



HYT 221 (with membrane filter)

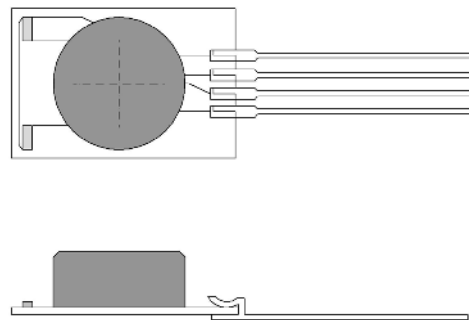
Digital Humidity and Temperature Module

Optimal for critical application areas

Benefits & Characteristics

- Calibrated and temperature compensated
- High chemical resistance
- Wide humidity and temperature range
- Very stable at high humidity
- Mechanically robust
- Excellent humidity/temperature accuracy and stability
- I²C protocol (address 0x28 or alternative address)
- Very low drift
- Interchangeable without adjustments

Illustration¹⁾



1) For actual size, see mechanical dimensions

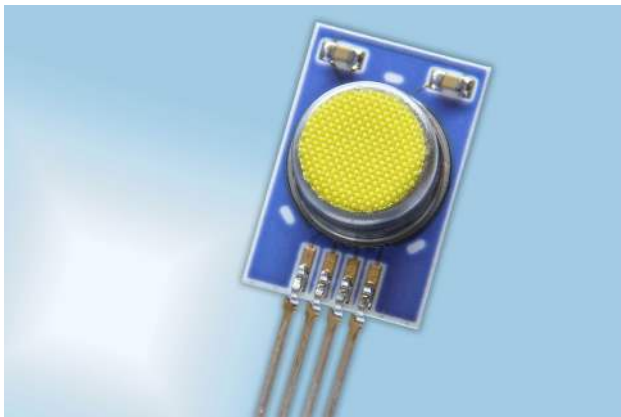
Technical Data

Operating temperature range:	-40 °C to +125 °C	
Operating humidity range:	0 % RH to 100 % RH	
Hysteresis:	< ±1 % RH	
Linearity error:	< ±1 % RH	
Temperature error:	0.05 % RH/K (0 °C to +60 °C)	
Operating voltage:	2.7 V to 5.5 V	
Current consumption (nominal):	< 22 µA at 1 Hz measuring rate; 850 µA max.	
Current consumption (sleep):	< 1 µA	
Digital interface:	I ² C, address 0x28 or alternative address	
Operating voltage (limits):	-0.3 V to 6 V	
Storage conditions:	-20 °C to +50 °C	
	Humidity	Temperature
Accuracy:	±1.8 % RH at +23 °C (0 % RH to +90 % RH)	±0.2 K (0 °C to +60 °C)
Reproducibility:	±0.2 % RH	±0.1 K
Resolution:	0.02 % RH	+0.015 °C

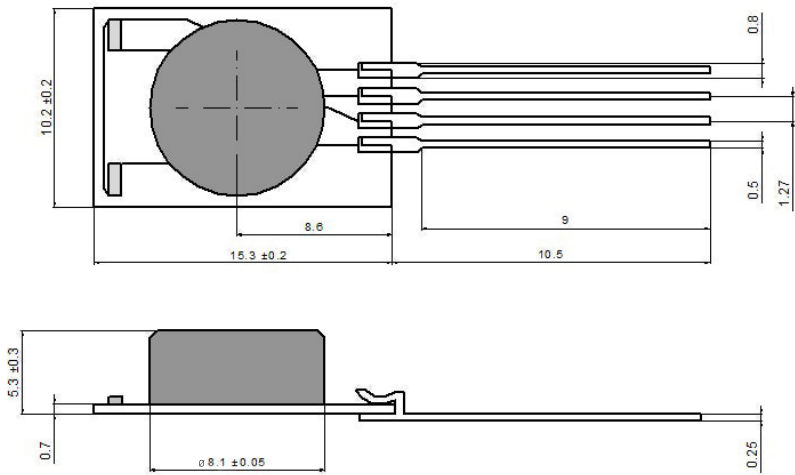


Response time t_{63} :	< 10 s with membrane filter	< 10 s with membrane filter
Long-term drift:	< 0.5 % RH/a	< 0.05 K/a
Measuring principle:	Capacitive polymer humidity sensor	PTAT (integrated)

Product Photo

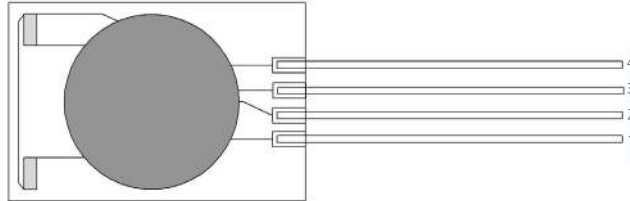


Mechanical Dimensions





Pin Assignment



1	2	3	4
SDA	GND	VCC	SCL

Order Information

Description:	Item number:	Former main reference:
HYT 221 (with membrane filter)	103923	150.00068

Additional Electronics

Description:	Item number:	Former main reference:
HYT LabKit	103925	150.00073

Additional Note

Application Note:	Document name:
	AHHYTM_E

