![iST logo] **Innovative Sensor Technology**

physical. chemical. biological.

DigiPicco™ Basic I²C
Capacitive Humidity Module
With calibrated and linearized I²C output signal

Benefits & Characteristics

- Precise humidity and temperature measurement
- Fully calibrated
- Very low drift due to wide sensor area
- Excellent response time
- Integrated Pt1000 temperature sensor and P14 humidity sensor

- Module with external sensor available
- Calibrated humidity and temperature signals on one bus
- PCB moisture protected
- Customer-specific module available upon request

Illustration[1]
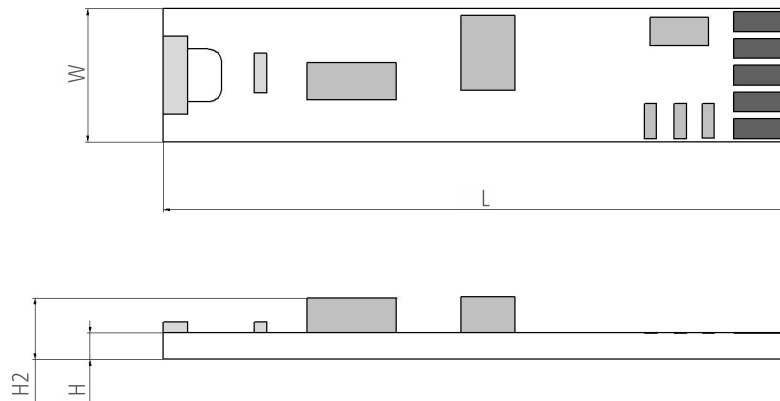
1) For actual size, see dimensions

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, class B (IEC 60751 F0.3)		
Humidity accuracy:	< ±3 % RH (15 % RH to 85 % RH at +23 °C) < ±5 % RH (0 % RH to 15 % RH and > 85 % RH at +23 °C)		
Temperature accuracy:	±0.5 K (-25 °C to +85 °C)		
Response time t_{63}:	< 5 s (50 % RH to 0 % RH) at +23 °C		
Operating voltage (V_{CC}):	5 V_{DC}		
Current consumption:	< 3 mA		

Output signal:	0x0 to 0x7FFF (0 % RH to 100 % RH)
	0x0 to 0x7FFF (-40 °C to +125 °C)
Cycle rate:	59 Hz
I²C standard address:*	0x78
Connection:*	Soldering pads for V_{cc}, clock and data (I²C), GND
Storage conditions:	-40 °C to +80 °C at max. 95 % RH non condensing
Cable (external sensor version only):	PTFE, 1 m (other lengths on request)

* Customer-specific alternatives available

Pin Assignment

W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
		Clock SCL (I²C)	Data SDA (I²C)				GND		V_{cc}+
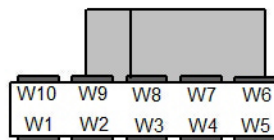
Order Information - Module

	DigiPicco (TM) Basic I2C-G
Order code	150.00015

Order Information - Module with PTFE cable, 1 m

	DigiPicco (TM) Basic I2C-G.S
Order code	150.00092

Additional Documents

	Document name:
Application Note:	AHLin_Digi_E