



Part Number: SEN0160

Description: Gravity: Digital Weight Sensor

## INTRODUCTION

This Electronic Arduino [Weight Sensor](#) is able to detect 1kg weight. It based on HX711, a precision 24-bit analog-to-digital converter designed for weight scale and industrial control applications to interface directly with a bridge sensor.

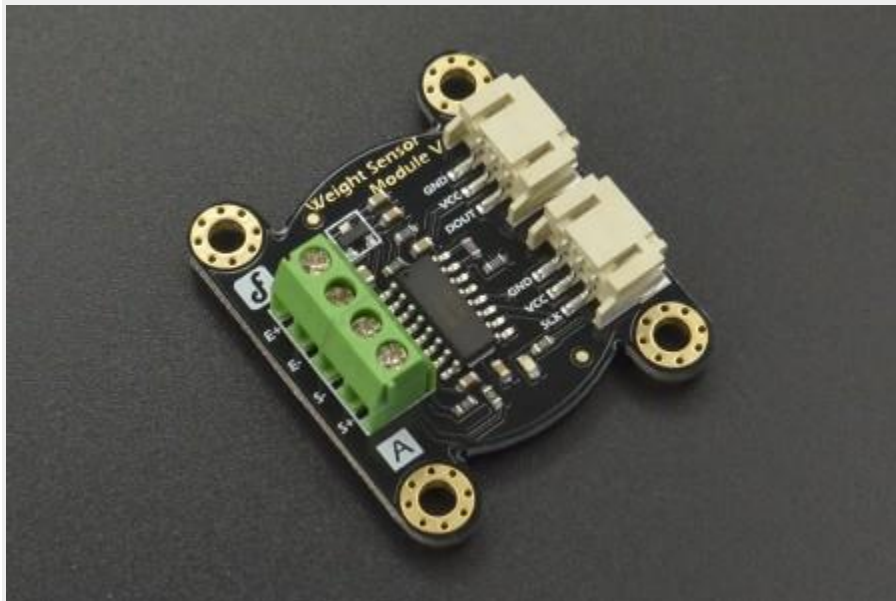
This Electronic arduino weight sensor lowers the cost of the electronic scale, and at the same time improving the performance and reliability. The interface of this sensor uses [DF Robot Gravity Interface](#). The output adopts compact terminal that makes the [sensor](#) easier to connect. It's the best choose for electronic enthusiast to do some tiny home scale.

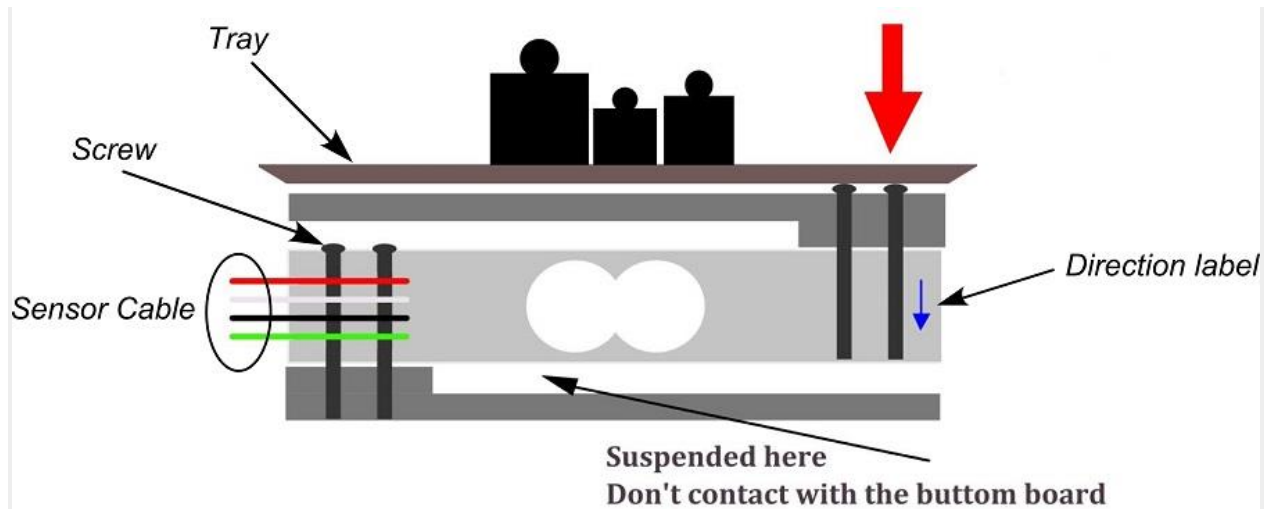
Sensor connection Note : Red Line -- E+

Black Line -- E-

White Line -- S-

Green Line -- S+





## SPECIFICATION

### 24-Bit Analog-to-Digital Converter for Weight Scales (HX711)

- Two selectable differential input channels
- On-chip active low noise PGA with selectable gain of 32,64 and 128
- On-chip power supply regulator for load-cell and ADC analog power supply
- On-chip oscillator requiring no external component with optional external crystal
- On-chip power-on-rest
- Simple digital control and serial interface: pin-driven controls, no programming needed
- Selectable 10SPS or 80SPS output data rate
- Simultaneous 50 and 60Hz supply rejection
- Supply Voltage: 2.6V~5.5V
- Current: <1.6mA
- Working temperature: -40~85°C
- 16 pin SOP-16 package

### Weight Sensor Module

- Range: 1kg
- Excitation voltage: 5-15 V
- Output sensitivity:  $1.0 \pm 0.15 \text{ mV/V}$
- Synthetical error: 1 per thousand cent of full scale
- Zero shift: 0.05/0.03 (30min) %F.S
- Zero temperature shift: 0.05/0.03 %F.S/10°C
- Zero output:  $\pm 0.1 \text{ mV/V}$
- Input impedance:  $1055 \pm 15 \Omega$
- Output impedance:  $1000 \pm 5 \Omega$
- Overload capability: 200 %F.S
- Output: Analog output
- Size: 33mm\*38mm

## ***SHIPPING LIST***

- Weight sensor module      x1
- Weight sensor                x1
- Sensor cable                 x2