

Humidity Sensor Module HSM 100

The humidity sensor module HSM 100 extends the functionality of STM 33x / STM 330C / STM 33xU / STM 431J temperature sensor modules.

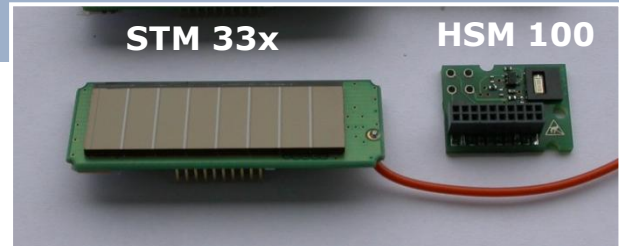
Functional Principle

HSM 100 contains an internal calibrated humidity sensor. It can be plugged onto members of the STM 33x / STM 431J module family via a 20 pin connector. The sensor signal is read via the ADIO3 input of STM 33x / STM 431J.

In order to be able to read the sensor signal, STM 33x / STM 431J has to be configured to an EEP supporting humidity. This can be done via Dolphin Studio.

Features Overview

Humidity sensor	measurement range 0%-100% r.h. resolution 0.4% r.h. accuracy typ. $\pm 5\%$ r.h. between 30%-70% r.h. and 0-40°C
Power supply	via SWPWR pin from STM 33x / STM 330C / STM 33xU / STM 431J
Module dimensions	18 x 13 mm
Operating temperature	-20 up to +60 °C



Type
HSM 100

Ordering Code
S3095-D100



Please ensure sufficient ventilation of air inside the housing. Otherwise the measurement will not represent ambient humidity.



Please avoid any material within 2mm distance from the 7mm x 7mm area depicted in the figure below (in plane as well as above and below the PCB). The measurement might be influenced by detuning the capacitive sensor.

