

## LightRanger click



PID: MIKROE-1897

RS Product Code: [136-0734](#)

LightRanger click is a proximity sensor carrying ST's VL6180X IC. This chip is based on ST's patented Flight Sense technology: the sensor — consisting of an IR emitter, ambient light sensor, and range sensor — calculates distance by measuring the time it takes for a photon to travel to the nearest object and back (Time of Flight). In contrast to conventional IR proximity sensors which derive distance by measuring the amount of light reflected, VL6180X works with all objects, regardless of their colour or reflectivity. LightRanger click communicates with the target board MCU through mikroBUS I2C pins (SCL, SDA), with additional interrupt (INT) and enable (EN, in place of default mikroBUS CS pin).

### Specification

Product Type	Proximity
Applications	Proximity sensing for portable touchscreen devices (smartphones, tablets, gaming devices); Distance measurement in other applications. Also works as an ambient light sensor
On-board modules	ST's VL6180X IC
Key Features	Sensor consists of IR emitter, ambient light sensor and range sensor. Measures distance by calculating photon time of flight
Key Benefits	Equally sensitive to all objects regardless of colour and reflectivity
Interface	I2C
Power Supply	3.3V or 5V
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Weight	30g

## Downloads

[LightRanger click - Example](#)

[LightRanger click - User Manual](#)