



LinPicco™ Axxx Basic

Capacitive Humidity Module

Analog

1/2



Product

Within the markets of measurement, HVAC, building and control, and home appliances/white goods, humidity modules are required to translate the signals of the robust IST humidity sensors into commonly used standards and provide a calibrated sensor signal.

Contrary to existing humidity modules or fully integrated solutions the LinPicco series unifies advantages of both worlds, avoiding their disadvantages: The high precision measurement of humidity with discrete sensors (high stability due to wide active sensor area) combined with calibrated and linearized output signal.

Advantages

- Integrated Pt-1000 temperature sensor + P14 humidity sensor
- Calibrated and ready to use
- Precise humidity measurement
- Very low drift due to wide sensor area
- Various analog output signals
- With extended sensor possible

Technical Data

Sensor Type:	P14 SMD
Measurement principle:	Capacitive humidity sensor
Mechanical dimensions:	W=10 x L=47 x T=2.8 mm
Humidity measurement range:	0 ... 100% RH
Operating temperature range:	- 25 ... +85 °C
Temperature sensor	Pt1000 Ω (DIN EN 60751, F0.3), loop-through
Storage temperature range:	-40 ... +80 °C / at max. 95% RH non condensing
Accuracy:	< ±3 % RH (15 ... 85% RH at 23 °C)
Response time t_{63} :	< 5 s (50% RH → 0% RH) at 23 °C



INNOVATIVE SENSOR TECHNOLOGY



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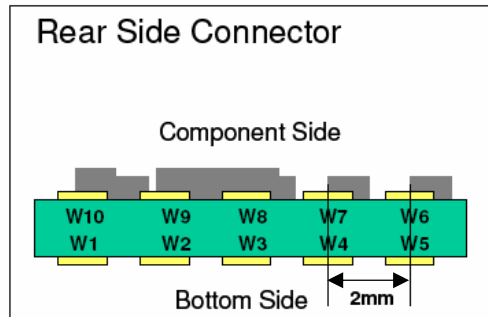
Analog



	A0545	A420	A01	A05
Operating voltage (V_{cc}):	4.5 ... 5.5 VDC stabilized	8 ... 10 VDC (max. load resistor 300 Ω)	7 ... 32 VDC (recommended 7 ... 9 V)	7 ... 32 VDC (recommended 7 ... 9 V)
Current consumption:	< 3 mA	4 ... 20 mA (two wire operation)	< 3 mA	< 3 mA
Output signal (0 ... 100% RH):	10 ... 90% of operating voltage	4 ... 20 mA	0 ... 1 V	0 ... 5 V

Pin Designation

	A0545	A420	A01	A05
W5	Pt1000	Pt1000	Pt1000	Pt1000
W6	Pt1000	Pt1000	Pt1000	Pt1000
W7		Current Loop Return		
W8	GND		GND	GND
W9	Analog Output		Analog Output	Analog Output
W10	V_{cc+}	Current Loop V_{cc+}	V_{cc+}	V_{cc+}



All mechanical dimensions are valid at 25°C ambient temperature, if not differently indicated. ■ All data except the mechanical dimensions only have information purposes and are not to be understood as assured characteristics. ■ Technical changes without previous announcement as well as mistakes reserve. ■ The information on this data sheet was examined carefully and will be accepted as correct. No liability in case of mistakes. ■ Load with extreme values during a longer period can affect the reliability. All rights reserved. The material contained herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner. Typing errors and mistakes reserved. Product specifications are subject to change without notice. All rights reserved.



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