

# SHT click

MIKROE-2101

Weight: 23 g



SHT click is a temperature and humidity sensing click board that carries Sensiron's [SHT3x-DIS](#) IC. Compared to its predecessor (SHT11), SHT3x click has increased reliability and enhanced signal processing features with a high signal-to-noise ratio.

Best measurement results are achieved within a 5-60° C temperature range (0.015 resolution) and a 20%–80%RH humidity range (0.01 resolution). SHT click outputs a fully calibrated, linearized, and temperature compensated digital output through the mikroBUS™ I2C interface (SCL, SDA). An additional INT pin is for setting up alerts for certain temperature or humidity values. Finally, a RST pin allows you to reset the sensor. Designed to use either 3.3V or 5V power supply.

## Specifications

<b>Type</b>	Temperature, Humidity
<b>Applications</b>	Reliable, precise and fast humidity and temperature measurement devices
<b>On-board modules</b>	Sensiron's SHT3x-DIS IC
<b>Key Features</b>	-0 to 100% RH, 40 to 125°C temperature range. $\pm 2$ %RH and $\pm 0.3$ °C typical accuracy
<b>Key Benefits</b>	High reliability and long-term stability. High signal-to-noise ratio
<b>Interface</b>	I2C, GPIO
<b>Input Voltage</b>	3.3V or 5V
<b>Compatibility</b>	mikroBUS
<b>Click board size</b>	S (28.6 x 25.4 mm)

## Features and usage notes

SHT click features two onboard jumpers. One for setting the power supply (soldered to 3.3V by default) and another one for setting the I2C address.

The SHT3x is a robust and reliable sensor. Even when exposed to conditions outside its normal range, it has the capability to recalibrate itself once conditions stabilize. This feature is explained on page 4 of the manufacturer's data sheet:

The sensor shows best performance when operated within recommended normal temperature and humidity range of 5 °C – 60 °C and 20 %RH – 80 %RH, respectively. Long-term exposure to conditions outside normal range, especially at high humidity, may temporarily offset the RH signal (e.g. +3%RH after 60h kept at >80%RH). After returning into the normal temperature and humidity range the sensor will slowly come back to calibration state by itself.

Also note that prolonged exposure to extreme conditions may accelerate ageing.