

DT269

Relative Humidity Transmitter



The DT269 transmitter has a I7000 HYGROSMART sensor. Thanks to this solution, the sensor can be changed on site quickly and simply, providing greatly reduced maintenance costs. The transmitter does not need recalibration after the sensor is changed.

Highlights

- Designed for accurate measurement in a controlled environment
- Based on the interchangeable Hygrosmart module
- Output signal configurable on request
- Linearization for a specific isotherm on request

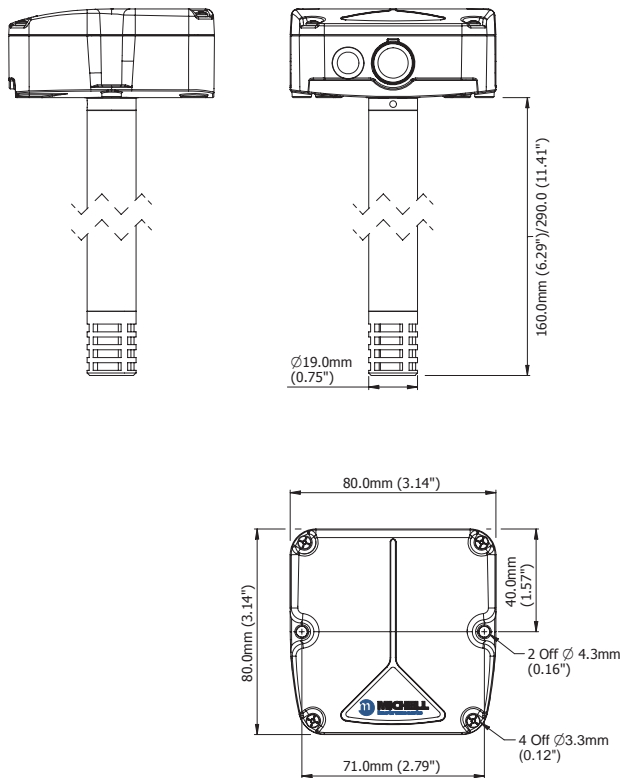
Accessories and spare parts

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
Aluminum mounting flange for fixing probe	FLA019
HYGROSMART without Pt100 output	I7000.0
HYGROSMART with Pt100 output	I7000.1
Stainless steel sintered filter	H4
Noryl cap with polyester filter/PTFE	Z2

Technical Specifications

Performance	
Measurement range (RH)	0–100% RH
Measurement range (T) configurable on request	-22 to +176°F / -30 to +80°C
RH Accuracy at 23°C / 73°F	<±2% RH (5–95% RH)
Temperature Accuracy	Pt100 1/3 DIN direct ±0.36°F / ±0.2°C Current output ±0.54°F / ±0.3°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) configurable on request	4–20 mA 0–1 V, 0–5 V, 0–10 V
Output signal (T) configurable on request	4–20 mA 3-wire 1/3 DIN Pt100 direct 0–1 V, 0–5 V, 0–10 V
Supply voltage	Output 4–20 mA: E= 12–30 VDC Output 0–10 V: E= 15–30 VDC Output 0–5 V: E= 10–30 VDC Output 0–1 V: E= 8–30 VDC
Load resistance	Output 4–20 mA: Rload < (Uv-9)/0.02 Output 0–10 V: R > 10 k Ω Output 0–5 V: R > 5 k Ω Output 0–1 V: R > 1 k Ω
Current consumption	2 x 20 mA max
Operating conditions	
Operating humidity	Probe 0–100% RH Housing, Storage 0–98% RH (non-condensing)
Operating temperature	Probe -22 to +185°F / -30 to +85°C Housing -22 to +158°F / -30 to +70°C Storage -40 to +158°F / -40 to +70°C
Mechanical specification	
Ingress protection	IP65
Material	PPO + POM
Dimensions	Housing 3.14 x 3.14 x 1.35" / 80 x 80 x 34.5mm Probe L=3.35/7.01", ø 0.75" L=85/178mm, ø19mm
Weight	3.6oz / 100g
Electrical connections	Screw terminals

Dimensions



Electrical Connections

Version mA output and Pt100 direct	
Pin 1	Output RH +
Pin 2	Output RH -
Pin 3	Pt100 direct
Pin 4	
Pin 5	

Version mA output for RH and Temperature		
Pin 1	Output temperature +	Warning: Temperature channels Pin 1 and Pin 2 must be powered.
Pin 2	Output	
Pin 3	Output RH +	
Pin 4	Output RH -	

Version V output and Pt100 direct	Version V output for RH and Temperature
Pin 1	Power supply V+
Pin 2	Common ground
Pin 3	Output RH +
Pin 4	Pt100 direct
Pin 5	

Order codes

Relative humidity and temperature transmitter DT269 A 4 0 H4

Output configuration	
4–20 mA	A
0–10 V	B
0–5 V	C
0–1 V	D

Temperature output range and configuration	
No temperature output (standard)	0
Pt100 direct	1
-22 to +158°F / -30 to +70°C Range	3
-22 to +68°F / -30 to +20°C Range	4
32 to +122°F / 0 to +50°C Range	5
-4 to +176°F / -20 to +80°C Range	6
Other ranges available - consult factory	TX

Protections and filters	
Stainless steel sintered filter	H4
Noryl cap with polyester filter/PTFE	Z2

Extension	
Length 6.3" / 160mm (standard)	0
Length 11.5" / 290mm	1

Example: DT269 A 4 0 H4

Relative humidity and temperature transmitter DT269 with 4–20 mA humidity signal, 6.3" / 160mm extension, filter, -22 to +68°F / -30 to +20°C temperature range.

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: DT269_1001US_P



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