

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.

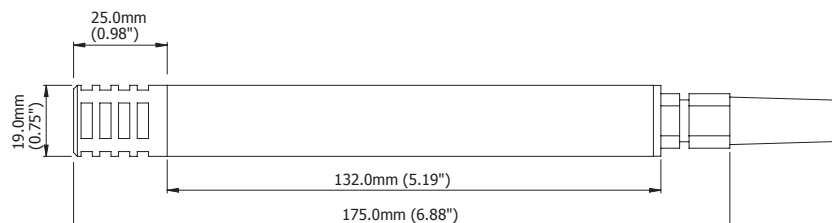
Highlights

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

Technical Specifications

Performance	
Measurement range (RH)	0–100% RH
Measurement range (T)	-22 to +158°F / -30 to +70°C
RH Accuracy at 23°C/73°F	<±2% RH (5–95 % 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 (RH)	4–20 mA, 0–10 V
Output signal (T)	3-wire 1/3 DIN Pt100 direct
Supply voltage	10–32 VDC for 4–20 mA output 15–32 VDC for 0–10 V output 24 VAC ±10% (PF211B)
Load resistance	Output 4–20 mA: $R_{load} < (U_v - 9)/0.02$ Output 0–10 V: $R > 1K \Omega$
Current consumption	20 mA max
Operating conditions	
Operating humidity Probe, Housing, Storage	0–100% RH
Operating temperature Probe, Housing, Storage	-20 to +160°F / -30 to +70°C
Mechanical specification	
Ingress protection	IP54
Housing material	ABS
Dimensions	L=6.89", ϕ 0.75" / L=175mm, ϕ 19mm
Weight	6.5oz / 184g
Electrical connections	5 or 6 wire output cable, 9.8ft / 3m

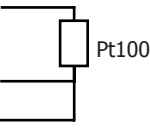
Dimensions



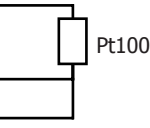
Accessories and spare parts

Hygrosmart w/Pt100 mA output	17 4 00 1
Hygrosmart w/Pt100 V output	17 0 00 1
Noryl cap, white, with polyester filter/PTFE	Z2
Stainless steel sintered filter	H4
Molded polymer housing fitting	3401135
Fixing collar	3420085
Mounting clip	2510387

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 return
Blue	Output RH +
White	
Yellow	
Green	

Order codes

HVAC relative humidity transmitter

PF211	A	C	Z2
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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

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

Example: PF211 A C Z2

Relative humidity transmitter PF211, output signal 4-20 mA for humidity, Pt100 direct for temperature, 9.8ft / 3m 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_1001US_M