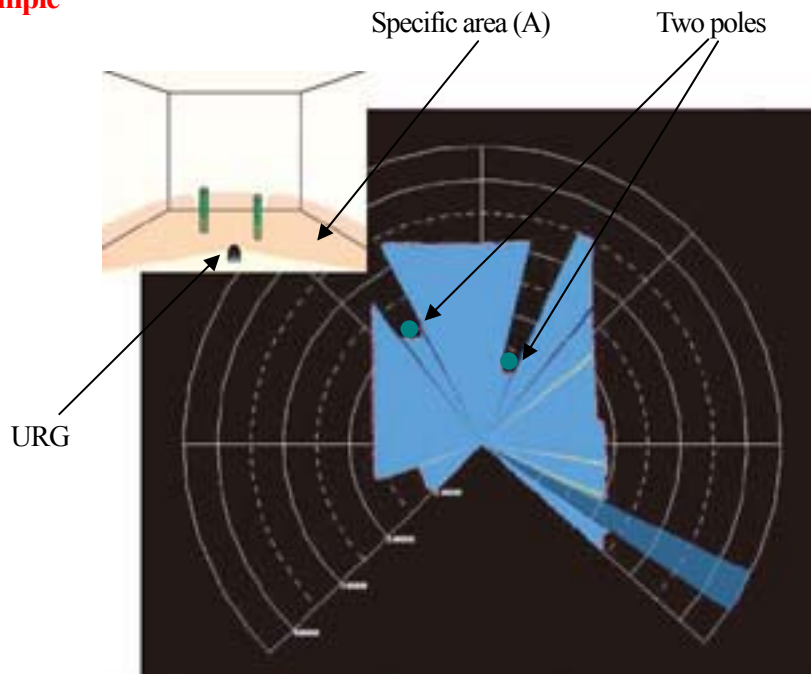
$0.36^\circ$

Wide Scanning Area

$240^\circ$

Low Cost!

### Scanning example



URG is scanning the specific area (A) and is detecting two poles and it shows distance and direction of two poles.

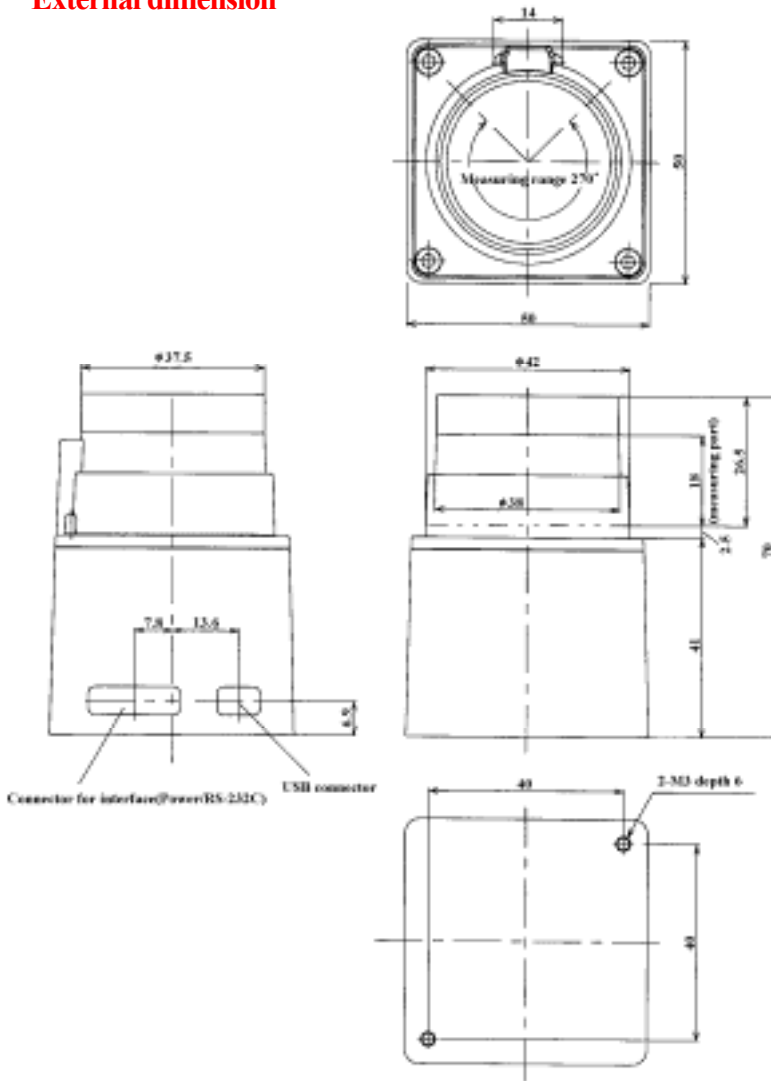
### Applications

\* Robot eyes, Security, Automatic doors, AGV(obstacle detecting sensor)

## Specifications

Products	Scanning Laser Range Finder
Model No.	URG-04LX
Light source	Semiconductor laser $\lambda=785\text{nm}$ , Laser safety class 1(IEC60825-1)
Power source	5VDC, $\pm 5\%$
Current consumption	500mA or less(rush current 800mA)
Detectable distance and objects	20mm to 4000mm, white Kent sheet 70mm x 70mm*
Accuracy	(Official 20 to 1000mm : $\pm 10\text{mm}$ , 1000 to 4000mm : $\pm 1\%$ of measurement) (White Kent sheet 70mm x 70mm)
Resolution	1mm
Scanning angle	240°
Angle resolution	Approx. 0.36° (360° /1024 steps)
Scanning time	100msec/scan
Interface	RS-232C(19.2k, 57.6k, 115.2k, 500k, 750kbps), USB : Ver.2.0 FS mode(12Mbps)
Ambient temperature/ humidity	-10 to +50°C, 85%RH or less(without dew and frost)
Protective structure	Optics : IP64, Case : IP40
Weight	Approx.160g
Material	Polycarbonate

## External dimension



## Interface

	URG-04LX	Cable colors
1	NC	
2	NC	
3	OUTPUT(Synchronous output)	Black
4	GND(9-pin, D-sub connector 5 pins)	
5	RxD(9-pin, D-sub connector 3 pins)	
6	TxD(9-pin, D-sub connector 2 pins)	
7	0V	Blue
8	5VDC	Brown

## Exemption clause

- \* This sensor is not a safety instrument/tool.
- \* This sensor is designed for indoor use only.
- \* This sensor is not for use in military application
- \* Read this specifications sheet before using.

**PHOTO SENSOR, LASER SENSOR, MICROWAVE SENSOR, COUNTER, AUTOMATIC DOOR**



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