



LinPicco™ Axxx Basic

Capacitive Humidity Module

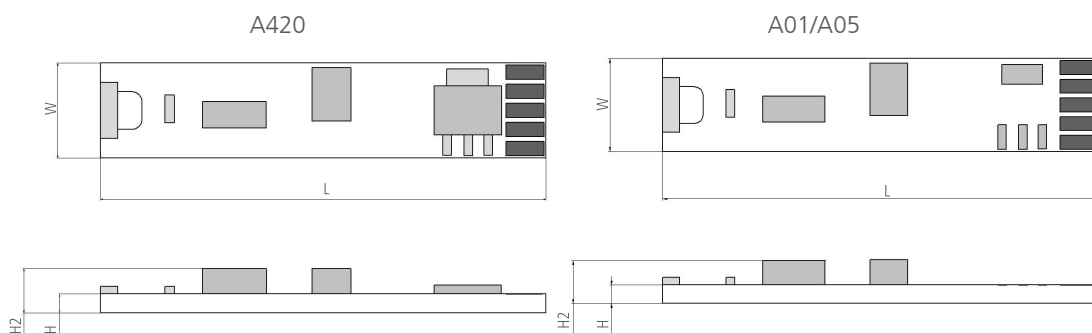
With calibrated and linearized analog output signal



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

Illustration¹⁾



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:* | -25 °C to +85 °C with external sensor elements, other ranges on request, (P14: -50 °C to +150 °C or MK33: -40 °C to +190 °C) |
| Humidity sensor:* | P14 SMD |
| Temperature sensor:* | Pt1000 or Pt100, class B (DIN EN 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 Ω) | 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



HUMIDITY



TEMPERATURE



FLOW



CONDUCTIVITY

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Pin Assignment

| | A420 | | | A01/A05 | | | |
|------|------------------|------------------|---------------------|---------|---------------|-----|-------------------------------|
| | W5 ¹⁾ | W6 ¹⁾ | 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 _{CC+} |
| A05 | Pt1000 / Pt 100 | Pt1000 / Pt 100 | | GND | Analog output | | V _{CC+} |

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

Order Information - Module

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

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

Order Information - Module with PTFE cable, 1m

| | A420 | A01 | A05 |
|------------------------------------|------------------------------|-----------------------------|-----------------------------|
| Nominal resistance: 1000 Ω at 0 °C | LinPicco (TM) Basic A420-G.S | LinPicco (TM) Basic A01-G.S | LinPicco (TM) Basic A05-G.S |
| Order code | 150.00091 | 150.00031 | 150.00090 |



INNOVATIVE SENSOR TECHNOLOGY

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