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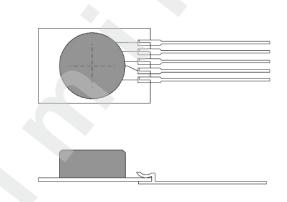
Heated HYT 223 Digital Humidity and Temperature Module Optimal for critical application areas

Benefits & Characteristics

- Heatable digital humidity sensor
- With PTFE membrane filter for long term stability
- Calibrated and temperature compensated
- High chemical resistance
- Wide humidity and temperature range

Illustration¹⁾

- Excellent humidity/temperature accuracy and stability
- I²C protocol (address 0x28 or alternative address)
- Very low drift
- Interchangeable without adjustments
- Very stable at high humidity



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1) For actual size, see mechanical dimensions

Technical Data

Operating temperature range:	-20 °C to +120 °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)			
Digital interface:	I ² C, address 0x28			
Humidity output signal:	% RH			
Measuring principle:	Capacitive polymer humidity sensor			
	Humidity Sensor	Heater		
Operating voltage:	2.7 V to 5.5 V	7 V - 9 V		
Operating voltage limit:	-0.3 V to 6 V			
Current consumption:	$<$ 22 μ A at 1 Hz measuring rate			
Current consumption (sleep):	< 1 µA			
Power consumption:		< 720 mW		

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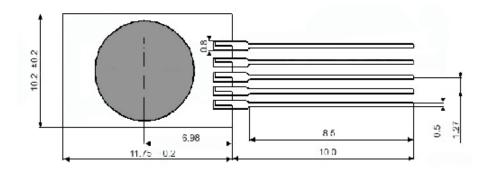
	Humidity	Temperature	Heater
Accuracy:	0 °C to 50 °C: ± 1.8 % RH at 0 - 90 % RH ± 3.0 % RH at 90-100 % RH	0 to 60 °C: ± 0.2 °C	\pm -3 °C for T < 150 °C
Reproducibility:	±0.2 % RH	±0.1 K	
Resolution:	0.03 % RH	+0.015 °C	
Response time t ₆₃ :	< 10 s	< 10 s	
Long-term drift:	< 0.5 % RH/a	< 0.05 K/a	

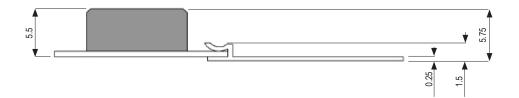
Thermal reconditioning

HYT223 contains a microheating structure which allows for thermal reconditioning. A reconditioning cycle is recommended in challenging atmospheres and conditions. Length and interval required depend on the application environment. A possible reconditioning setting is heating the module with 7 to 9 V and 700mW power for 10 minutes every 24 hours.

During reconditioning, the read-out values are not calibrated measurement data.

Mechanical Dimensions







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Pin Assignmer	nt				
				5 4 3 2 1	
1	2	3	4	5	
SDA	Ground	VDD	SCL	Heater	
Order Informa	ition				_
Order code			Heated HYT 22 151331	23	
Additional Do	cuments				
			Document nan	ne:	
Application Note:			AHHYTM_E		



Innovative Sensor Technology IST AG, Stegrütistrasse 14, 9642 Ebnat-Kappel, Switzerland Phone: +41 71 992 01 00 | Fax: +41 71 992 01 99 | Email: info@ist-ag.com | www.ist-ag.com

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