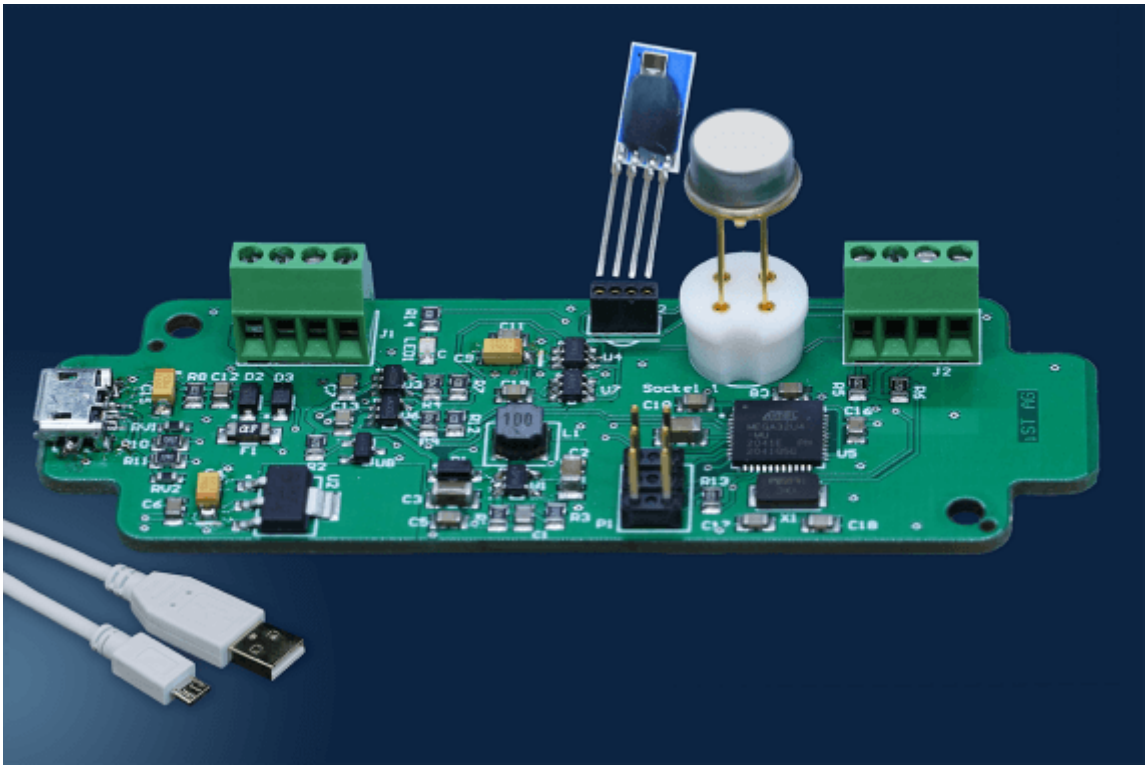
HYT Evaluation Box



Test board with standard modules HYT271 & HYT939

Box set of an Arduino based board with a digital (USB) and analog interface and the most common humidity modules from the HYT product family with a general use calibration.

1x Evaluation Board
1x HYT 271 module
1x HYT 939 module
1x USB cable

Product Name: HYT Evaluation Box
Operating humidity range: 0 to 100 % RH (modules) < 95 % non condensing (board)
Operating temperature range: -20 °C to 120 °C (modules); -20 °C to +50 °C (board)
Accuracy humidity: ±1.8% RH (0-90% RH), ±3%(>90%RH) at 0-50°C
Accuracy temperature: ±0.2 °C@0-50°C

Digital interface: Board to PC: USB Board to Sensor: I²C
Operating voltage: 5 V (USB); 4 to 15 V DC
Current consumption: 50 to 300 mA
Dimensions: 84 x 29 mm (LxW, board)
Measured medium: Air/Gas
Product code: 154775

Product details

HYT Evaluation Box > Details

Benefits & Characteristics of the HYT Evaluation Box

The purpose of this evaluation board is to facilitate the evaluation of HYT sensor modules for humidity and temperature under application-relevant conditions. The evaluation board enables connection of a HYT module to a PC via USB. If required, it converts its digital I2C output to analog signals.

Benefits & Characteristics of the HYT 939

Mechanically robust and with a chemical and condensed waterproof sensing area, the digital iST HYT 939 humidity module excels with the special robust construction withstanding peak loading at high temperatures. The HYT 939 is also ideal for high pressure applications and is also offered with a pressure tight packaging. Precisely calibrated, the HYT 939 delivers an accuracy of ±1.8 % RH and ±0.2 °C and combines the advantages of a precise, capacitive polymer humidity sensor with the high integration density and functionality of an ASIC. The digital software integrated in the module processes the measured data and delivers the physical parameters of relative humidity and temperature over the I²C compatible interface as digital values. The HYT 939 humidity module is therefore fully interchangeable without adjustment and both the linearity error as well as temperature drift are corrected “on-chip” through computation resulting in an outstanding accuracy over a wide range of applications.

Further advantages of the HYT 939 digital humidity module include:

- Calibrated and temperature compensated
- Excellent humidity/temperature accuracy and stability

- High chemical resistance
- I2C protocol (address 0x28 or alternative address)
- Wide humidity and temperature range (0 % RH to 100 % RH and -40 °C to +125 °C)
- Very low drift
- Very stable at high humidity
- Interchangeable without adjustments
- Pressure-resistant version (up to 16 bar) upon request

Benefits & Characteristics of the HYT 271

Mechanically robust and with a chemical and condensed waterproof sensing area, the digital iST HYT 271 humidity modules offer the widest application window and an optimal price-performance ratio. Precisely calibrated, the HYT 271 delivers an accuracy of ±1.8 % RH and ±0.2 °C and combines the advantages of a precise, capacitive polymer humidity sensor with the high integration density and functionality of an ASIC. The digital software integrated in the module processes the measured data and delivers the physical parameters of relative humidity and temperature over the I²C compatible interface as digital values. The HYT 271 humidity module is therefore fully interchangeable without adjustment and both the linearity error as well as temperature drift are corrected “on-chip” through computation resulting in an outstanding accuracy over a wide range of applications.

Option: High-end humidity calibration HYT modules

With the development of a high end humidity calibration and measurement set up, the HYT sensor family boasts the accuracy of up to +/- 1.4 % RH and sets new standards for moisture measurement with low hysteresis and easy plug-and-play interchangeability.

Our three HYT models can be ordered with a tailored calibration, which allows an accuracy of higher than +/- 1.4 % RH when used in combination with a limited range of 0-50 % RH. For dew point applications measuring in the range of 0-5 % RH, you can even reach an accuracy of < +/- 0.5 % RH.

Contact our experts for customized solutions.

Quality

Consistent with the well-known, high-quality standards in Switzerland, IST AG is certified according to ISO 9001:2015 (quality) and ISO 14001:2015 (environment). Appropriate processes are part of our daily work. They are regularly audited and extended parallel to the growth of our company.

> Read more

The online shop

Quantity (pieces)	Price (per piece)
1-5	CHF 185.40

Sklad: **4**