

# NEW PRODUCTS

HOKUYO

RANGE-FINDER TYPE LASER SCANNER

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!

+/- 10mm

High Resolution!

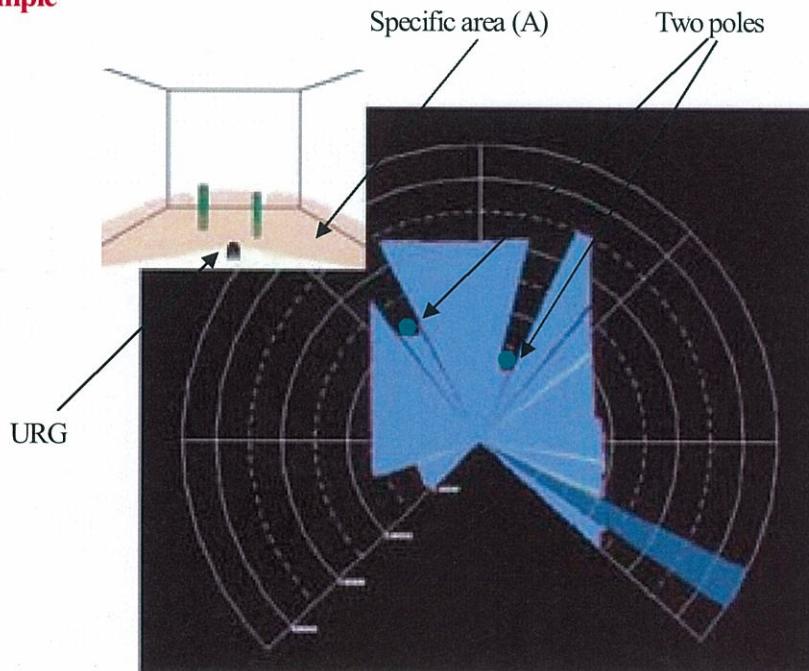
0.36 degrees

Wide Scanning Area

240 degrees

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

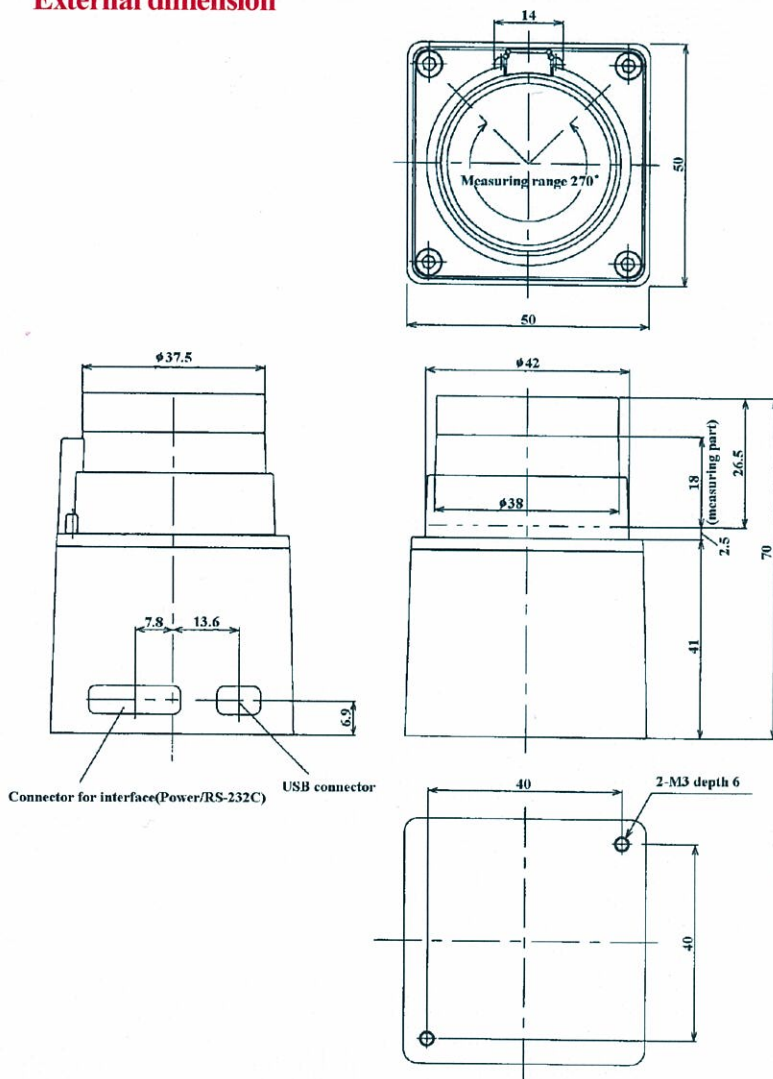
\* Robot eyes, Security, Automatic doors, AGV(obstacle detecting sensor)



## Specifications

Products	Range-finder type laser scanner
Model No.	URG-04LX
Light source	Semiconductor laser $\lambda=785\text{nm}$ , Laser safety class 1(IEC60825-1)
Power source	5VDC, +/- 5%
Current consumption	500mA or less(800mA just after putting power source in)
Detectable distance and objects	0.02 to 4m, white kent paper with 70mm x 70mm*
Accuracy	(Official 0.02 to 1m : +/- 10mm, 1 to 4m : 1% of distance)(Detecting object is white kent paper with 70mm x 70mm)
Resolution	1mm
Scanning angle	240 degrees
Angle resolution	Approx. 0.36 degrees(360 degrees/1024 partition)
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 degrees C, 85%RH or less(Not condensing, not icing)
Protective structure	IP64 for lens surface, IP40 for case
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**



**HOKUYO AUTOMATIC CO.,LTD.**  
 1-10-9 Niitaka, Yodogawa-ku, Osaka  
 532-0033, Japan  
 Tel(06)6394-2102 Fax(06)6394-2339  
<http://www.hokuyo-aut.jp>  
 E-mail:info@hokuyo-aut.jp