

WR285

Digital Relative Humidity Transmitter with Remote Probe for Pressurized Areas

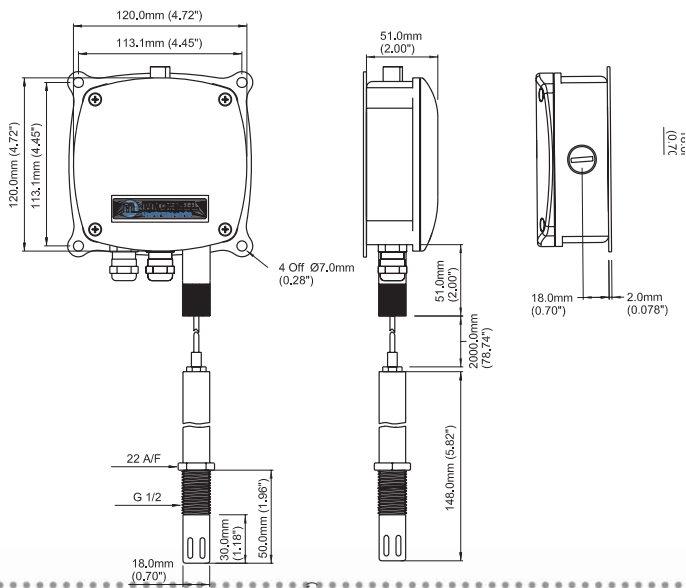


The WR285 relative humidity sensor uses the HYGROSMART module, integrated in the interchangeable probe. This device can be used in high-temperature applications due to the remote measurement element and its small overall size. The interchangeable probe allows for simple recalibration and lower maintenance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

Highlights

- Up to 450psi / 30 bar pressure
- Analog and digital output standard
- Interchangeable probe
- Analog output signals selectable through software
- Metric or US 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)
Repeatability	
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	-25 to +245°F / -30 to +120°C
Housing	-25 to +160°F / -30 to +70°C
Storage	-40 to +160°F / -40 to +70°C
Mechanical specification	
Ingress protection	IP67
Material	
Housing	Aluminum die casting
Probe	Stainless steel
Dimensions	
Housing	4.72 x 4.72 x 2.00" / 120 x 120 x 51mm
Probe	L=5.83" / ø 0.71" / L=148mm, ø18mm
Weight	16oz / 450g
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	V+
2	V -
3	RS485 output Ground
4	Ground
5	N.C.
6	N.C.
7	Output Channel 2 RH
8	Output Channel 2 Ground
9	RS485 Data+
10	RS485 Data-
11	Not connected
12	Not connected
13	Not connected
14	Not connected

Do not connect V - (pin 2) to 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 6.5' / 2m cable, 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 6.5ft / 2m 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_1001US_P



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