

Special resistance ...

to airborne pollutants as a result of the use of a high-quality measuring element. This ensures - in combination with the high-quality electronics - excellent measuring accuracy and high long-term stability. As a consequence, the sensor 8091 is particularly appropriate for measurements outdoors in different areas of application.

- small, light, compact
- simple mounting, very robust, low-maintenance
- low power consumption
- good dynamic behaviour
- reliable membrane filter as protection against atmospheric pollutants
- high long-term stability

■ building technology • industry



Humidity/Temperature Sensor 8091



Sensor Shelter 8141.6
(optional)

Standard Line	(8091)	Humidity/Temperature Sensor	Id-No. 00.08091.000 042
Measuring elements:		capacitive • Pt100 • IEC 751 class B	
Measuring range:		0...100 % r. h. • -30...+70 °C	
Accuracies:		± 2 % r. h. (5...95 % r. h. at 10...40 °C) ± 0.3 °C (4...20 mA)	plus < 0.1 %/ K (<10 °C, >40 °C) plus ± 0.007 K/K (<10 °C, >40 °C)
Time constant:		self-heating coefficient Pt 100 (v = 2 m/s in air) 0.2 K/mW	
Long-term stability:		< 1 min	
Outputs:		typical under normal conditions < 1 % r. h./ year	
Supply voltage:		humidity: 4...20 mA = 0...100 % r. h. • temperature: 4...20 mA = -30...+70 °C	
Current consumption:		12...30 V _{DC}	
Housing:		max. 45 mA	
Cable:		aluminium • lacquered • grey-white • IP 65 • membrane filter as sensor protection IP 30 •	
Dimensions/ Weight:		4 x AWG 20 C UL sw (Id-No. 67.01002.056 041 • not included in delivery)	
Standards:		H 180 mm • Ø 20 mm • 0.34 kg	
Accessories:		CE/ EMC: DIN 50082-2 • EN 550011 Cl. B	
00.08141.600 000	(8141.6)	Sensor shelter for sensor (8091) • Data logger TROPOS	
Version:	(8091)	Humidity-Temperature Sensor	Id-No. 00.08091.000 012
Signal output H:		0...10 V _{DC} • 0...100 % r. h.	
Signal output T:		0...10 V _{DC} • -30...+70 °C	
Supply voltage:		15...30 V _{DC}	
Cable:		8 x AWG 20 C UL sw (Id-No. 67.01002.056 081 • not included in delivery)	