

# Laser Ranging Sensor RS485 (4m)

SEN0492

## Product Overview

01-20-2023

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

## Description

The Laser Ranging Sensor RS485 from DFRobot is used to detect objects in 4cm to 400cm with  $\pm 2$ cm accuracy. The sensor metal black shell adopts a threaded barrel design, and its probe comes with an optical cover. The integrated design makes the product capable of effectively filtering optical interference, waterproof and shockproof. The SEN0492 sensor uses an invisible laser, and there is a voltage regulator circuit inside the module that operates at the 5V-36V range and employs an industrial 485 chip. This chip supports Modbus-RTU protocol and works well with industrial 485 devices. The sensor has three measurement modes and is well applicable to various detection scenarios. This includes security gate detection, access control systems, security alarm devices, smart trash cans, smart cars, or robots for obstacle avoidance.



## Features

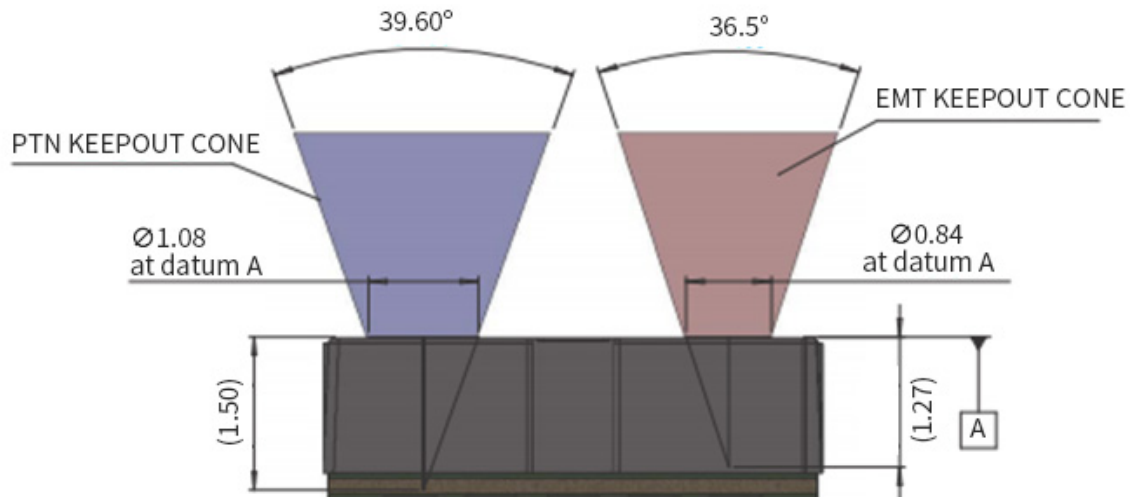
- Laser ranging
- Wide voltage of 5V - 36V
- RS485 output
- Made with metal, waterproof and shockproof

## Specifications

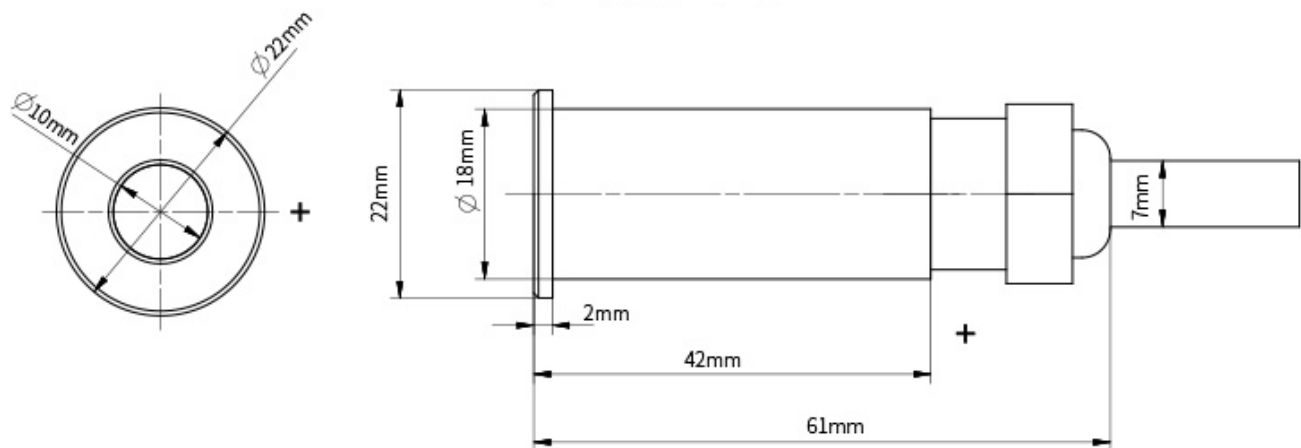
- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• Power supply voltage:<ul style="list-style-type: none"><li>• 6V - 36V</li></ul></li><li>• Measuring distance:<ul style="list-style-type: none"><li>• 4cm - 400cm</li></ul></li><li>• <math>\pm 2</math>m measurement accuracy</li><li>• 39.6° emitting angle</li><li>• 36.5° receiving angle</li><li>• &lt;38mA working current</li><li>• RS485 communication interface</li><li>• Modbus-RTU communication protocol</li><li>• IP67 waterproof rating</li></ul> | <ul style="list-style-type: none"><li>• Baud Rate:<ul style="list-style-type: none"><li>• 2400-921600 optional 115200 (default)</li></ul></li><li>• 20Hz frequency (default)</li><li>• -20°C to 70°C working temperature</li><li>• Size:<ul style="list-style-type: none"><li>• 21.5mm × 21mm × 8mm /<br/>0.85" × 0.83" × 0.31"</li></ul></li></ul> |
|--|---|

## Overview

### Emission angle and Receiving angle



## Mechanical Drawing



## Mouser Part Number

[View Part](#)

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