

## P-NUCLEO-53L0A1 pack PC graphical user interface (GUI)

Data brief



### Description

STSW-IMG006 is a personal computer graphical user interface for Windows 7, Windows 8 and Windows 10.

The GUI allows to control through an STM32 NUCLEO board the X-NUCLEO-53L0A1 expansion board, and up to two VL53L0X satellites connected onto the X-NUCLEO-53L0A1.

It can be used with the P-NUCLEO-53L0A1, which consists of the X-NUCLEO-53L0A1 expansion board, connected to the STM32F401RE. Nucleo board.

### Features

- Live display of:
  - Ranging distance in centimeters
  - Signal strength
- Three standard modes selectable
  - Long range
  - High speed
  - High accuracy
- Calibration procedure
- Maximum and minimum ranging threshold controls
- Data logs output
- I2C transaction recording

The VL53L0X is the latest product based on ST's patented FlightSense™ technology. This is a ground-breaking technology allowing absolute distance to be measured independent of target reflectance. Instead of estimating the distance by measuring the amount of light reflected back from the object (which is significantly influenced by color and surface), the VL53L0X precisely measures the time the light takes to travel to the nearest object and reflect back to the sensor (Time-of-Flight).

To install the PC GUI, refer to the following software installation user manual:

“UM2046 Getting started with Time-of-Flight laser ranging sensor software expansion for STM32Cube”.

## Revision history

**Table 1. Document revision history**

Date	Revision	Changes
13-May-2016	1	Initial release.

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