



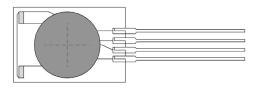
# HYT 221 (with membrane filter) Digital Humidity and Temperature Module Optimal for critical application areas

#### Benefits & Characteristics

- Calibrated and temperature compensated
- High chemical resistance
- Wide humidity and temperature range
- Very stable at high humidity
- Mechanically robust

#### Illustration<sup>1)</sup>

- Excellent humidity/temperature accuracy and stability
- I<sup>2</sup>C protocol (address 0x28 or alternative address)
- Very low drift
- Interchangeable without adjustments





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 μΑ		
Digital interface:	I <sup>2</sup> 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	



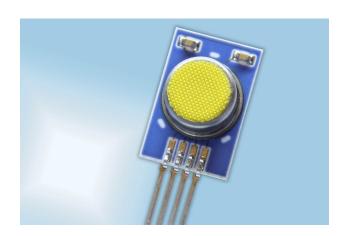
physical. chemical. biological.



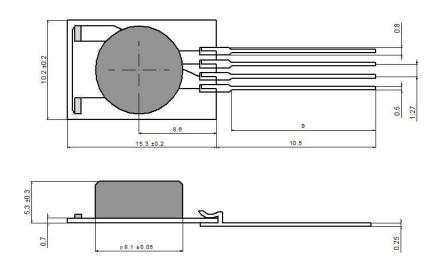
#### Response time t<sub>63</sub>: Long-term drift: Measuring principle:

< 10 s with membrane filter < 0.5 % RH/a Capacitive polymer humidity sensor < 10 s with membrane filter < 0.05 K/a PTAT (integrated)

## Product Photo



## Mechanical Dimensions





physical. chemical. biological.



Pin Assignment

			4 3 2 1
1	2	3	4
SDA	GND	VCC	SCL
Order Informati	on	Item number:	Former main reference:
HYT 221 (with mem	brano filtor)	103923	150.00068
Additional Elect			
Description:		Item number:	Former main reference:
HYT LabKit		103925	150.00073
Additional Note	2		
		Document name:	
Application Note:		AHHYTM_E	



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