

WR285

Digital Relative Humidity Transmitter - Remote for Pressurized Locals

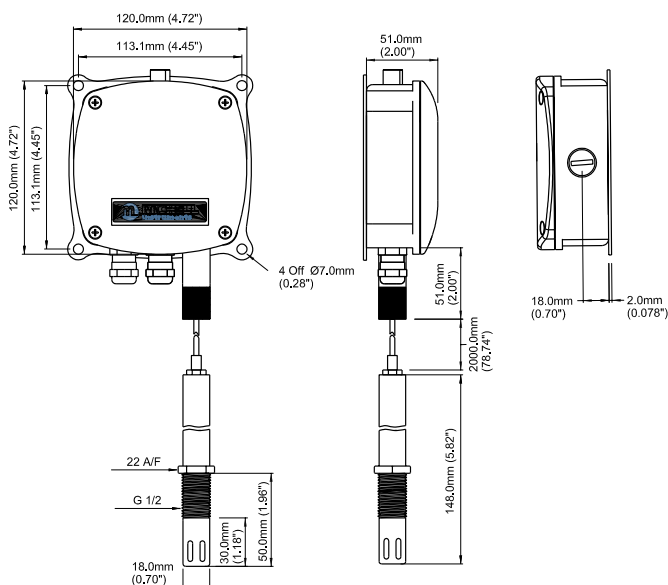


The WR285 relative humidity sensor uses the HYGROSMART module, integrated in the interchangeable probe. This device can be used in high-temperature applications due to the remote measurement element and its small overall size. The interchangeable probe allows for simple recalibration and lower maintenance costs.

Highlights

- Up to 30 bar pressure
- Analog and digital output standard
- Interchangeable probe
- Analog output signals selectable through software
- Metric or imperial measurement units selectable through software

Dimensions



Technical Specifications

Performance	
Measurement range (RH)	0–100% RH
Accuracy at 25°C Humidity	<±2% RH (5–95% RH)
Stability – RH Sensor	±1% RH/year
Response time – RH Sensor	<10 sec typical (for 90% of the step change)
Electrical output/input	
Output signal	0–1 VDC, 0–5 VDC, 0–10 VDC 0–20 mA, 4–20 mA, RS485
Supply voltage	15 ≤ VAC ≤ 27 / 18 ≤ VDC ≤ 38
Load resistance	Current output: R ≤ 500 Ω
Power consumption	1.7 W
Operating conditions	
Operating humidity Probe, Housing, Storage	0–100% RH
Operating temperature Probe Housing Storage	-30 to +120°C / -22 to +248°F -30 to +70°C / -22 to +158°F -40 to +70°C / -40 to +158°F
Mechanical specification	
Ingress protection	IP67
Material Housing Probe	Aluminum die casting Stainless steel
Dimensions Housing Probe	120 x 120 x 51mm / 4.72 x 4.72 x 2.00" L=148mm, $\varnothing 18\text{mm}$ / L=5.83", $\varnothing 0.71"$
Weight	450g / 15.87oz
Electrical connections	Screw terminals

Accessories and spare parts

You can check your hygrometer with the control kit HKC which is based on the principle of non-saturated salt solutions. Refer to technical data sheet CONTROL KIT	Control Kit HKC
Interchangeable probe: Stainless steel with 2m / 6.5' cable with stainless steel mesh filter	USTE015
Stainless steel slotted cap with mesh filter	K1
Stainless steel slotted cap with PTFE filter	Z1
Cable USB for configuration "DIGICOR" (USB/TTL)	F035263
RS422/485 to PC (RD232) converter	330185

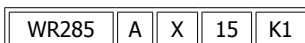
Electrical Connections

Pin	
1	Power Supply V+
2	Power Supply V -
3	Output RS485 Ground
4	Ground
5	Not connected
6	Not connected
7	Output Channel 2 RH +
8	Output Channel 2 Ground
9	RS485 Data+
10	RS485 Data-
11	Not connected
12	Not connected
13	Output Channel 3 (not connected)
14	Output Channel 3 Ground (not connected)

Do not connect pin 2 (V-) to pin 4 (Ground)

Order codes

Relative humidity and temperature transmitter



Humidity output	
4–20 mA	A
0–10 V	B
0–5 V	C
0–1 V	D
0–20 mA	E

Interchangeable probe	
Stainless steel probe with 2m / 6.5' cable output, and stainless steel cover with stainless steel mesh filter	15

Filters	
Stainless steel slotted cap with mesh filter	K1
Stainless steel slotted cap with PTFE filter	Z1

Example: WR285 A X 15 K1

Relative humidity transmitter WR285 with 4–20 mA 2-wire humidity output, stainless steel probe with 2m / 6.5' cable, stainless steel cap with mesh filter.

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: WR285_97193_V1_UK_1009