

# QMC5883L GY-271 COMPASS



Technical Manual Rev 1r0

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**3-Axis Magnetic Sensor QMC5883L** is a multi-chip 3-axis magnetic sensor. Targeted for high precision applications such as compassing, navigation and gaming in drone, robot, mobile and personal hand-held devices. Compatible in all gizduino boards.

## Features:

- 3- Axis Magneto-Resistive Sensors in a 3x3x0.8 mm<sup>3</sup> Land Grid Array Package
- Operate over an extended temperature range of -40 degC to +85 degC.
- 16 Bit ADC with Low Noise AMR sensors
- 5 Milli-Gauss Field Resolution
- Wide Magnetic Field Range ( $\pm 8$  Gauss)

## General Specifications:

**Wide range operation voltage:** 2.16V to 3.6V

**Low Power Consumption:** 75uA

**On Board IC:** QMC5883L

**Heading Accuracy:** Enables 1 to 2 degrees

**Data Output rate:** Maximum 200Hz

**PCB Dimension:** 14mm x 13mm

### Wire Connections:

gizDuino to Magnetic sensor

+5V -----> VCC

GND -----> GND

SCL/D24-----> SCL\*

SDA/D25-----> SDA\*

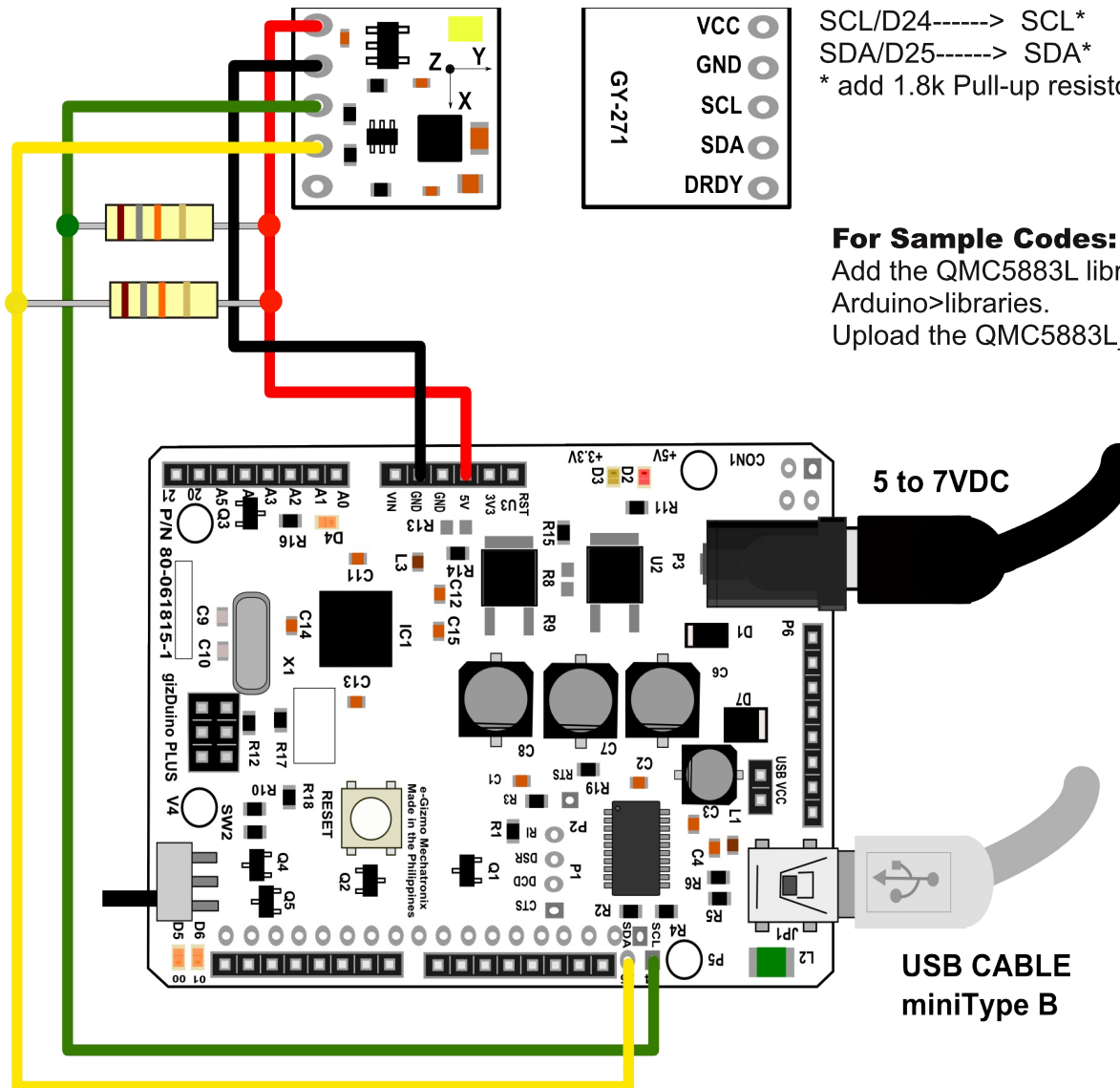
\* add 1.8k Pull-up resistors

### For Sample Codes:

Add the QMC5883L library to

Arduino>libraries.

Upload the QMC5883L\_Compass.ino



gizDuino PLUS w/ ATmega644P

Figure 1: Sample connections with gizduino PLUS