



innovative  
Sensor  
Technology

# Humidity module HYT 271 with pluggable SIL contacts



Digital RH/T module, for up to 125°C and 100% RH, withstands condensation

Humidity sensor with ambient humidity and temperature monitoring, module with digital output (I<sup>2</sup>C) and quick response times

**Product Name:** HYT271

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

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

**Accuracy humidity:** ± 1.8 % RH at + 23 °C

**Accuracy temperature:** ±0.2 °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:** 10.2 x 5.1 x 1.8 mm

**Connections:** SIL RM

**Wire dimensions:** 10.5 x 0.5 mm (LxW)

**Product code:** 153349

## **Product details**

### **Planar humidity module HYT 271 for harsh conditions > Details**

#### **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  $\pm 1.8$  % 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 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  $\pm 1.4$  % 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 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

<b>Quantity (pieces)</b>	<b>Price (per piece)</b>
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1-9	CHF 32.96
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10-49	CHF 27.81
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Stock: **110**