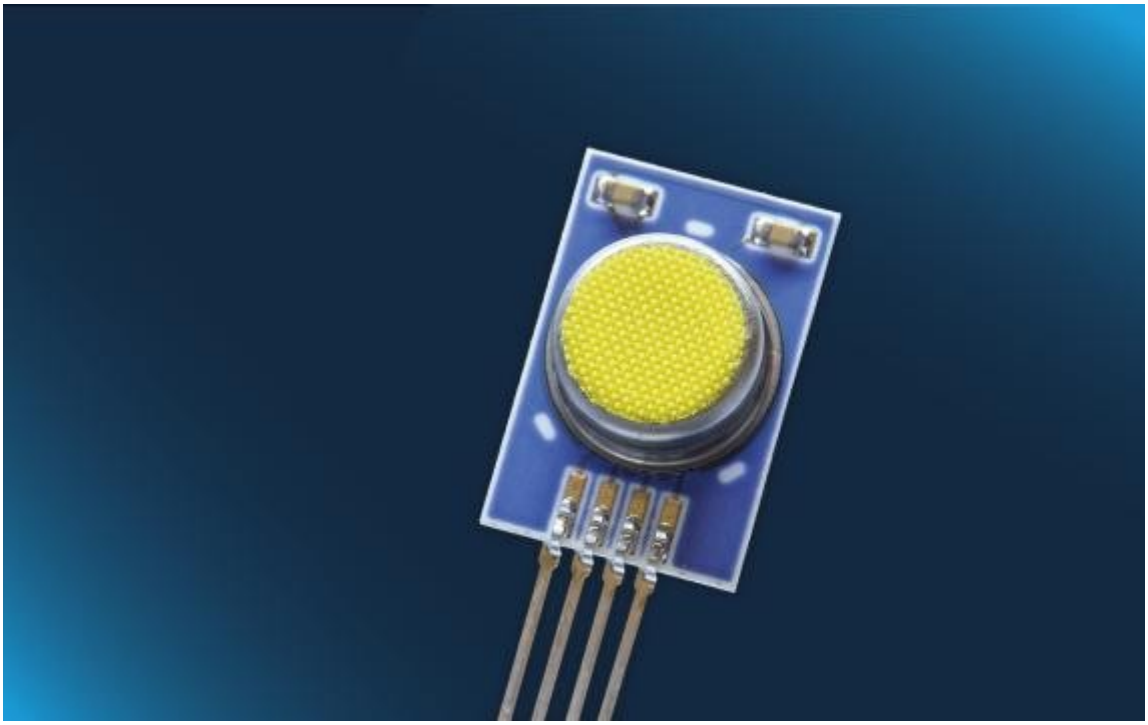
Humidity module textile filter



Digital RH/T module with compact dust filter, suitable for HVAC

Humidity and temperature module with a textile membrane filter, for tight spaces or extra sensor protection. The dust filter is mounted directly on the sensor.

Product Name: HYT 221
Operating humidity range: 0 % RH to 100 % RH
Operating temperature range: -40 °C to +125 °C
Accuracy humidity: ±1.8 % RH (0 % RH to 90 % RH)
Accuracy temperature: ±0.2 °C at 0-60°C
Digital interface: I²C, default address 0x28
Operating voltage: 2.7 V to 5.5 V
Current consumption: < 1µA in sleep mode, < 22µA at 1Hz measuring rate
Dimensions: 15.3 x 10.2 x 5.3 mm
Connections: SIL RM
Wire dimensions: 10.5 x 0.5 mm (LxW)
Product code: 153680

Product details

Benefits & Characteristics of the HYT 221

Mechanically robust and with a chemical and condensed waterproof sensing area, the iST HYT 221 humidity module with a round stainless steel casing can easily be fitted into housing openings and can be sealed against the wall with the use of an O-ring. Combined with the waterproof metal filter, it results into an assembly that is splash waterproof and enables a sealed housing construction while providing a high dynamic responsiveness. Precisely calibrated, the HYT 221 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 221 humidity module is fully interchangeable without adjustment and both the linearity error as well as temperature drift are corrected “on-chip” resulting in outstanding accuracy over a wide range of applications.

Further advantages of the HYT 221 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

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)
1-9	CHF 47.38
10-49	CHF 33.99

Stock: **101**