

Time-saving embedded tools

MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

Temp&Hum 24 Click





PID: MIKROE-5651

Temp&Hum 24 Click is a compact add-on board that measures the surrounding environment's humidity and temperature. This board features the HDC3021, an integrated capacitive-based relative humidity and temperature sensor with a removable tape cover from <u>Texas Instruments</u>. The HDC3021 is characterized by its high accuracy (±0.5%RH and ±0.1°C over a wide operating temperature range) and high resolution, providing 16-bit data to the host controller with a configurable I2C interface. Offset Error Correction reduces RH sensor offset due to aging, exposure to extreme operating conditions, and contaminants to return the device to within accuracy specifications. The long-term stability and reliability, alongside other features, make this Click board[™] ideal for developing various automotive temperature and humidity-related applications.

Temp&Hum 24 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u>^m comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u>^m 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).



MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

Specifications

Туре	Temperature & humidity
Applications	Can be used for developing various automotive temperature and humidity-related applications
On-board modules	HDC3021 - relative humidity and temperature sensor from Texas Instruments
Key Features	Low power consumption, high accuracy, automotive-grade, covers extended operating humidity and temperature ranges, removable tape cover, fully functional in condensing environment, offset error correction, fast data transfer, alert interrupt, and more
Interface	I2C
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V or 5V

Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board[™] Catalog

Click boards[™]

Downloads

HDC3021 datasheet

Temp&Hum 24 click 2D and 3D files

Temp&Hum 24 click schematic

Temp&Hum 24 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).