



HYT.R.411 RH/T Module



Fast Responding Humidity and Temperature Module



Ideal for weather balloons and drones



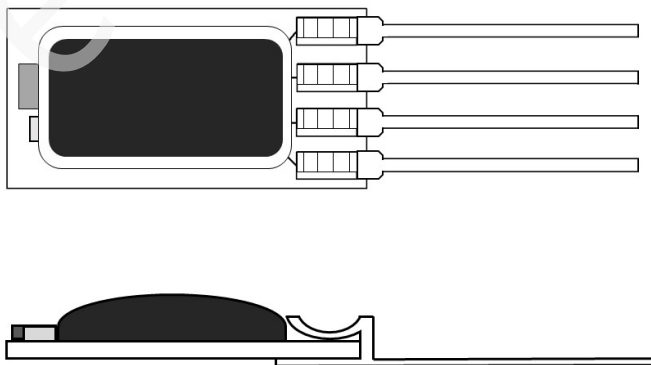
Benefits & characteristics



- Fast response time
- Precise measurement at low temperatures and at high altitudes
- Excellent RH/T reproducibility
- Fully factory-calibrated, exchangeable module
- Digital 1°C interface



Illustration ¹⁾



1) For actual size see mechanical dimensions



Technical data

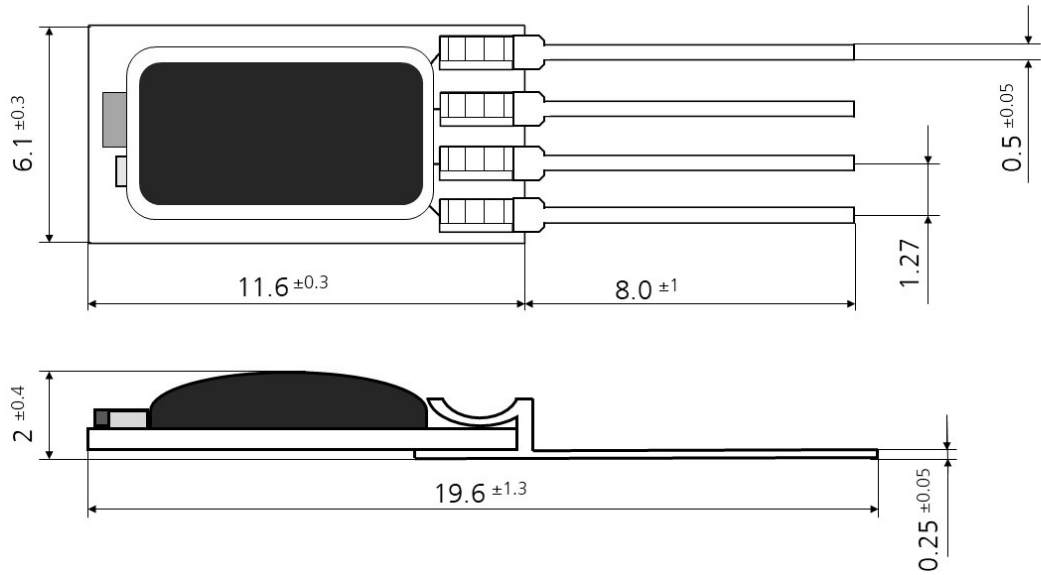
Operating temperature range:	-80 to + 50°C
Operating humidity range:	0 % RH to 100 % RH
Hysteresis:	< ±1 % RH
Linearity error:	< ±1 % RH
Temperature error:	0.05 % RH/K (0 °C to +60 °C)
Current consumption (nominal):	< 80 µA at 10 Hz measuring rate
Digital interface:	I ² C, address 0x28; 32 bit for humidity and temperature
Operating voltage:	2.1 V to 3.6 V
Max. voltage (any pin to GND):	-0.3 V to 4 V
Storage conditions:	-20 °C to + 50 °C

	Humidity Sensor	Temperature Sensor
Accuracy:	±2 % RH at 23 °C (0 % RH to 90 % RH)	±0.5 K (-80 °C to 0 °C) ±0.2 K (0 °C to +50 °C)
Reproducibility:	±0.2 % RH	±0.1 °C
Resolution:	0.04 % RH	+0.015 °C
Response time t ₆₃ :	< 0.5 s at 23 °C	< 2 s
Long-term drift:	< 0.5 % RH/a at +23 °C, 30 – 70 % RH (laboratory conditions) Exposure to VOCs can lead to higher values.	< 0.05 K/a
Measuring principle	Capacitive polymer humidity sensor	Pt1000

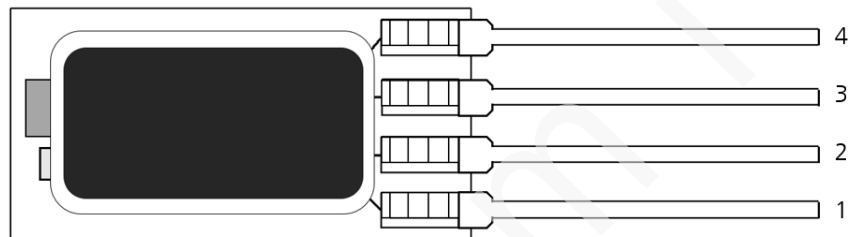
[Custom calibration available on request](#)



Mechanical dimensions



Pin Assignment



1	2	3	4
SDA	GND	VDD	SCL



Order Information

Product name	HYT.R411.P2032.0.KK.SA.S
Order code	153690

Additional Documents

	Document name:
Application Note:	AHHYTM_E



RoHS

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