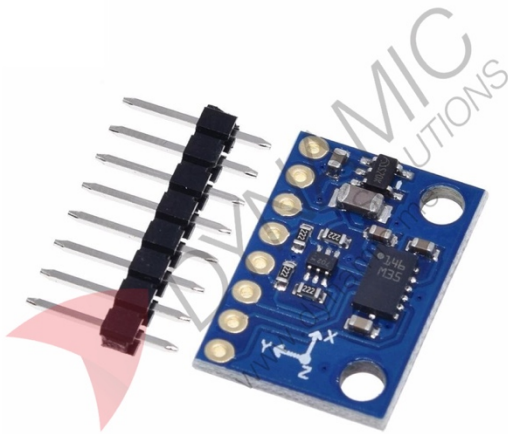


# GY-511 LSM303DLHC 3 Axis E-Compass Accelerometer Magnetometer Sensor

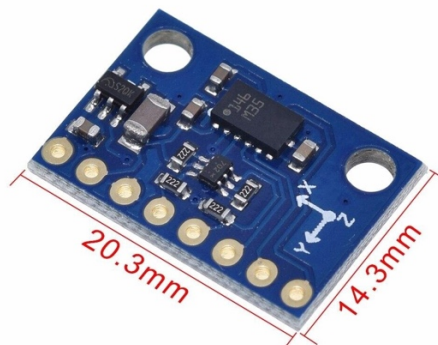


## **Features:**

The GY-511 module is designed to offer combined motion and magnetic field sensing using the LSM303DLHC chip. This chip integrates a 3-axis linear accelerometer and a 3-axis magnetometer, each with user-selectable full-scale ranges. Communicating via standard I2C, the module supports a variety of applications including map rotation, orientation detection, pedometers, and power-saving in portable electronics. Embedded functions include FIFO buffering, 6D/4D orientation, free-fall/motion interrupts, and an internal temperature sensor. The compact board also provides regulated 3.3V output for external use.

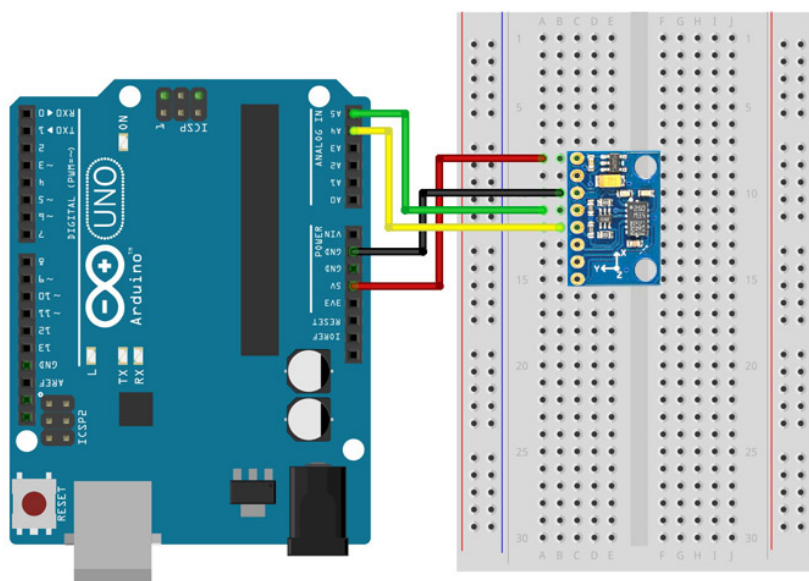
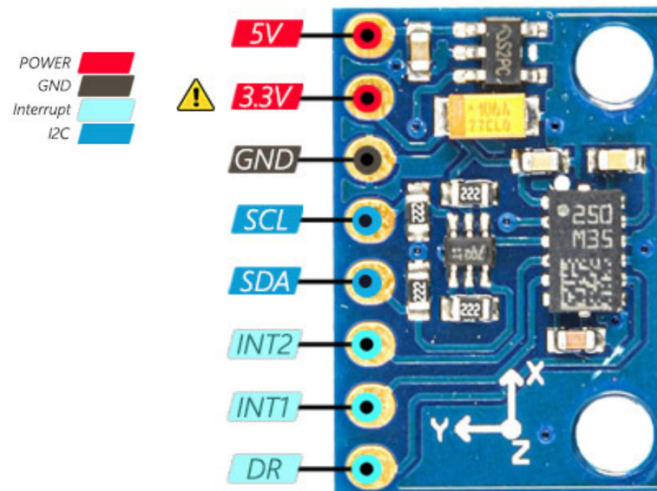
Specifications	
Model	GY-511
Sensor Chip	LSM303DLHC
Axes	3-Axis Accelerometer + 3-Axis Magnetometer
Acceleration Range	$\pm 2g$ / $\pm 4g$ / $\pm 8g$ / $\pm 16g$ (selectable)
Magnetic Field Range	$\pm 1.3$ to $\pm 8.1$ Gauss
Output Resolution	16-bit
Communication	I2C (SCL/SDA)
Operating Voltage	3V – 5V DC
Regulator Output	3.3V @ 100mA max
Built-in Features	FIFO, Orientation Detection, Interrupts, Temp Sensor
Applications	Compass, Motion Detection, Free-Fall Sensing, Power-Saving
Dimensions	14.3mm x 20.3mm

## **Product Dimensions:**



## Pinouts:

Pin Name	Type	Description
VIN	Power	Power input (3.3V to 5V)
3V	Output	3.3V regulator output, up to 100mA
GND	Power	Ground
SCL	Input	I2C Clock Line
SDA	Input	I2C Data Line
INT1	Output	Programmable Interrupt 1
INT2	Output	Programmable Interrupt 2
DRDY	Output	Data Ready Signal



**Product Pictures:**

