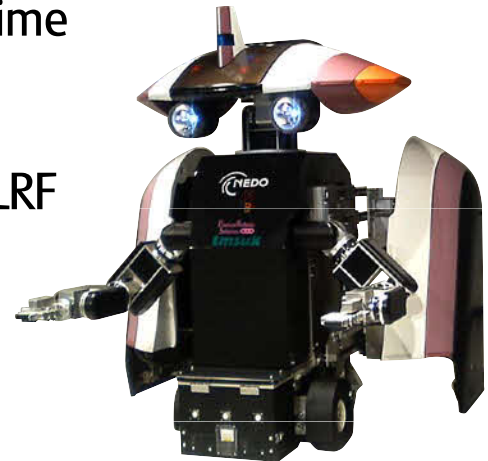


URG-04LX-UG01

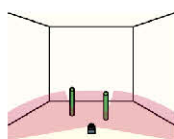
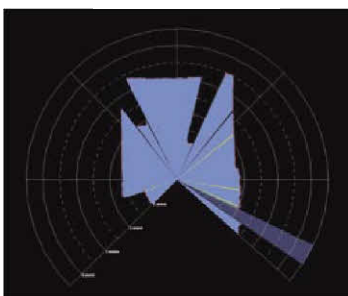
Low Cost Compact LRF from **HOKUYO**

Laser Range Finders (LRF) provide continuous time stamped mapping information.

The URG-04LX-UG01 is the smallest & lightest LRF available. With a single USB connection it is ideally suited to mobile robotic applications





tnsuk Co., Ltd. - NEDO
Outdoor security robot MuRo



Detection performance
in the indoor environ-
ment with the existence
of two poles.

- 5.6 metres range
- 240° scan 0.35° resolution
- 10 scans per second
- Compact: 50 x 50 x 70mm
- Lightweight 160g
- Low Power 5V DC, 2.5W

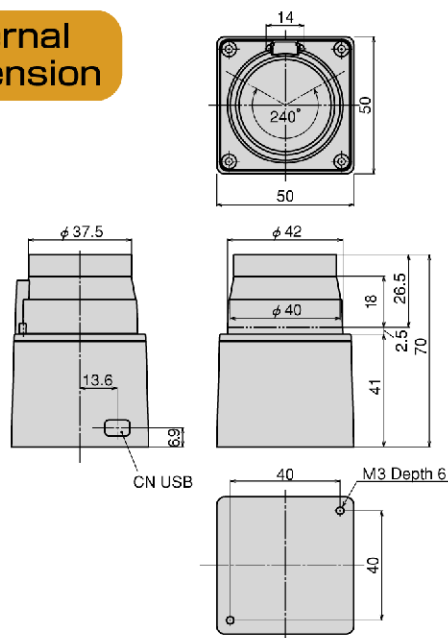
Specifications

Product name	Scanning laser range finder (SOKUIKI sensor)	
Model No.	URG-04LX-UG01 (Simple-URG)	URG-04LX (Classic-URG)
Appearance		
Power source	5VDC \pm 5% (USB Bus power)	5VDC \pm 5%
Light source	Semiconductor laser diode(λ =785nm), Laser safety class 1	
Measuring area	20 to 5,600mm (white paper with 70mm ²), 240°	
Accuracy	60 to 1,000mm : \pm 30mm, 1,000~4,095mm : \pm 3% of measurement	60 to 1,000mm : \pm 10mm, 1,000 to 4,095mm : \pm 1% of measurement
Angular resolution	Step angle : approx. 0.36° (360° /1,024 steps)	
Scan time	100ms/scan	
Noise	25dB or less	
Interface	USB2.0/1.1 [Mini B] (Full Speed)	USB2.0/1.1 [Mini B] (Full Speed), RS-232C*1
Synchronous output	—————	NPN open-collector
Command System	SCIP Ver.2.0	SCIP Ver.1.1 or Ver.2.0
Ambient illuminance*2	Halogen/mercury lamp: 10,000Lx or less, Florescent: 6000 Lx (Max)	
Ambient temperature/humidity	-10 to +50 degrees C, 85% or less (Not condensing, not icing)	
Vibration resistance	10 to 55Hz, double amplitude 1.5mm Each 2 hour in X, Y and Z directions	
Impact resistance	196m/s ² , Each 10 time in X, Y and Z directions	
Weight	Approx. 160g	
Cable	—————	Power cable including RS-232C

*1. Baud rate: 19.2k,57.6k,250k,750k.

*2. These products are only for indoor applications. Strong sunlight may cause error output.

External dimension



Connection

●Cable URG-C001



* Current exceeds 500mA during start up.

Please use provided cable and connect to two independent USB ports which can supply 500mA

⚠ PC's motherboard could be broken if the sensor is connected to USB ports which are not able to supply 500mA x 2

⚠ The GND lines connected to the USB are all shorted together