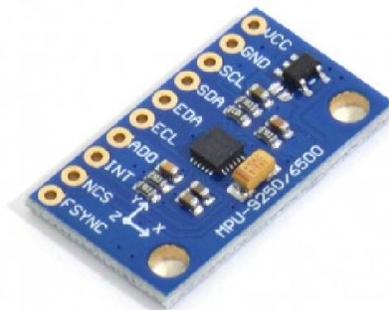


# HiLetgo MPU9250/6500 9-Axis 9 DOF 16 Bit Gyroscope Acceleration Magnetic Sensor 9-Axis Attitude +Gyro+Accelerator+Magnetometer Sensor Module IIC/SPI for Arduino GY-9250



## Product description

### Instruction :

This module features the MPU-9250, which is a multi-chip module (MCM) consisting of two dies integrated into a single QFN package. One die houses the 3-Axis gyroscope and the 3-Axis accelerometer. The other die houses the AK8963 3-Axis magnetometer. Hence, the MPU-9250 is a 9-axis MotionTracking device that combines a 3-axis gyroscope, 3-axis accelerometer, 3-axis magnetometer, and a Digital Motion Processor (DMP). The MPU-9250 also features an embedded temperature sensor. This module includes pull-up resistors on the SDA, SCL, and nCS lines, pull-down resistors on the FSYNC and ADO lines, and an on-board 3.3V voltage regulator allowing you to power the module from 5V sources such as an Arduino. If you desire to power the module from 3.3V you can bridge the solder jumper next to the voltage regulator to bypass the regulator.

**Specifications:**

- \* On-board pull-up resistors on SDA, SCL, and nCS
- \* On-board pull-down resistors on FSYNC and AD0
- \* 3-Axis Accelerometer
- \* Range: up to  $\pm 16$  g
- \* Sensitivity: up to 16,384 LSB/g
- \* 3-Axis Gyroscope
- \* Range: up to  $\pm 2000$  deg/sec
- \* Sensitivity: up to 131 LSB/deg/sec
- \* 3-Axis Magnetometer
- \* Range:  $\pm 4800$   $\mu$ T
- \* Sensitivity: 0.6  $\mu$ T/LSB
- \* Supply Voltage: 4.4 to 6.5 V or 3.3V if you solder the solder jumper near the on-board voltage regulator
- \* Interface: I2C
- \* 2C Address: 0x68 by default, 0x69 if AD0 is pulled high
- \* Board Dimensions: 25.5mm (1.004") long x 15.4mm (0.606") wide, 3mm (0.118") inside diameter of mounting holes
- \* Weight: 2.72g (0.096oz)