

# Fermion Environmental Sensor (Breakout)

SEN0500

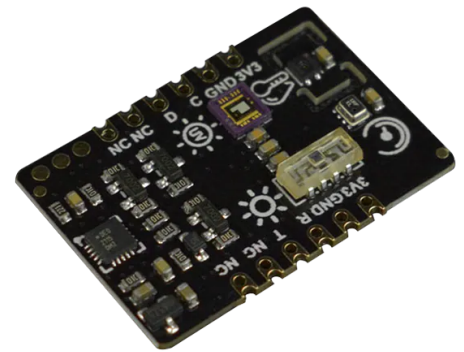
## Product Overview

02-23-2023

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

## Description

DFRobot Fermion Environmental Sensor (Breakout) is capable of measuring five types of environmental parameters. This device includes the SHTC3 temperature and humidity, VEML7700 ambient light, BMP280 barometric pressure, and ML8511 UV sensors. The Fermion environmental sensor features an MCU processing chip onboard that converts the sensor's raw data into values with the standard unit. This sensor supports two communication methods, UART and I<sup>2</sup>C. Typical applications include home indoor and outdoor environment detection systems and environmental monitoring work.



## Features

- Mini size can be directly soldered onto your PCB
- The highly integrated module can test a variety of data at the same time (temperature, humidity, barometric pressure, altitude, ultraviolet intensity, and ambient light intensity)
- Supports two communication methods, UART and I<sup>2</sup>C
- Reasonable layout and high precision

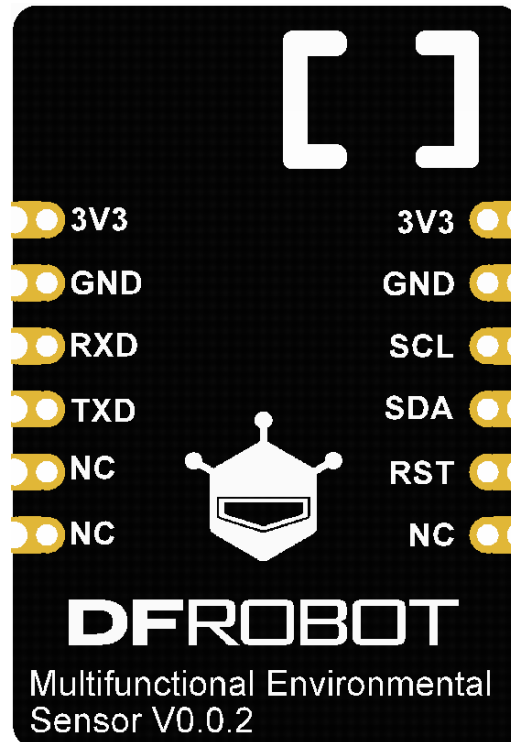
## Specifications

- 3.3V<sub>DC</sub> working voltage
- 35mA working current
- -20°C to 70°C working temperature range
- 30mm x 20.5mm size

