

Surface temp 2 Click



PID: MIKROE-4266

Surface temp 2 Click is a compact add-on board that contains a high accuracy temperature sensor offering breakthrough performance over a wide industrial temperature range. This board features the [ADT7422](#), a 16-bit I2C temperature sensor from [Analog Devices](#). It features the internal bandgap reference and a precision ADC, it provides a 16-bit temperature result with a resolution of 0.0078°C, and an accuracy of up to $\pm 0.1^\circ\text{C}$ across the temperature range of 25°C to 50°C without the need for calibration. This makes the Surface Temp Click an excellent choice for RTD and thermistor replacement, medical equipment, food transportation and storage, environmental monitoring, HVAC, and other applications.

Surface temp 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	Temperature & humidity
Applications	Can be used for RTD and thermistor replacement, medical equipment, food transportation and storage, environmental monitoring, HVAC, and other applications.
On-board modules	Surface temp 2 Click is based on the ADT7422, a high accuracy 16-bit digital temperature sensor with programmable interrupt and critical temperature indicator from Analog Devices.
Key Features	Low power consumption, no calibration needed, long-term stability and reliability, high accuracy for industrial, instrumentation, and medical applications, and more.
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[ADT7422 datasheet](#)

[Surface Temp 2 click 2D and 3D files](#)

[Surface Temp 2 click schematic](#)

[Surface Temp 2 click example on Libstock](#)

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).