

220-HMP155D Humidity Sensor

The **220-HMP155D Humidity Sensor** provides reliable humidity measurement utilizing a new generation HUMICAP® 180R sensor that has excellent stability and withstands harsh environments. Includes standard 3.5m (11.5') cable and MP12 connector.

- Long-term stability
- Fast Measurements
- Weather-proof housing IP66
- High level 0-1V or 0-5V Humidity output
- Applications: meteorology, aviation and road weather



		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
220-HMP155D Humidity Probe		D		A	B			A	0			A	1			A
1	Probe type	Voltage output for RH	D													
2	Signal output selection	0...1 V output 0...5 V output 0...10 V output		2 3 4												
3	Analog output signal for CH1	None		A												
4	Analog output signal for CH2	RH (0... 100%RH)			B											
5	Units	Metric Non-metric				1 2										
6	Humidity sensor type	General purpose spare: HUMICAP180R General purpose spare: HUMICAP180 General purpose with NTC Thermistor (YSI) spare: HUMICAP180R + 44031RC (10 k Ohm @ +25 °C)				1 3 7										
7	Heating options	None						A								
8	Chemical purge	None							0							
9	Sensor protection	Sintered Teflon filter spare: 219452SP Membrane filter spare: 230727								A B						
10	Probe cable length	No cable (no counter connector) 0 3.5 m (with 8 pin M12 female connector) spare: 220496 10 m (with 8 pin M12 female connector) spare: 220497 30 m (with 8 pin M12 female connector) spare: 220498 5 m (with 8 pin M12 female connector) spare: 223283									0 1 2 3 4					
11	Additional Temperature probe	None										A				
12	Calibration	At room temperature											1			
13	PC-Accessories	None PC connection cable (USB) spare: 221040 MI70 connection cable spare: 221801												A B C		
14	Installation accessories	None Installation kit to Stevenson screen spare: 221321													0 1	
15	(For production use only)															A

Ordering Information

220-HMP155D	Humidity Sensor, 0-1 V output, 3.5m cable (11.5 feet)	(D 2 A B21A0A1A1A0A)
220-HMP155D3	Humidity Sensor, 0-5 V output, 3.5m cable (11.5 feet)	(D 3 A B21A0A1A1A0A)
380-41005-5	14-Plate Solar Radiation Shield for the 220-HMP155D	

For additional sensor options, see chart above.

220-HMP155D Humidity Performance

Sensor	HUMICAP [®] R2, 180R and INTERCAP for typical applications
Output	Voltage output: 0 ... 1 V, 0 ... 5 V, 0 ... 10 V
Observation range	0 ... 100 %RH
Response time at +20 °C (+68 °F) in still air with sintered Teflon filter	63 %: 20 s 90 %: 60 s
Factory calibration uncertainty at +20 °C (+68 °F)*	±0.6 %RH (0 ... 40 %RH) ±1.0 %RH (40 ... 95 %RH)
* Defined as ±2 standard deviation limits. Small variations possible (see also the calibration certificate).	

220-HMP155D Power Requirements

Minimum operating voltage	0 ... 1 V output: 7 V 0 ... 5 V output: 12 V 0 ... 10 V output: 16 V
Average power consumption (+15 V DC, load 100 kΩ)	0 ... 1 V output: < 3 mA 0 ... 10 V output: +0.5 mA
Settling time at startup	Voltage output: 2 s

220-HMP155D Mechanical

Dimensions (H × W)	279 × 40 mm (10.9 × 1.6 in)
Weight	93 g (3.25 oz)
Connection	8-pin male M12 connector
Connection cables	3.5 m (11 ft 6 in), 10 m (32 ft 10 in), 30 m (98 ft 5 in)
Filter	Sintered Teflon or membrane
Housing	Polycarbonate (PC)
Cable	PUR
Rating	IP66