

THP[pro] Modbus Temperature-Humidity- Pressure Sensor



APPLICATIONS

- Hydrology
- Building technology
- Power plants
- Industry

High accuracy and energy-saving electronics

The sensor THP[pro] Modbus is a combined measuring instrument for measuring relative humidity, air temperature and air pressure. The sensor is characterised by high accuracy and energy-saving electronics. The Modbus RTU interface simplifies sensor installation and integration into networks.

- Combined measuring instrument for high-quality use
- Capacitive humidity measuring element
- Low maintenance
- Signal output: RS 485; Modbus
- For use in all climatic zones
- Suitable sensor shelter type 8141.6 (recommended option)



PRODUCT OVERVIEW

THP[pro] Modbus

Temperature- Humidity-Pressure Sensor

Professional Line	THP[pro] Modbus
Id-No.	00.08095.200030
Meas. range air temperature	-40...+70 °C
Meas. range rel. humidity	0...100 % r. h.
Meas. range barometric pressure	500...1100 hPa
Accuracy air temperature	± 0.1 K (0...60 °C) ± 0.2 K (-40...0 °C) ± 0.2 K (60...70 °C)
Accuracy rel. humidity	Typically at 25 °C: ± 1 % (20...70 %) r. h. ± 1.5 % (0...20 %) r. h. ± 1.5 % (70...90 %) r. h. ± 3 % (90...100 %) r. h.
Accuracy barometric pressure	Typically 0.38 hPa (700... 1100 hPa) (15...55 °C)
Resolution air temperature	0.1 °C
Resolution rel. humidity	0.1 % r. h.
Resolution barometric pressure	0.1 hPa
Reaction time	Rel. humidity (at v = 1.5 m/s): 30 s
Protocols	Modbus RTU
Interface	Serial RS 485
Supply voltage	4,8...33 VDC
Power consumption	4 mA at 24 VDC; 6 mA at 12 V DC; 11 mA at 4.8 VDC
Dimensions	H 140 mm x Ø 20 mm
Housing	Aluminum specially coated; M12 plug connector (4-pole)
Protection class	IP 65 (housing)
Weight	Approx. 80 g
Standards	DIN EN 60945 DIN EN 61000-4-2, 3, 4, 6, 11
Accessories (order separately)	00.08141.600000 sensor shelter with natural ventilation 00.08141.600004 sensor shelter with artificial ventilation 32.14567.060010 sensor cable, 15 m, 4 pole, M12 plug 32.14567.060000 sensor cable, 12 m, 4 pole, M12 plug

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