

## Scanning Laser Range Finder for Robotics "SOKUIKI Sensor"

## **UBG-04LX-F01**



- 28ms per scan -- faster than URG-04LX.
- The most suitable environment detection sensor for intelligent robots.
- Compact Body: W60 x D75 x H60mm
- Light Weight: 260 g
- Low Power: 4.5 Watts
- Detecting Angle: 240°
- Accuracy: ±10 mm\*
- Resolution: 0.36°

## **URG-04LX**

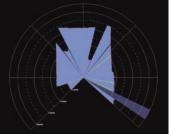
- Low power consumption resulting longer battery life.
- More design freedom with supercompact size.
- The most suitable environment detection sensor for intelligent robots.
- Super-Compact Body
   Optical window: Ø42 x H26
   Product size: 50 x 50 x 70 mm
- Super-Light Weight: 160 g
- Low Power: 2.5 Watts
  Detecting Angle: 240°
  Accuracy: ±10 mm\*
- Resolution: 0.36°

\*1% of distance for more than 1m.





Detection performance in the indoor environment with the existence of two poles.



<sup>\*1%</sup> of distance for more than 1m.



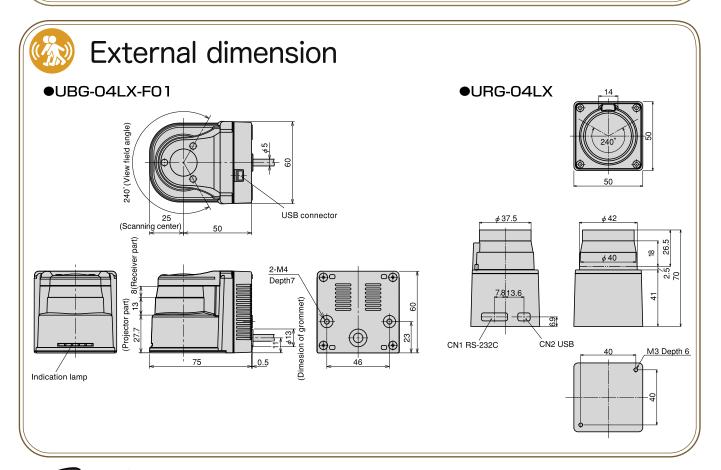


## Specifications

Product name	Scanning Laser Range Finder "SOKUIKI Sensor"	
Model	UBG-04LX-F01 (Rapid-URG)	URG-04LX
Power source	12V DC ±10%	5V DC ±5%
Detection Range	20∼5,600mm White Square Kent Sheet 80mm 240°	20~5,600mm White Square Kent Sheet 70mm 240°
Accuracy	Nominal Range 60~1,000mm : ±10mm, 1,000~4,095mm : 1% of Distance	
Angular resolution	0.36° (360° /1,024 steps)	
Light source	Semiconductor laser diode ( $\lambda$ =785nm), Laser safety Class 1 (FDA)	
Scan time	28msec/scan	100msec/scan
Sound level	Less than 25dB	
Interface	USB2.0 (Full Speed), RS-232C(19.2k, 57.6k, 115.2k, 250k, 500k, 750kbps)	
Synchronous output	NPN open collector	
Command system	Exclusively designed command SCIP Ver.2.0	Exclusively designed command SCIP Ver.1.1/2.0*1
Ambient illuminance *2	Halogen/mercury lamp :10,000Lx or less, Florescent : 6000 Lx (Max)	
Ambient (Temperature/Humidity)	- 10∼+50℃, Less than 85%RH (without dew and frost)	
Vibration Resistance	Double amplitude 1.5mm 10 $\sim$ 55Hz, 2 hours each in X, Y and Z direction	
Impact Resistance	196 m/s², 10 times each in X, Y and Z direction	
Weight	Approx. 260g (with cable attachment)	Approx.160g

<sup>\*1.</sup> Default setting is Ver.1.1

<sup>\*2</sup> These products are only for indoor applications. Strong sunlight may cause error output.





 $\bigstar$ All information in this catalog is subject to change without notice.

