

## Thermo K 3 Click



PID: MIKROE-5605

**Thermo K 3 Click** is a compact add-on board that provides accurate temperature measurements with a thermocouple probe. This board features the [MAX6675](#), a cold-junction-compensated K-thermocouple-to-digital converter from [Analog Devices](#). With the versatile type-K probe, this board enables precise temperature measurements of up to +700°C in 12-bit (0.25°C) resolution. This board can measure temperatures as high as +1024°C but with less precision. It features cold-junction compensation sensing and correction and open thermocouple detection. This Click board™ makes the perfect solution for the development of hand-held measurement equipment, industrial equipment thermal management, petrochemical thermal management, and more.

Thermo K 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	Temperature & humidity
Applications	Can be used for the development of hand-held measurement equipment, industrial equipment thermal management, petrochemical thermal management, and more
On-board modules	MAX6675 - cold-junction-compensated K-thermocouple-to-digital converter from Analog Devices
Key Features	Direct digital conversion of Type-K thermocouple output, cold-junction compensation, open thermocouple detection, 12-bit (0.25 °C) resolution, PCC-SMP connector, and more
Interface	SPI
ClickID	Yes
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

## Downloads

[MAX6675 datasheet](#)

[Thermo K 3 click 2D and 3D files](#)

[Thermo K 3 click schematic](#)

[Thermo K 3 click example on Libstock](#)

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