

The Yocto-RangeFinder is a USB distance sensor (range finder). It works by measuring the time-of-flight of an infra-red laser beam that reflects on the target.

Be aware that this small and relatively cheap module, using a quite harmless laser, does not pretend to be a true telemeter that you could use to measure distances with a millimeter accuracy. Its accuracy is limited, and the detection range depends on the environment. You can find tables describing the expected accuracy depending on the surrounding conditions in the section of the documentation entitled Working principles and limitations.

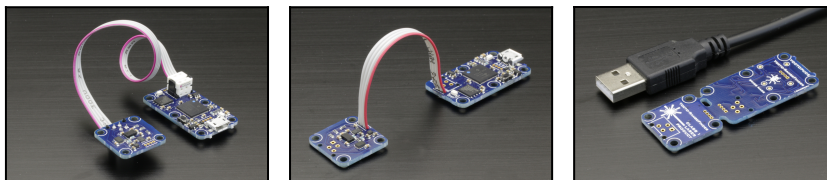
Measurements can be read directly via USB or stored on the device internal flash for later retrieval when connected again by USB.

This device has been designed so that the sensor itself can be moved away from the USB part by a few meters: simply split the board into two parts and use a 4-wire cable between the two parts.

Specifications

Product ID	YRNGFND1
USB connector	micro-B
Width	20 mm
Length	58 mm
Weight	5 g
Chipset	VL53L0X
Max accuracy	3 %
Max distance	2 m (-6%)
Field of view (FOV)	25 °
Wavelength	940 nm
IEC protection class	class III
Normal operating temperature	5...40 °C
Extended operating temperature [‡]	-20...70 °C
RoHS compliance	RoHS III (2011/65/UE+2015/863)
USB Vendor ID	0x24E0
USB Device ID	0x006F
Suggested enclosure	YoctoBox-Long-Thin-Black-RF
Harmonized tariff code	8542.3190
Made in	Switzerland

[‡] The extended temperature range is defined based on components specifications and has been tested during a limited duration (1h). When using the device in harsh environments for a long period of time, we strongly advise to run extensive tests before going to production.



For more information: www.yoctopuce.com/EN/products/yocto-rangefinder