This weight sensor (load cell half bridge 50KG) is suitable for electronic balance and other high accuracy electronic weighing devices.

When measuring, the correct force is applied to the outer side of the strain E-shaped beam portion of the sensor and the outside edges to form a shear force in the opposite direction.

**Tips:**

1-The sensor use the following three methods:

   Using a sensor with external resistors to make full bridge measurement range 50kg.

   The use of only two full-bridge sensors measuring range is the range of the two sensors and: 50kgx2 = 100kg.

   The use of four full-bridge sensors measuring range is the range of four sensors and: 50kgx4 = 200kg

2-When measuring, the correct force is applied to the outer side of the strain E-shaped beam portion of the sensor and the outside edges to form a shear force in the opposite direction.
Pin Connection

B: Black
R: Red
B: Blue

Gauge in tension
\( (R_o + \Delta R) \)

Gauge in compression
\( (R_o - \Delta R) \)

\[
\frac{V_o}{V_{EX}} = \frac{GF \cdot \varepsilon}{2}
\]
VCC: Red wire
GND: Black wire
Signal + : Green wire
Signal - : White wire
Connect Load Cell Half bridge 50KG with Weight Scales Analog-to-Digital Converter (ADC) 24-bit and arduino

Load Cell to Weight Scales

Out +: sensor power (connect to red wire of weight sensor)
A- : Signal -ve (connect to white wire of first weight sensor)
A+ : Signal +ve (connect to green wire of first weight sensor)
GND : Weight sensor ground (connect to black wire of weight sensor)

Weight Scales to micro controller (arduino) side:

VCC: 5 VDC
DO : Digital Output
CK : Clock
GND: Ground
For Arduino code and library file, please [click here](#)