

DT269

Digital Relative Humidity & Temperature Transmitter, Duct Mount

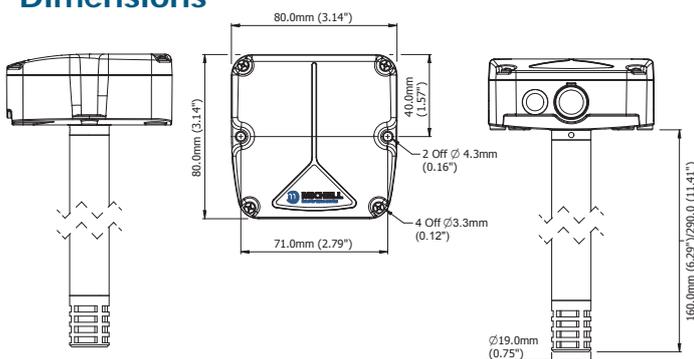


The DT269 transmitter has a I7000 Hygrosmart module. Thanks to this solution, the sensor can be changed on site quickly and simply, providing greatly reduced maintenance costs. The transmitter does not need recalibration after the sensor is changed.

Highlights

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

Dimensions



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)
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, 0–5, 0–10 V
Output signal (T) configurable on request	4–20 mA 3-wire 1/3 DIN Pt100 direct 0–1, 0–5, 0–10 V
Supply voltage	Output 4–20 mA: V+ = 12–30 V DC Output 0–10 V: V+ = 15–30 V DC Output 0–5 V: V+ = 10–30 V DC Output 0–1 V: V+ = 8–30 V DC
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 temperature	
Probe	-30 to +85°C (-22 to +185°F)
Housing	-30 to +70°C (-22 to +158°F)
Storage	-40 to +70°C (-40 to +158°F)
Mechanical specification	
Ingress protection	IP65 (NEMA 4 level)
Material	PPO + POM
Dimensions	
Housing	80 x 80 x 34.5mm (3.14 x 3.14 x 1.35")
Probe	L=85/178mm, \varnothing 19mm (L=3.35/7.01", \varnothing 0.75")
Weight	100g (3.53oz)
Electrical connections	Screw terminals

Accessories and Spare Parts

Al mounting flange for \varnothing 19mm (0.75") SS probes	FLA019
SS sintered filter	H4
ABS cap slotted with PTFE filter, white	Z2
Hygrosmart without Pt100 output (RH = 0-1 V)	I7-0-00-0
Hygrosmart with Pt100 output (RH = 0-1 V)	I7-0-00-1
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	HKC

Electrical Connections

Version mA output and Pt100 direct		Version mA output for RH and Temperature		Version V output and Pt100 direct		Version V output for RH and Temperature	
Pin 1	Output RH +	Pin 1	Output temperature +	Pin 1	Power supply V +	Pin 1	Power supply V +
Pin 2	Output RH -	Pin 2	Output Temperature -	Pin 2	Common ground	Pin 2	Common ground
Pin 3	 Pt100 direct	Pin 3	Output RH +	Pin 3	Output RH +	Pin 3	Output Temperature +
Pin 4		Pin 4	Output RH -	Pin 4	 Pt100 direct	Pin 4	Output RH +
Pin 5		Warning: Temperature channels Pin 1 and Pin 2 must be powered always		Pin 5		Output RH -	

Ordering Codes

To construct the order code, select the relevant feature from the tables below, starting with the base model, which is {Feature A} and then add on options to create a string: {Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}

Order example: DT269+A+4+E0+H4

Digital RH and temperature transmitter DT269, 4-20 mA output, -30 to +20°C (-22 to +68°F) temp range, 160mm (6.30") probe length, stainless steel sintered filter

