

# HYT939P humidity and temperature module with membrane filter



Humidity module with a front PTFE membrane filter for VOC and particle protection.

HYT 939P digital RH/T module with I<sup>2</sup>C outputs in gas-tight TO39 housing. Condensation-safe for 0..100%RH. Compact, fast and universally applicable in HVAC, emission monitoring or industrial drying.

Ideal for gas analyzer or compact probes without any extra filter cap

Application specific calibration and housing design possible [upon request](#).

**Product Name:** HYT 939P module with PTFE filter

**Operating humidity range:** 0 % RH to 100 % RH

**Operating temperature range:** -40 °C to +125 °C

**Accuracy humidity:** ± 1.8 % RH at + 23 °C (0 % RH to 90 % RH)

**Accuracy temperature:** ±0.2 °C at 0-60°C

**Digital interface:** I<sup>2</sup>C, default address 0x28

**Operating voltage:** 2.7 V to 5.5 V

**Current consumption:** < 1µA in sleep mode, < 22µA at 1Hz measuring rate

**Dimensions:** 9 mm x 5.2 mm (ØxH)

**Connections:** TO-39, 4 wires

**Wire dimensions:** 13.5 x 0.45 mm (LxØ)

**Response time:** < 10 s

**Filter:** PTFE particle filter

**Product code:** 154417

## Product details

### Benefits & Characteristics of the HYT 939

Mechanically robust and with a chemical and condensed waterproof sensing area, the digital IST AG 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  $\pm 1.8$  % RH and  $\pm 0.2$  °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 I<sup>2</sup>C 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
- I<sup>2</sup>C 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

## 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  $\pm 1.4\%$  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  $\pm 1.4\%$  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  $< \pm 0.5\%$  RH.

[Contact our experts](#) for more information.

## 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)
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1-9	CHF 59.00
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10-50	CHF 54.00
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Склад: **20**