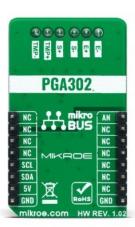


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Load Cell 3 Click





PID: MIKROE-4658

Load Cell 3 Click is a compact add-on board that represents a weigh scale solution. This board features the PGA302, a low-drift, low-noise, programmable signal-conditioner device designed for various resistive bridge-sensing applications from Texas Instruments. It creates 2.5V of bridge excitation and a current output source with programmable current output up to 1mA. Two identical analog front-end (AFE) channels followed by a 16-bit Sigma-Delta ADC are available at the input, where each AFE channel has a dedicated programmable gain amplifier with gain up to 200V/V. It also comes with an on-chip temperature sensor and integrated EEPROM memory for device configuration, calibration, and user data. This Click board™ has many features that make it a perfect solution for weight scale and force-sensing applications that use strain gauge load cells and other general resistive bridge signal-conditioning applications.

Load Cell 3 Click is supported by a mikroSDK compliant library, which includes functions that simplify software development. This <u>Click board™</u> comes as a fully tested product, ready to be used on a system equipped with the mikroBUS™ socket.

Mikroe produces entire development toolchains for all major microcontroller architectures. Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.







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Specifications

Туре	Force
Applications	Can be used for weight scale and force- sensing applications that use strain gauge load cells and other general resistive bridge signal-conditioning applications.
On-board modules	PGA302 - programmable signal-conditioner device designed for various resistive bridge- sensing applications from Texas Instruments
Key Features	Dual channel analog front-end, 16-bit Sigma- Delta ADC, programmable gain up to 200V/V, on-chip temperature sensor, EEPROM memory for device configuration, calibration and user data, and more.
Interface	Analog,I2C
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	5V

Resources

mikroBUS™

mikroSDK

Click board™ Catalog

Click boards™

Downloads

PGA302 datasheet

Load Cell 3 click 2D and 3D files

Load Cell 3 click schematic

Load Cell 3 click example on Libstock

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health and safety management system.