



Grove - 6-Axis Accelerometer&Gyroscope

SKU 105020012

Grove - 6-Axis Accelerometer&Gyroscope is a cost-effective Grove sensor integrated with a 3-axis digital accelerometer and a 3-axis digital gyroscope.

With a serious low power consumption digital chip LSM6DS3 and power supply regulator inside, it features high sensitivity, green tech and low noise interference. It can be configured to different sensitivity levels of acceleration and different angular rate measurement range. Provided with detailed SDK, it can make the prototyping process quicker and easier.

This product can be used for different applications for tilt, motion, and tap sensing, such as robotics, IoT devices and consumer electronic devices.

Features

- Grove interfaced and cost-effective.
- Digital-output for 6 DOF motion data.
- $\pm 2/\pm 4/\pm 8/\pm 16$ g full scale leaner acceleration sensing range for various environment.
- $\pm 125, \pm 245, \pm 500, \pm 1000, \pm 2000$ degree per seconds(dps) for angular rate measurement range make it versatile.
- Detailed SDK for easier programming.
- Regulated power supply for reliable data to be collected.
- Programmed interrupts for different event.
- 8 kbyte data buffering.

Specification

Analog supply voltage: 5V/3.3V(DC)

Power consumption: 0.9 mA in combo normal mode and 1.25 mA in combo high-performance mode up to 1.6 kHz

Linear acceleration measurement range $\pm 2/\pm 4/\pm 8/\pm 16$ g full scale (typical value)

Angular rate measurement range $\pm 125, \pm 245, \pm 500, \pm 1000, \pm 2000$ dps (typical value)

Linear acceleration sensitivity 0.061(FS = ± 2), 0.122(FS = ± 4), 0.244(FS = ± 8), 0.488(FS = ± 16) mg/LSB

Angular rate sensitivity 4.375(FS = ± 125), 8.75(FS = ± 245), 17.50(FS = ± 500), 35(FS = ± 1000), 70(FS = ± 2000)

Platform Seeeduno/Arduino Rasberry Pi LinkIt One Beaglebone

Supported status Supported Supported Supported Supported

Notes If no version number is not represented for a specific platform, it means this product support all versions within this platform. But you will need additional corresponding Grove shield board such as [Grove - Base shield v2](#).

Technical details

Dimensions	140mm x85mm x10.3mm
Weight	G.W 8g
Battery	Exclude

Part List

Grove - 6-Axis Accelerometer&Gyroscope	1
Grove - cable	1

ECCN/HTS

ECCN	7A994
------	-------

