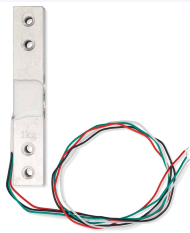


PRODUCT DATASHEET · VARIANT OF 555026



High-Precision Load Cell Module

5kg

555080

The High-Precision Load Cell Module accurately measures weight with a Wheatstone bridge circuit, ideal for digital scales.

Full product documentation, files and tutorials: solde.red/555080

CORE ATTRIBUTES

SKU 555080

WEIGHT 29 g

DESCRIPTION

The **High-Precision Load Cell Module** is a compact device designed to accurately measure and weigh the physical load applied to it. At its core, the sensor incorporates a Wheatstone bridge circuit consisting of two fixed and two variable resistors.

When weight is applied, the load cell produces a very small output voltage. Because this voltage is too low to be read directly, it must be amplified using an operational amplifier or an ADC with a built-in op-amp, such as our **HX711 breakout**, before the data can be processed by a microcontroller like our **NULA boards**.

In practical applications like a **digital scale**, the load cell is typically mounted securely inside an enclosure with one end fixed and the other supporting the weighing platform. As a physical weight is placed on the scale, the metal body of the load cell bends slightly, which deforms the internal strain gauges and creates the measurable spike in output voltage.

TECHNICAL DETAILS

- Max. load: Available in 1kg, 2kg, 5kg, 10kg, and 20kg variants
- Voltage: 5-10V
- Output: 2 ± 0.1 mV/V
- Wiring configuration: Black wire → Input-, Red wire → Input+, White wire → Output-, Green wire → Output+
- Dimensions (1kg variant): 12 × 13 × 75 mm / 0.5" x 0.5" x 3"
- Dimensions (2kg, 5kg, 10kg, and 20kg variants): 12.7 × 12.7 × 80 mm / 0.5" x 0.5" x 3.1"

GALLERY

