

4-20mA T 2 Click



PID: MIKROE-5540

4-20mA T 2 Click is a compact add-on board for transmitting an analog output current over an industry-standard 4-20mA current loop. This board features [DAC161S997](#), a low-power 16-bit $\Sigma\Delta$ digital-to-analog converter (DAC) from [Texas Instruments](#). It has a programmable Power-Up condition and loop-error detection/reporting accessible via simple 4-wire SPI for data transfer and configuration of the DAC functions. In addition, it is characterized by low power consumption and the possibility of simple Highway Addressable Remote Transducer (HART) modulator interfacing, allowing the injection of FSK-modulated digital data into the 4-20mA current loop. This Click board™ is suitable for 2-wire 4-20mA current loop transmitters, industrial process control, low-power transmitters, and many more.

4-20mA T 2 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	Current
Applications	Can be used for 2-wire 4-20mA current loop transmitters, industrial process control, low-power transmitters, and more
On-board modules	DAC161S997 - 16-bit DAC for 4-20mA loops from Texas Instruments
Key Features	High resolution, industry-standard current loop, SPI-programmable, low power consumption, Power-Up programmable output current, loop-error detection and reporting, HART modulator interfacing, and more
Interface	SPI
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)
[mikroSDK](#)
[Click board™ Catalog](#)
[Click boards™](#)

Downloads

[4-20mA T 2 click example on Libstock](#)
[4-20mA T 2 click 2D and 3D files](#)
[DAC161S997 datasheet](#)
[4-20mA T 2 click schematic](#)

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