



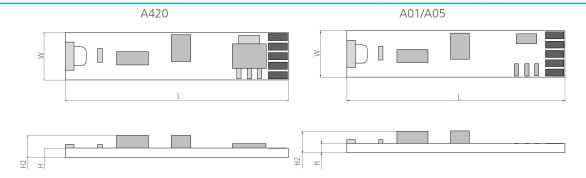
# LinPicco<sup>™</sup> Axxx Basic Capacitive Humidity Module

With calibrated and linearized analog output signal

## Benefits & Characteristics

- Precise humidity measurement
- Fully calibrated
- Very low drift due to wide sensor area
- Various analog output signals
- Easy to integrate
- Module with external sensor available
- PCB moisture protected
- Customer-specific module available upon request

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



1) For actual size, see dimensions

# Technical Data

Dimensions (L x W x H / H2 in mm):	47 x 10 x 1 / 2.8	47 x 10 x 1 / 2.8		
Operating humidity range:	0 % RH to 100 % RH (maximal dew point = +85 $^{\circ}$ C)			
Operating temperature range:*	Module:	Module: With external sensor:		
		P14:	MK33:	
	-25 °C to +85 °C	-50 °C to +150 °C	-40 °C to +190 °C	
Humidity sensor:*	P14 SMD			
Temperature sensor:*	Pt1000 or Pt100, class B (IEC 60751 F0.3), loop-through			
Accuracy:		< ±3 % RH (15 % RH to 85 % RH at +23 °C) < ±5 % RH (0 % RH to 15 % RH and >85 % RH at +23 °C)		
Response time t <sub>63</sub> :	< 5 s (50 % RH to 0 % RH) at +23 °C			
Storage conditions:	-40 °C to +80 °C at r	-40 °C to +80 °C at max. 95 % RH non-condensing		
Cable (external sensor version only):*	PTFE, 1 m			
	A420	A01	A05	
Operating voltage (V <sub>cc</sub> ):	8 to 10 V <sub>pc</sub> (max. load resistor 300 Ω)	7 to 32 V <sub>DC</sub> (recommended 7 V to 9 V)	7 to 32 V <sub>DC</sub> (recommended 7 V to 9 V)	
Current consumption:	4 mA to 20 mA (two wire operation)	< 3 mA	< 3 mA	
Output signal (0 % to 100 % RH):	4 mA to 20 mA	0 V to 1 V	0 V to 5 V	
* Customer-specific alternatives available				

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physical. chemical. biological.

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A420				A01/A05		
	W10 W1	W9 W8 W7 W2 W3 W4	W6 W5			
	W5 <sup>1)</sup>	W6 <sup>1)</sup>	W7	W8	W9	W10
A420	Pt1000 / Pt 100	Pt1000 / Pt 100	Current loop return			Current loop $V_{cc}$ +
A01	Pt1000 / Pt 100	Pt1000 / Pt 100		GND	Analog output	V <sub>cc</sub> +
A05	Pt1000 / Pt 100	Pt1000 / Pt 100		GND	Analog output	V <sub>cc</sub> +
1) Decemply for module with colds and external concern						

1) Does not apply for module with cable and external sensor

Pin Assignment

# Order Information - Modules

Nominal resistance:	100 Ω at 0 °C	1000 Ω at 0 °C
A420	LinPicco (TM) Basic A420-G	LinPicco (TM) Basic A420-G
Order code	150.00016	150.00010
A01	LinPicco (TM) Basic A01-G	LinPicco (TM) Basic A01-G
Order code	150.00029	150.00007
A05	LinPicco (TM) Basic A05-G	LinPicco (TM) Basic A05-G
Order code	150.00018	150.00008
Order code A05	150.00029 LinPicco (TM) Basic A05-G	150.00007 LinPicco (TM) Basic A05-G

## Order Information - Modules with PTFE-cable, 1m

Nominal resistance:	1000 Ω at 0 °C
A420	LinPicco (TM) Basic A420-G.S
Order code	150.00091
A05	LinPicco (TM) Basic A05-G.S
Order code	150.00090

## Additional Documents

Application Note:

Document name: AHLin\_Digi\_E



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