

The Yocto-Proximity is a USB proximity sensor. It uses a pretty simple principle: the sensor part emits pulsed infrared light and measures reflection on nearby objects. Thanks to filters, ambient infrared light has very little effect on it, as long as the detector is not saturated. Beware, the sensor performance depends directly on the target color: a white object can be detected up to ~10cm, but a black and mat object can be detected up to ~2cm only.

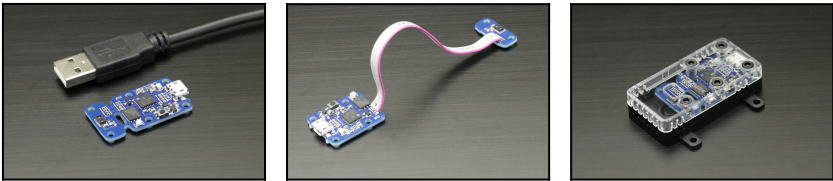
The Yocto-Proximity can also give estimation of visible and infrared ambient light. Measurements can be read directly via USB or stored on the device internal flash for later retrieval when connected again by USB.

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 solder a 4-wire cable on the designated pads.

Specifications

Product ID	YPROXIM1
USB connector	micro-B
Width	20 mm
Length	35.5 mm
Weight	3 g
Chipset	RPR-0521RS
Refresh rate	10 Hz
Measuring range	<>10cm
IEC protection class	class III
Technology	Pulsed infrared
Normal operating temperature	5...40 °C
Extended operating temperature [‡]	-25...85 °C
RoHS compliance	RoHS III (2011/65/UE+2015/863)
USB Vendor ID	0x24E0
USB Device ID	0x0071
Suggested enclosure	YoctoBox-Short-Thin-Black-Prox
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-proximity