


HOME / PRODUCT CATEGORIES / FLEX / FORCE / LOAD SENSOR - 50KG

Load Sensor - 50kg

SEN-10245
★★★★☆ 4

DESCRIPTION DOCUMENTS

This load sensor, sometimes called a strain gauge, is the same one found in digital bathroom scales (you know, the ones you use in January for your New Year's resolutions, and then forget about a month later). This sensor can measure up to about 110 pounds. Check the video below for a simple explanation on how these work and how to use them.




Images are CC BY 2.0

SHARE


Load Sensor - 50kg Product Help and Resources

TUTORIALS SUPPORT TIPS SKILLS NEEDED



Getting Started with Load Cells
JUNE 11, 2015

A tutorial defining what a load cell is and how to use one.



Load Cell Amplifier HX711 Breakout Hookup Guide
JULY 22, 2016

A hookup guide for the HX711 load cell amplifier breakout board.

COMMENTS 123 **REVIEWS** ★★★★★ 4

Customer Reviews

★★★★☆ 3.5 out of 5

Based on 4 ratings:

| | |
|--------|---|
| 5 star | 1 |
| 4 star | 2 |
| 3 star | 0 |
| 2 star | 0 |
| 1 star | 1 |

Currently viewing all customer reviews.

1 of 1 found this helpful:

★★★★★ Works great once figured out
about 10 months ago by Member #905039 verified purchase

It does take some time to understand how to wire properly. Read the guides, then read them again. Trust me, everything you need to know is there. I used an OpenScale board to connect and manage everything - very happy with results. You do need four of these arranged in a square on a platform, a bit of solder into the open scale board, and a USB cable/host is all you need. Wrote some python on a RPI to make this into a handy little IOT scale.

6 of 7 found this helpful:

★★★★☆ Works fine, but I had to dig around in the documentation a bit
about 2 years ago by Brad10 verified purchase

I built a dog weight scale using 4 of these, a Load Combinator board, a Load Cell Amplifier, and an Arduino. It worked and gave good results the first time I turned it on.

This page could use a little more documentation on two things: 1) how to mechanically mount the thing. You must mount it with a cutout below it so the "T" bar is free to bend below the "C" frame. 2) a brief schematic and instructions on how to figure out which wires are which. As it is, the Black, Red, White colors sort of match the Red, White, Blue colors of the Load Combinator. It would be easy to mention: to test the wires measure the resistance between each pair. The wire with the lowest resistance is the "red" center tap. Then measure the other two wires resistance to the Red wire as you push on the sensor; one wire will show a changing resistance, the other won't change much.

I found all this information buried near the bottom of the hookup guide. It would be helpful to reiterate it here for people who don't plan to use the load combinator.

1 of 6 found this helpful:

★☆☆☆☆ Totally useless, poor documentation, poor everything
about 2 years ago by Member #722134 verified purchase

There's only ONE way to use this thing, according to SparkFun and that's by connecting four of them to a combinator and load cell amp. I would never have purchased the thing knowing that I would have to spend instead of .

It's not as simple as it should be and there is next to no documentation or relevant help for this sensor. I would not recommend it to anyone. AND PLEASE DO NOT GIVE ME A LINK TO YOUR USELESS "Getting Started with Load Cells" PAGE.

ROB-24601 replied on April 28, 2016:
I'm sorry you're having trouble with this product. Like every load cell, it requires an amplifier. However, as is laid out in the HX711 Hookup Guide, this three-wire load sensor requires 4 units and a combinator board.

0 of 4 found this helpful:

★★★★☆ Confuse
about 2 years ago by Member #775420 verified purchase

I still am unable to figure out how it works...

Single T replied on March 15, 2016:
There's a good tutorial here to help you - <https://learn.sparkfun.com/tutorials/getting-started-with-load-cells>

START SOMETHING

SUBSCRIBE TO NEWSLETTER

SUBSCRIBE TO NEWSLETTER

In 2003, CU student Nate Seidle blew a power supply in his dorm room and, in lieu of a way to order easy replacements, decided to start his own company. Since then, SparkFun has been committed to sustainably helping our world achieve electronics literacy from our headquarters in Boulder, Colorado.

No matter your vision, SparkFun's products and resources are designed to make the world of electronics more accessible. In addition to over 2,000 open source components and widgets, SparkFun offers curriculum, training and online tutorials designed to help demystify the wonderful world of embedded electronics. We're here to help you start something.

About Us
About SparkFun
SparkFun Education
Feeds
Jobs
Contact

Help
Customer Service
Shipping
Return Policy
FAQ
Chat With Us

Community
Forum
SparkFun IRC Channel
Take the SparkFun Quiz
SparkFun Kickstarter Projects
Distributors

Programs
Become a Community Partner
Community Stories
Custom Kit Requests
Tell Us About Your Project
Sell Your Widget on SparkFun
Become a SparkFun Distributor
Large Volume Sales

What's on your mind?

For which department?
General

Please include your email address if you'd like us to respond to a specific question.
 email address

SUBMIT