

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 [Click board™](#) 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.



ISO 27001: 2013 certification of informational security management system.
 ISO 14001: 2015 certification of environmental management system.
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

Specifications

Type	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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