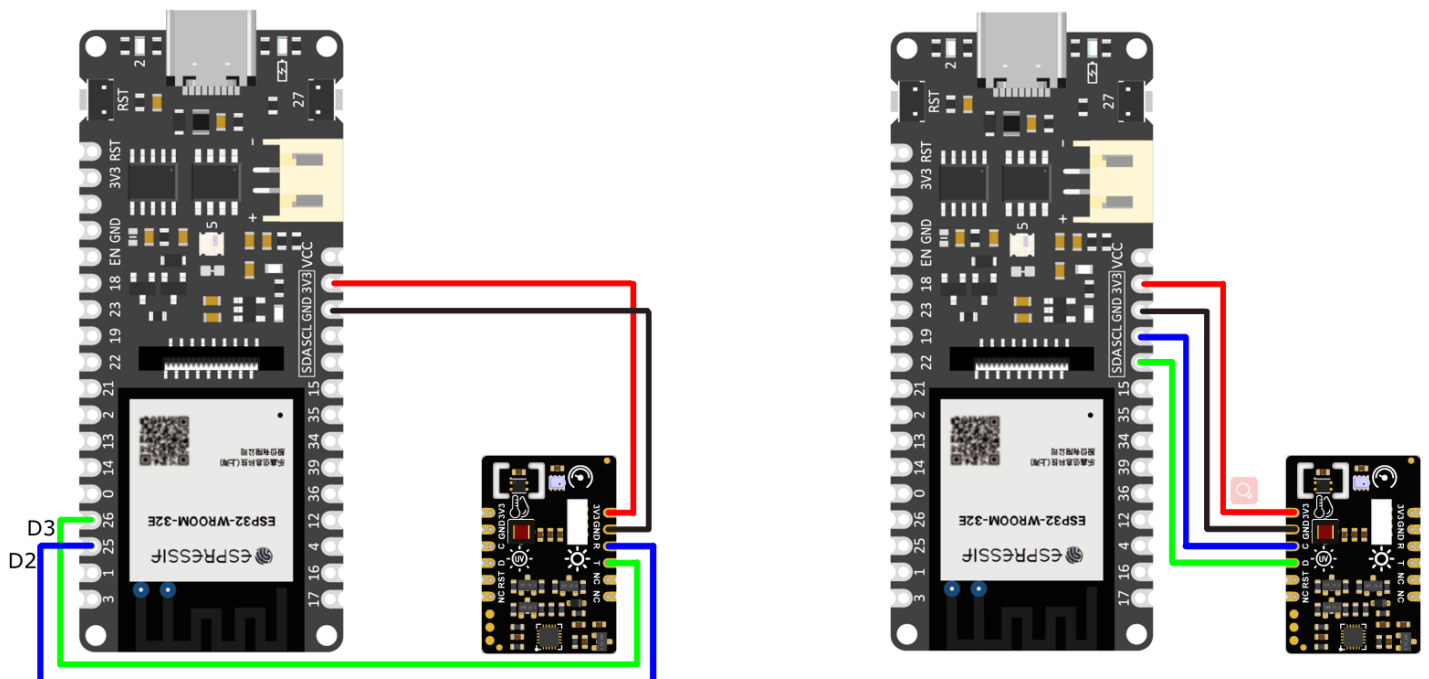
## Applications

- Home indoor and outdoor environment detection system
- Environmental monitoring work

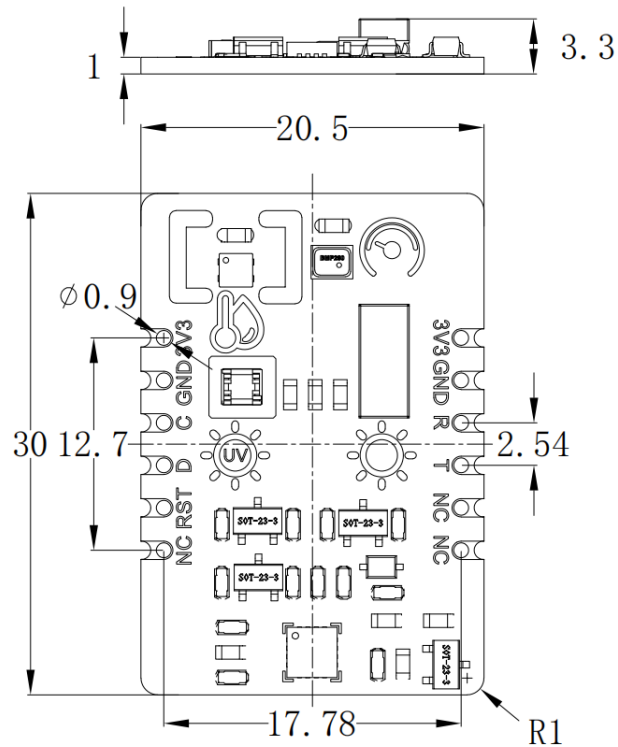
## Board Overview



## Connection for UART and I<sup>2</sup>C



## Dimensions (mm)



## Mouser Part Number

[View Part](#)

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