



# LinPicco™ Axxx Basic

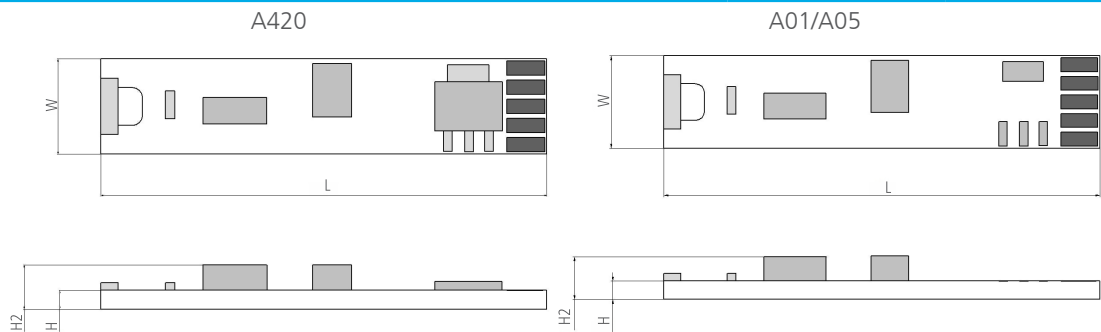
## Capacitive Humidity Module

### 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		
Operating humidity range:	0 % RH to 100 % RH (maximal dew point = +85 °C)		
Operating temperature range:*	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 $t_{63}$ :	< 5 s (50 % RH to 0 % RH) at +23 °C		
Storage conditions:	-40 °C to +80 °C at max. 95 % RH non-condensing		
Cable (external sensor version only):*	PTFE, 1 m		
	A420	A01	A05
Operating voltage ( $V_{CC}$ ):	8 to 10 $V_{DC}$ (max. load resistor 300 $\Omega$ )	7 to 32 $V_{DC}$ (recommended 7 V to 9 V)	7 to 32 $V_{DC}$ (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



## Pin Assignment

	A420					A01/A05				
	W5 <sup>1)</sup>	W6 <sup>1)</sup>	W7	W8	W9	W7	W8	W9	W10	
A420	Pt1000 / Pt 100	Pt1000 / Pt 100	Current loop return						Current loop V <sub>CC+</sub>	
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) Does not apply for module with cable and external sensor

## 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	103884	103880
Former order code	150.00016	150.00010
A01	LinPicco (TM) Basic A01-G	LinPicco (TM) Basic A01-G
Order code	103896	103877
Former order code	150.00029	150.00007
A05	LinPicco (TM) Basic A05-G	LinPicco (TM) Basic A05-G
Order code	103886	103878
Former order code	150.00018	150.00008

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

Nominal resistance:	1000 Ω at 0 °C
A420	LinPicco (TM) Basic A420-G.S
Order code	103938
Former order code	150.00091
A05	LinPicco (TM) Basic A05-G.S
Order code	On request
Former order code	150.00090



## Additional Documents

---

	Document name:
Application Note:	AHLin_Digi_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](mailto:info@ist-ag.com) | [www.ist-ag.com](http://www.ist-ag.com)

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 reserved • 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 • 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