DT269

Relative Humidity & Temperature 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

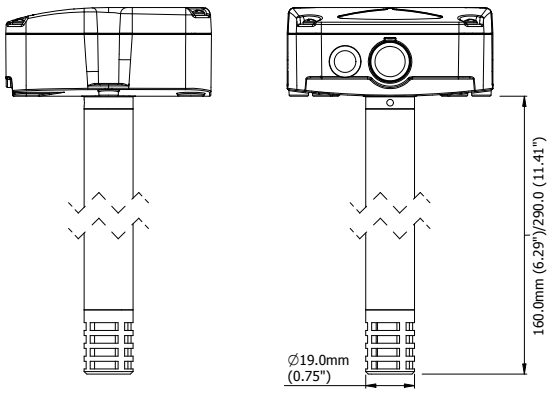
You can check your hygrometer with the control kit HKC which is based on the principle of non-saturated salt solutions. Refer to technical data sheet CONTROL KIT	**Control Kit HKC**
Aluminum mounting flange for fixing probe	**FLA019**
HYGROSMART without Pt100 output	**I7000.0**
HYGROSMART with Pt100 output	**I7000.1**
Stainless steel sintered filter	**H4**
Noryl cap with polyester filter/PTFE	**Z2**

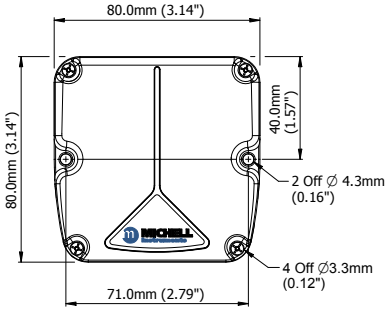
Technical Specifications

Performance		
Measurement range (RH)	0–100% RH	
Measurement range (T)	-20 to +80°C / -4 to +176°F	
Accuracy at 23°C / 73°F Humidity	<±2% RH (5–95% RH)	
Accuracy at 23°C / 73°F Temperature	Pt100 1/3 DIN direct ±0.2°C / ±0.36°F Current output ±0.3°C / ±0.54°F	
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: Output 0–10 V: Output 0–5 V: Output 0–1 V:	V+ = 12–30 VDC V+ = 15–30 VDC V+ = 10–30 VDC V+ = 8–30 VDC
Load resistance	Output 4–20 mA: Output 0–10 V: Output 0–5 V: Output 0–1 V:	Rload < (Uv-9)/0.02 R > 10 k Ω R > 5 k Ω R > 1 k Ω
Current consumption	2 x 20 mA max	
Operating conditions		
Operating humidity Probe Housing, Storage	 0–100% RH 0–98% RH (non-condensing)	
Operating temperature Probe Housing Storage	 -30 to +85°C / -22 to +185°F -30 to +70°C / -22 to +158°F -40 to +70°C / -40 to +158°F	
Mechanical specification		
Ingress protection	IP65	
Material	PPO + POM	
Dimensions Housing Probe	 80 x 80 x 34.5mm / 3.14 x 3.14 x 1.35” L=85/178mm, ø19mm L=3.35/7.01”, ø 0.75”	
Weight	100g / 3.53oz	
Electrical connections	Screw terminals	

DT269

Dimensions





Electrical Connections

Version mA output and Pt100 direct

Pin 1	Output RH +
Pin 2	Output RH -
Pin 3	
Pin 4	Pt100 direct
Pin 5	

Version mA output for RH and Temperature

Pin 1	Output temperature +	
Pin 2	Output temperature -	Warning: Temperature channels Pin 1 and Pin 2 must be powered always.
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 1	Power supply V+
Pin 2	Common ground	Pin 2	Common ground
Pin 3	Output RH +	Pin 3	Output Temperature +
Pin 4	Pt100 direct	Pin 4	Output RH +
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 configuration	
No temperature output (standard)	0
Pt100 direct	1
-30 to +70°C / -22 to +158°F	3
-30 to +20°C / -22 to +68°F	4
0 to 50°C / 32 to 122°F	5
-20 to +80°C / -4 to +176°F	6
Other output scaling available on request	TX

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

Extension	
Length 160.0mm / 6.30" (standard)	0
Length 290.0mm / 11.42"	1

Example: DT269 A 4 0 H4
Relative humidity and temperature transmitter DT269 with 4–20 mA humidity signal, 160.0mm / 6.30" extension, filter, -30 to +20°C / -22 to +68°F 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_97188_V1_UK_1009