

# PCMini52

## Relative Humidity and Temperature Transmitter Mini Probe



The microprocessor control and multi-point calibration gives the PCMini52 RH transmitter excellent performance in terms of accuracy and linearity. The mini probe transmitter can provide two linear analog outputs for temperature and relative humidity, dew point or absolute humidity.

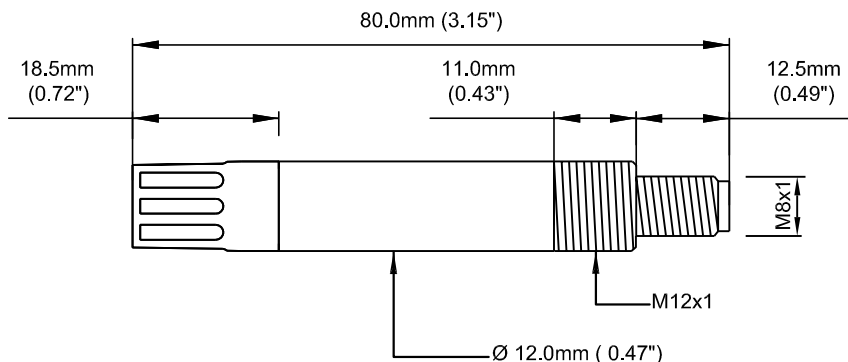
### Highlights

- Output can be %RH, calculated absolute humidity, dew point or wet bulb temperature + temperature
- Excellent linearity, ( $\mu$ P) micro processor temperature compensated
- Low power consumption, fast settling time
- Small size: 80mm x  $\varnothing$ 12mm

### Technical Specifications

Performance	
Measurement range (RH)	0–100% RH
Measurement range (T)	-20 to +80°C / -4 to +176°F
Accuracy at 23°C / 73°F Humidity	<±2% RH (10–90% RH)
Accuracy at 23°C / 73°F Temperature	±0.2°C / -10 to +50°C ±0.36°F / 14 to 122°F
Stability – RH Sensor	±1% RH/year
Response time – RH Sensor	<10 sec typical (for 90% of the step change)
Electrical output/input	
Output signal options	0–1 VDC, 0–5 VDC, 0–10 VDC
Supply voltage	14–35 VDC (for 0–5 / 10 VDC) 4.5–35 VDC (for 0–1 VDC) and 14–26 VAC
Operating conditions	
Operating humidity Probe, Housing, Storage	5–95% RH (non-condensing)
Operating temperature Sensing element Housing Storage	-30 to +85°C / -22 to +185°F -30 to +85°C / -22 to +185°F -40 to +85°C / -40 to +185°F
Mechanical specification	
Ingress protection	IP65
Housing material	Moulded polymer housing or stainless steel
Dimensions	L=80mm, $\varnothing$ 12mm / L=3.15" x $\varnothing$ 0.47"
Weight	10g / 0.35oz
Electrical connections	4 pin, H8 connector

### Dimensions



Accessories and spare parts	
You can check your hygrometer with the control kit HKC which is based on the principle of non-saturated salt solutions. Refer to technical data sheet CONTROL KIT.	Control Kit HKC
Connector with 2m / 6.5' cable	<b>A000033</b>
Connector with 5m / 16' cable	<b>A000036</b>
Connector with 10m / 33' cable	<b>A000037</b>
Connector without wire	<b>A000321</b>
Slotted protection cap, black	<b>A000003 (standard)</b>
PVDF filter	<b>A000017</b>
PVDF filter with protection cap	<b>A000018</b>
Wire mesh filter with protection cap, black	<b>A000022</b>
Stainless steel sintered dust filter	<b>A000023</b>
Stainless steel sintered filter 20 µm Arrow shape	<b>A000028</b>
½" NPT adj fitting stainless steel. Only to be used with stainless steel probe housing	<b>A000101</b>
Aluminum mounting flange	<b>A000111</b>

Electrical Connections	
Cable	
Brown	Supply voltage V+
White	Output RH, Dew Point or Absolute Humidity
Black	Output temperature
Blue	Common ground

## Order codes

Relative humidity and temperature mini probe

PCMini52 4 M X H T1 A

Output configuration	
0–10 V (only in combination with RH and T, Td or Ta output)	3
0–5 V	4
0–1 V	5

Body configuration	
Moulded polymer housing	X
Stainless steel	S

Moisture signal configuration	
RH	H
Calculated dew-point temperature & temperature output. Range (Td) -40 to +60°C / -40 to +140°F (only available with temperature range T1)	D
Calculated absolute humidity and temperature output. Range Abs from 0 - 200g/m <sup>3</sup> / 87.4gr/ft <sup>3</sup> (only available with temperature range T1)	A
Calculated wetbulb temperature and temperature volt output. Range (Tw) -40 to +60°C / 40 to +140°F	W

Cable length	
No cable	A
2m / 6.5'	B
5m / 16'	C
10m / 33'	D

Temperature output configuration	
No T output	X
-20 to +80°C / -4 to +176°F	T1
Other output scaling available on request	TX

### Example: PCMini52 4 M X H T1 A

Relative humidity and temperature mini probe PC52, Moulded polymer housing, 0–5 V output, 0-100% RH signal, -20 to +80°C / -4 to +176°F temperature range. No cable.

**Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: PCMini52\_97176\_V1\_UK\_1009**