

# PC Series

Mini Probe

## Relative Humidity and Temperature Transmitter, Mini Probe

The Microprocessor control and multi-point calibration gives the mini probe rh-transmitter an excellent performance in terms of accuracy and linearity. The mini probe-transmitter can provide two linear analogue outputs for temperature and relative humidity, dew point and absolute humidity.



### Features

- % rh, dew point, absolute humidity and temperature outputs
- Two analogue output signals, digital optional
- Small size:  $\varnothing 12 \times 80$  mm
- Excellent linearity, ( $\mu$ P) microprocessor temperature compensation
- Digitally corrected, no potentiometers
- Low power consumption, fast settling time



### Applications

- HVAC
- OEM solutions
- Pharmaceutical
- Energy control
- Greenhouses
- Incubators
- Data loggers
- ... and many more





## Experts in:



OEM Solutions



Engineering



RH Technologies

[www.michell.com](http://www.michell.com)

## PC Series Mini Ordering Code

### Basic Model, Miniature Probe



PC-52{1}-MX-HX	Relative Humidity Transmitter, Miniature Probe Length = 80 mm, 2 % accuracy, plastic body, rh, voltage output
PC-52{1}-M{2}-{3}{4}	Relative Humidity and Temperature Transmitter- Miniature Probe Length = 80 mm, 2 % accuracy, 0-10 V, 0-5 V, 0-1 V signal output, plastic or stainless steel body, % rh, Td°C and g/m <sup>3</sup> signal
Suffix {1}	Output configuration
3	0-10 V analogue output - not available with relative humidity transmitter code: code PC-52 {1}-MX-HX selected
4	0-5 V analogue selected
5	0-1 V analogue selected
Suffix {2}	Body configuration
X	Plastic
S	Stainless steel
Suffix {3}	Moisture signal configuration
H	% rh signal
D	Td°C dew point signal, select with T1
A	g/m <sup>3</sup> signal, select with T1
Suffix {4}	Temperature configuration
T0	0 to +100°C temperature range
T1	-20 to +80°C temperature range
T3	0 to +50°C temperature range

### Ordering example

PC-524-MX-HX

Relative Humidity Sensor, 2 % accuracy, 0-5 V output, plastic body, rh signal

PC-523-MS-DT0

Dew point and Temperature Sensor, 2 % accuracy, 2x 0 to 10 V output,  
stainless steel body, dew point signal, 0 to +100°C temperature signal



## PC Series Accessories

### Connectors

A-000033	Electrical connector, 2 m cable
A-000036	Electrical connector, 5 m cable
A-000037	Electrical connector, 10 m cable



### Filters

A-000003	Slotted protection cap, black
A-000017/18	PVDF Filter/PVDF filter with protection cap
A-000022	Wire mesh filter with protection cap, black
A-000023	Sintered stainless steel dust filter



### Weather Cap / Flanges

A-000111	Aluminium mounting flange
----------	---------------------------



### Calibration Salts

A-000050	12 % reference salt
A-000060	33 % reference salt
A-000070	55 % reference salt
A-000080	75 % reference salt
A-000090	90 % reference salt
A-000190	12 mm adapter



Ordering example

A-000050: Electrical 12 % reference salt

## Related Products



### Industrial Sensors



### HVAC Sensors



### Calibration Equipment

[www.michell.com](http://www.michell.com)

*Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice.*



# PC Series

## Technical Specifications

### Performance

Measurement range (rh)	0-100 % rh
Measurement range (T)	0 to +100°C, -20 to +80°C, 0 to +50°C
Accuracy rh @ 25°C	±2 % rh (10-90 % rh)
Accuracy T @ 25°C	±0.2°C (-10 to +50°C)
Stability rh sensor	±1 % rh over 12 months typical
Response time rh sensor	10 sec typical (90 % of the change)
Temperature influence	±0.05 % rh/°C
Supply influence	±0.005 % rh/V typical

### Electrical Input/Output

Output	0-1, 0-5, 0-10 VDC
Output digital	In development
Supply voltage	14-30 VDC, 5-30 VDC (0-1 V output)

### Operating Conditions

Operating temperature	-30 to +70°C
Storage temperature	-40 to +75°C

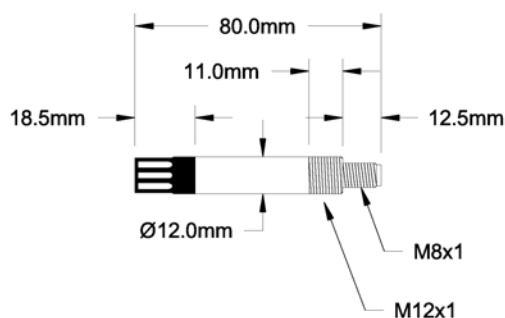
### Alternative Units

Dew point	-40 to +60°C
Absolute humidity	0-200 g/m <sup>3</sup>

### Mechanical Specifications

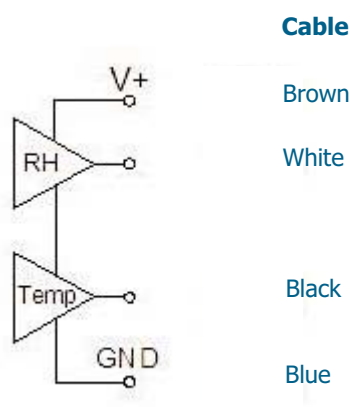
Ingress protection sensor	IP65 (NEMA 4)
Connector electrical	M8
Dimensions	Sensor: 80 x 12 mm

## Dimensions



Plastic / Stainless Steel Probe

## Connection Diagrams



### Cable

Brown

White

Black

Blue

Voltage output

## Ordering code:

Ordering information can be taken from the second and third pages of the document.

### Italy

Michell Italia Srl  
Tel.: [+39] 024 047194  
Email: it.info@michell.com

### Japan

Michell Japan KK  
Tel.: [+81] 422 502600  
Email: jp.info@michell.com

### USA

Michell Instruments, Inc.  
Tel.: [+1] 203 744-6881  
Email: us.info@michell.com

### Michell Instruments Ltd

48 Lancaster Way Business Park  
Ely, Cambridgeshire  
CB6 3NW, UK  
Tel.: [+44] 1353 658000  
Fax: [+44] 1353 658199  
Email: info@michell.com  
Web: www.michell.com

### Benelux

Michell Instruments BV  
Tel.: [+31] 180 466460  
Email: nl.info@michell.com

### China

Michell Instruments Shanghai  
Tel.: [+86] 21 6448 0152 x808  
Eail: cn.info@michell.com

### France

Michell Instruments SARL  
Tel.: [+33] 1 42 26 01 24  
Email: fr.info@michell.com

### Germany

Michell Instruments GmbH  
Tel.: [+49] 6172 591740  
Email: de.info@michell.com



Please note: The accuracy stated represents the typical variation between the instruments under test and a calibrated and corrected reference.

Please contact us for latest version: PC Series, Mini Probe 0508

PC Series Mini Probe