

# Serial 6-Axis Accelerometer for Arduino

SEN0386

## Product Overview

01/27/2023

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

## Description

DFRobot Serial 6-Axis Accelerometer for Arduino integrates high-precision gyroscopes, accelerometer, and high-performance microprocessors. This helps in solving Kalman filter algorithms that aim to quickly solve the current real-time movement of the module attitude. Measurement noise is reduced, and accuracy is improved with the use of advanced digital filtering technology. The serial 6-axis accelerometer module comes with a built-in gesture solver that can calculate accurate attitude in dynamic environment combining with dynamic Kalman filter algorithm. The static measurement accuracy is up to 0.05 degree (dynamic 0.1) with high stability. This module features a built-in stabilizer circuit.

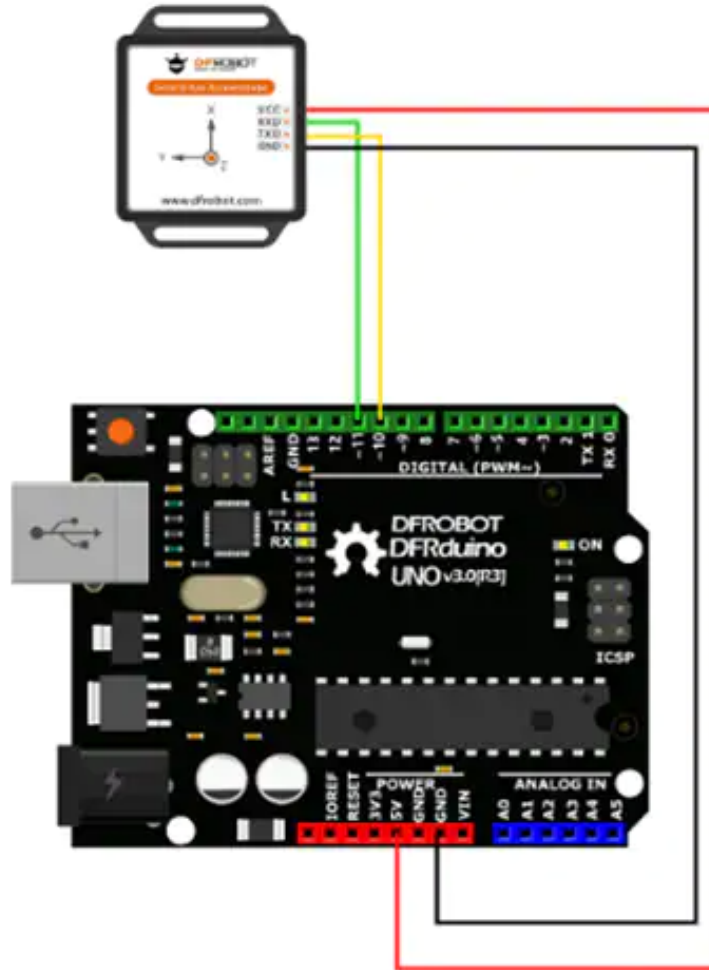


The serial 6-axis accelerometer module should be operated at 3.3V to 5V and the pin level is compatible with 3.3V/5V embedded systems. The 6-axis accelerator module employs TTL interface connection and supports adjustable 2400bps to 921600bps baud rate and 0.1Hz~200Hz data output.

## Specifications

- 3.3V to 5V voltage range
- <40mA current
- 51.3mm x 36mm x 10mm
- Measuring dimension:
  - Acceleration: 3D
  - Angular velocity: 3D
  - Attitude angle: 3D
- Range:
  - Acceleration:  $\pm 2/4/8/16g$ (optional)
  - Angular velocity:  $\pm 250/500/1000/2000^\circ/s$  (Optional)
  - Attitude angle:  $\pm 180^\circ$

## Connection Diagram



## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-sen0386-accelerometer/>