

# Laser Ranging Sensor UART

SEN0491

## Product Overview

11/03/2022

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

The SEN0491 Laser Ranging Sensor UART from DFRobot can detect objects in the 4~400cm range with  $\pm 2$ cm accuracy. With three measurement modes supported, it is well applicable to various detection scenarios like security gate detection, access control systems, security alarm devices, smart trash cans, smart cars, or robots for obstacle avoidance. The sensor metal black shell adopts a threaded barrel design, and its probe comes with an optical cover. The integrated design makes the product able to filter optical interference, waterproof and shockproof.



The DFRobot SEN0491 uses an invisible laser, and there is a voltage regulator circuit inside the module. By featuring a stable performance and UART output, the sensor has an alarm output line that will be triggered to output low steadily when the measurement distance is smaller than the user-set threshold.

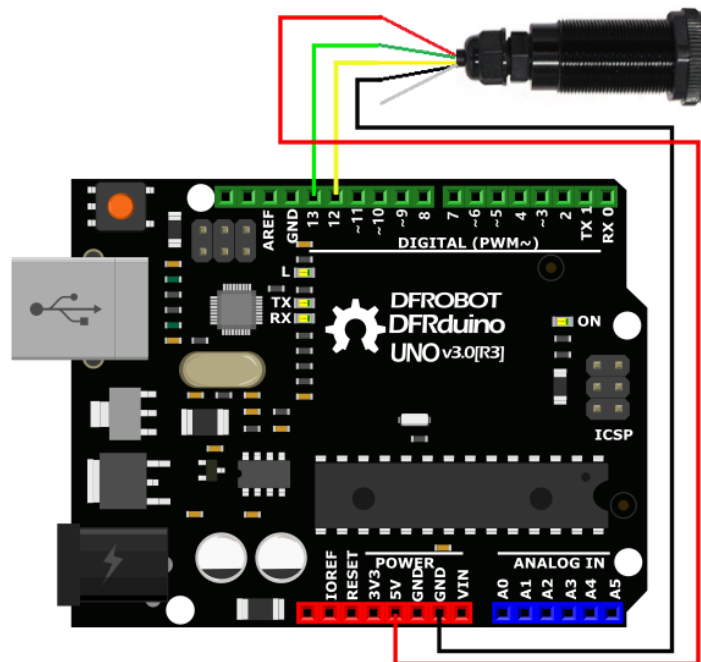
## Specifications

- 6-36V power supply voltage
- 4-400cm measuring distance
- $\pm 2$ cm measurement accuracy
- 39.6° emitting angle
- 36.5° receiving angle
- < 38mA working current
- UART communication interface
- IP67 waterproof rating
- 2400-921600 optional 115200 (default) baud rate
- 20Hz (default) frequency
- -20 to +70°C working temperature
- 21.5mm x 21mm x 8mm / 0.85 x 0.83 x 0.31 inch size

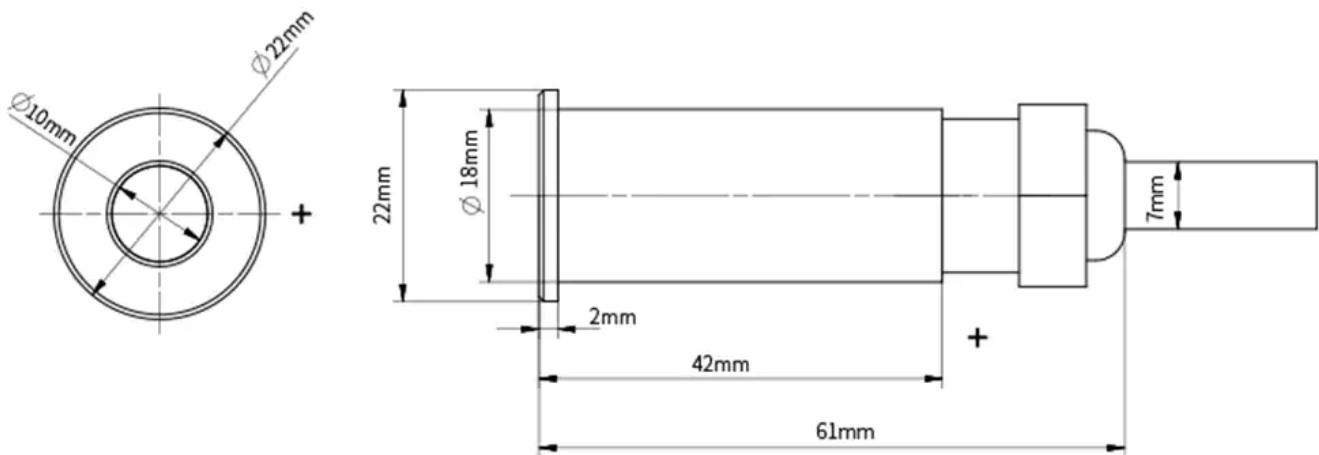
## Features

- Laser ranging
- Wide voltage of 6-36V
- UART output
- Made with metal, waterproof and shockproof

## Typical Connections



## Dimensions



## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-sen0491-laser-ranging-sensor-uart/>