



**VL53L1X Time of Flight (ToF)
Sensor Breakout
PIM373**

An all-singing, all-dancing time of flight distance sensor that uses PEW PEW LASERS (low-powered ones), our VL53L1X breakout is easy to use with Raspberry Pi or Arduino alike!

These low-power-laser-based time of flight sensors have great accuracy and sampling frequency, and this particular sensor has a wide range of detection, from 4cm to 4 metres.

Use it as a proximity sensor, for presence detection, or as a laser tape measure! The speed, accuracy, and range, make this sensor ideal for collision-avoidance on robots.

It's also compatible with our fancy new Breakout Garden, where using breakouts is as easy just popping it into one of the six slots and starting to grow your project, create, and code.

Features

- VL53L1X Time of Flight (ToF) sensor (datasheet)
- 4-400cm range (27° field of view)
- Up to 50Hz ranging frequency
- +/- 25mm accuracy (+/- 20mm in the dark)
- I2C interface (address 0x29)
- 3.3V or 5V compatible
- Reverse polarity protection
- Compatible with all models of Raspberry Pi, and Arduino
- Python library

Kit includes

- VL53L1X breakout
- 1x5 male header
- 1x5 female right-angle header

We've designed this breakout board so that you can solder on the piece of right-angle female header and pop it straight onto the bottom left 5 pins on your Raspberry Pi's GPIO header (pins 1, 3, 5, 7, 9).

Software

Our Python library makes it straightforward to use your time of flight sensor, providing methods for short, medium, and long range, and returning distances in mm. We've also included a couple of examples that graph distance sensed, and set a threshold distance at which events can be triggered.

Our software does not support Raspbian Wheezy.

Notes

Dimensions: 19x19x3.2mm (LxWxH).

