

# **Linear Magnetic Hall Sensor**

### **DESCRIPTION:**

This module is analog hall sensor module, it can both output an analog and digital voltage at the signal pin of this module. This module is different from hall magnetic sensor which just output digital signal, like a magnetic switch.



# **Specification:**

- Operation voltage: 5V
- 4Pin
- Size:45\*15.5mm
- Weight:2.943g

#### **PIN CONFIGURATION:**

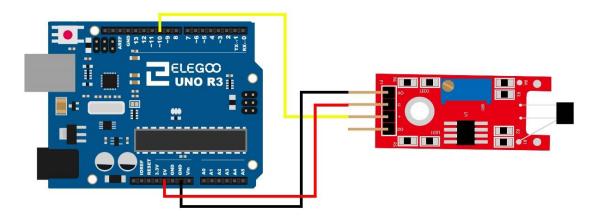
- $1 \sqrt \ ^{\prime \prime} A0 ^{\prime \prime} :$  Analog output pin, real-time output voltage signal
- 2、"G": Ground 3、"+": Power
- 4、"D0": Digital signal pin



## Example:

In this example, If no magnetic field is present, the signal line of the sensor is HIGH (3.5 V). If a magnetic field is presented to the sensor, the signal line goes LOW, at the same time the LED on the sensor lights up.

The connection as below:



#### Code:

```
int Led = 13; // define LED Interface
int SENSOR = 10; // define the Hall magnetic sensor interface
int val; // define numeric variables val
void setup ()
{
  pinMode (Led, OUTPUT); // define LED as output interface
  pinMode (SENSOR, INPUT); // define the Hall magnetic sensor line as input
}
void loop ()
{
  val = digitalRead (SENSOR); // read sensor line
  if (val == LOW) // when the Hall sensor detects a magnetic field, ArduinoLED lights up
```



```
{
digitalWrite (Led, HIGH);
}
{
digitalWrite (Led, LOW);
}
}
```