

PC Series

Standard and Long Probe

Relative Humidity and Temperature Transmitter, Analogue and Digital

The Probe Connector series offers a comprehensive range of relative humidity transmitters for accurate, stable and repeatable measurements. Available with analogue or digital output signals and in a choice of probe lengths, the PC series can be installed in a wide variety of applications.



Features

- % rh, dew point, absolute humidity and temperature outputs
- Digital and analogue output signals
- Variety of lengths available for different applications with M12 fast connector
- Excellent sensor protection
- Long term stability: ± 1 % rh over 12 months
- Stainless steel housing (optional)



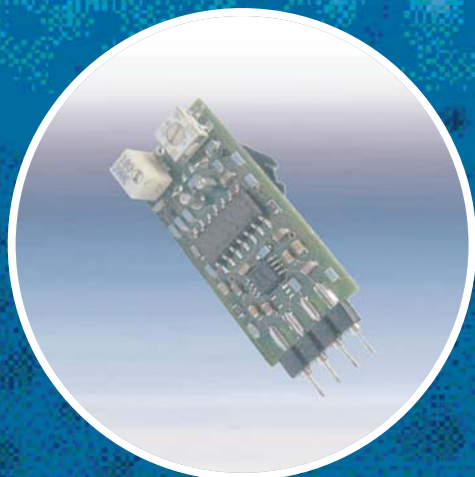
Applications

- HVAC
- Dry air storage
- Pharmaceutical
- Museums
- Green houses
- Air conditioning
- ... and many more





Experts in:



OEM Solutions



Engineering



RH Technologies

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PC Series Ordering Code

Basic Model, Probe Length 130 mm



PC- {1} {2} -XX- H {3}	Relative Humidity and Temperature Transmitter-Standard Probe Length = 130 mm
Suffix {1}	Accuracy and version configuration
33	3 % Accuracy - HVAC version
52	2 % Accuracy - universal version
Suffix {2}	Output configuration
2	4-20 mA analogue output
3	0-10 V analogue output
4	0-5 V analogue output
5	0-1 V analogue output
0	RS232 digital output (Available with 2 % accuracy only, suffix {1} -code 52 selected)
1	RS485 digital output (Available with 2 % accuracy only, suffix {1} -code 52 selected)
Suffix {3}	Temperature configuration
X	No temperature output, rh signal only
T0	0 to +100°C temperature range
T1	-20 to +80°C temperature range
T3	0 to +50°C temperature range
TC	Temperature range selectable in °C (Available when RS232/485 is selected)
TF	Temperature range selectable in °F (Available when RS232/485 is selected)
XX	Change XX to SX for stainless steel housing

Ordering example

PC-332-XX-HX

Relative Humidity Sensor, 3 % accuracy, 4-20 mA output

PC-524-XX-HT1

Relative Humidity and Temperature Sensor, 2 % accuracy,

0 to 5 V output for rh and temperature, -20 to +80°C temperature signal

Basic Model, Probe Length 200 mm



PC 52 {2} -XL-H {3}	Relative Humidity and Temperature Transmitter-Standard Probe Length = 200 mm
Suffix {2}	Output configuration
2	4-20 mA analogue output
3	0-10 V analogue output (under R & D)
4	0-5 V analogue output (under R & D)
5	0-1 V analogue output (under R & D)
Suffix {3}	Temperature configuration
X	No temperature output, rh signal only
T0	0 to +100°C temperature range
T1	-20 to +80°C temperature range
T3	0 to +50°C temperature range
XL	Change XL to SL for stainless steel housing

Ordering example

PC-522-LX-HX

Relative Humidity Sensor, 2 % accuracy, probe length 200 mm, 4-20 mA output

PC-522-LX-HT1

Relative Humidity and Temperature Sensor, 2 % accuracy,

2 x 4-20 mA output for H and temperature, -20 to +80°C temperature range

PC Series Accessories

Connectors

A-000030	Electrical connector, screws
A-000031	Electrical connector, 2 m cable
A-000032	Electrical connector, 5 m cable



Filters

A-000002	Slotted protection cap, black
A-000021	Wire mesh filter with protection cap, black
A-000014	PVDF Filter
A-000015/44	PVDF/Foil Filter with protection cap, black
A-000025/26/27	Sintered stainless steel filter 5/10/20 µm



Weather Cap / Flange

A-000110/100	Aluminium mounting flange/stainless steel flange
A-000150	Plastic mounting flange
A-000120	Weather cap, wall Ø 90 mm, Ø 19 mm probe
A-000125	Weather cap, wall Ø 120 mm, Ø 19 mm probe



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



Ordering example

A-000050: Electrical 12 % reference salt

Related Products



Industrial Sensors



HVAC Sensors



Calibration Equipment

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), ±3 % rh available
Accuracy T @ 25°C	±0.2°C (-10 to +50°C) or ±0.3°C (5 to +40°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	4-20 mA signal, 0-1, 0-5, 0-10 VDC
Output digital	RS232, RS485
Supply voltage	14-30 VDC, 5-30 VDC (0-1V & mA output)

Operating Conditions

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

Alternative Units (available only with RS232, RS485)

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

Mechanical Specifications

Ingress protection Sensor	IP65 (NEMA 4)
Connector electrical	M12
Dimensions	130/200 x 19 mm

Ordering code:

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

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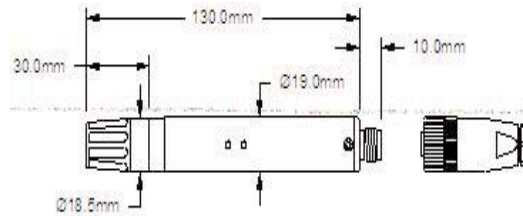
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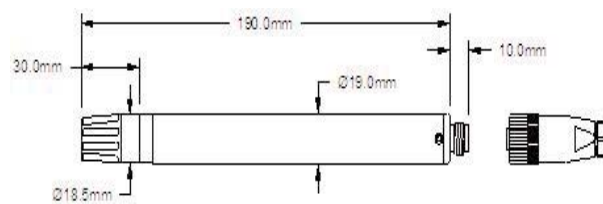
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Dimensions

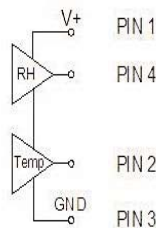


Standard probe

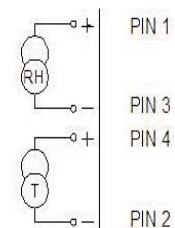


Long Probe

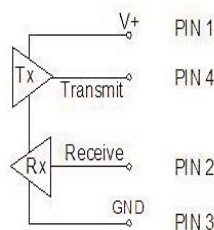
Connection Diagrams



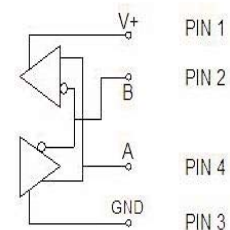
Voltage output



Current output



RS232



RS485



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, Standard and Long Probe 0508

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