

# PF211 HVAC Relative Humidity Transmitter



PF211 relative humidity transmitters are equipped with the Hygrosmart relative humidity sensor/converter. This interchangeable module has miniaturized electronics and does not require recalibration.

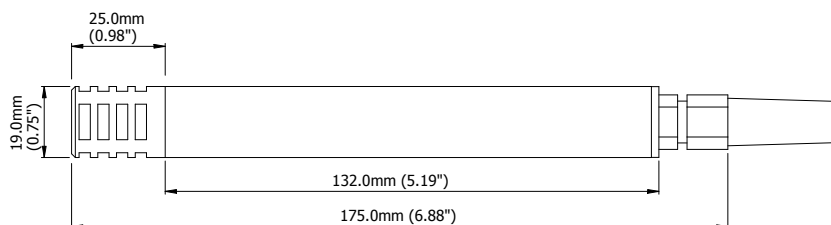
## Highlights

- Designed for HVAC applications
- Based on the interchangeable Hygrosmart module

## Technical Specifications

Performance	
<b>Measurement range (RH)</b>	0–100% RH
<b>Measurement range (T)</b>	-30 to +70°C / -22 to +158°F
<b>Accuracy at 23°C / 73°F Humidity</b>	<±2% RH (5–95 % RH)
<b>Accuracy at 23°C / 73°F Temperature</b>	±0.2°C (-10 to +50°C) ±0.36°F (14 to +122°F)
<b>Stability – RH Sensor</b>	<±1% RH/year
<b>Response time – RH Sensor</b>	<10 sec typical (for 90% of the step change)
Electrical output/input	
<b>Output signal (RH)</b>	4–20 mA, 0–10 V
<b>Output signal (T)</b>	3-wire 1/3 DIN Pt100 direct
<b>Supply voltage</b>	10–32 VDC for 4–20 mA output 15–32 VDC for 0–10 V output 24 VAC ±10% (PF211B)
<b>Load resistance</b>	Output 4–20 mA: Rload < (Uv-9)/0.02 Output 0–10 V: R > 1K Ω
<b>Current consumption</b>	20 mA max
Operating conditions	
<b>Operating humidity</b> Probe, Housing, Storage	0–100% RH
<b>Operating temperature</b> Probe, Housing, Storage	-30 to +70°C / -22 to +158°F
Mechanical specification	
<b>Ingress protection</b>	IP54
<b>Housing material</b>	ABS
<b>Dimensions</b>	L=175mm, ø19mm / L=6.89", ø 0.75"
<b>Weight</b>	184g / 6.49oz
<b>Electrical connections</b>	5 or 6 wire output cable, 3m / 9.8'

## Dimensions



**Accessories and spare parts**

Hygrosmart w/Pt100 mA output	<b>I7400.1</b>
Hygrosmart w/Pt100 V output	<b>I7000.1</b>
Noryl cap, white, with polyester filter/PTFE	<b>Z2</b>
Stainless steel sintered filter	<b>H4</b>
Moulded polymer housing fitting	<b>3401135</b>
Fixing collar	<b>3420085</b>
Mounting clip	<b>2510387</b>

**Electrical Connections**

**PF 211 A: 4-20 mA output 2-wire**

Cable	Connector
Red	Output RH +
Blue	Output RH -
White	
Yellow	
Green	

**PF 211 B: V output (0-10V)**

Cable	Connector
Red	Power supply V +
Black	Common ground
Blue	Output RH +
White	
Yellow	
Green	

**Order codes**

HVAC relative humidity transmitter **PF211 A C Z2**

Humidity output configuration	
4-20 mA 2-wire	A
0-10 V 3-wire	B

Filter	
Noryl cap, white, with polyester filter/PTFE	Z2
Stainless steel sintered filter	H4

Cable length	
3m / 9.8' (standard)	C
5m / 16'	D
7m / 23'	E
10m / 33'	F
15m / 49'	G

**Example: PF211 A C Z2**

Relative humidity transmitter PF211, output signal 4-20 mA for humidity, Pt100 direct for temperature, 3m / 9.8' cable, noryl cap, with polyester filter/PTFE.

**Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: PF211\_97180\_V1\_UK\_1009**