

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.

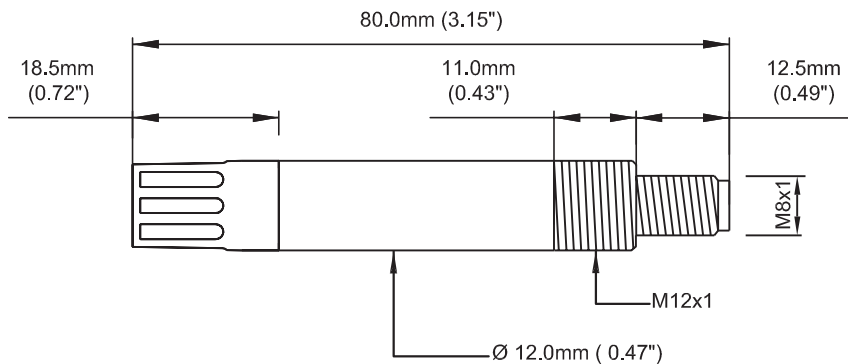
Highlights

- Output can be %RH, calculated absolute humidity, dew point or wet bulb temperature + temperature
- Excellent linearity, microprocessor corrected and temperature compensated
- Low power consumption, fast settling time
- Small size: 3.15" x 0.47"ø / 80mm x ø12mm

Technical Specifications

Performance	
Measurement range (RH)	0–100% RH
Measurement range (T)	-4 to +176°F / -20 to +80°C
RH Accuracy at 23°C / 73°F	<±2% RH (10–90% RH)
Temperature Accuracy	±0.36°F (14 to 122°F) ±0.2°C (-10 to +50°C)
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 & 0–10 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	-25 to +185°F / -30 to +85°C
Housing	-25 to +185°F / -30 to +85°C
Storage	-40 to +160°F / -40 to +85°C
Mechanical specification	
Ingress protection	IP65
Housing material	Molded polymer housing, or stainless steel
Dimensions	L=3.15" x ø 0.47" / L=80mm, ø12mm
Weight	10g / 0.4oz
Electrical connections	4 pin, H8 connector

Dimensions



Accessories and spare parts

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 6.5ft / 2m cable	A000033
Connector with 16ft / 5m cable	A000036
Connector with 32ft / 10m cable	A000037
Connector without wire	A000321
Slotted protection cap, black	A000003 (standard)
PVDF filter	A000017
PVDF filter with protection cap	A000018
Wire mesh filter with protection cap, black	A000022
Stainless steel sintered dust filter	A000023
Stainless steel sintered filter 20 µm pore size	A000028
½" NPT adj fitting stainless steel. Only to be used with stainless steel probe housing	A000101
Aluminum mounting flange	A000111

Electrical Connections

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

Order codes

Relative humidity and temperature mini probe

PCMini52 4 M X H T1 A

Cable length	
No cable	A
6.5ft / 2m with mating connector	B
16ft / 5m with mating connector	C
32ft / 10m with mating connector	D

Temperature output range	
No T output (0-1 & 0-5v out only)	X
-4 to +176°F / -20 to +80°C	T1
Other scaling (pls specify) upon request	TX

Moisture signal configuration	
RH	H
Calculated dew-point temperature & temperature output. Range (Td) -40 to +140°F / -40 to +60°C (only available with temperature range T1)	D
Calculated absolute humidity and temperature output. Range Abs from 0 - 200g/m³ / 87.4gr/ft³ (only available with temperature range T1)	A
Calculated wet bulb temperature and temperature output. Range (Tw) -40 to +140°F / -40 to +60°C (only available with temperature range T1)	W

Output configuration	
0-10 V (not available with Temp Output Range code X)	3
0-5 V	4
0-1 V	5

Body configuration	
Molded polymer housing	X
Stainless steel	S

Example: PCmini52 4 M X H T1 A

Relative humidity and temperature mini probe PCmini52, 0-5 V output, molded polymer housing, 0-100% RH signal, -4 to 176°F / -20 to 80°C 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_1001US_P



Process Measurement & Controls, Inc. Email: sales@pmc1.com
 Michell Instruments RH Web: www.michell.com/us/rh
 11 Old Sugar Hollow Road Tel: 203-792-8686
 Danbury, CT 06810 USA Fax: 203-743-2051

Represented by: