

# THP[pro] TEMPERATURE-HUMIDITY-PRESSURE SENSOR



Proven measurement technology

Now with improved accuracy!

The sensor THP[pro] 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. Also with Modbus or customised protocols realisable!

- combined measuring instrument for high-quality use
- capacitive humidity measuring element
- low maintenance
- signal output: RS 422/ Talker • NMEA • Modbus
- for use in all climatic zones
- suitable sensor shelter type 8141.6 (recommended option)

## APPLICATIONS

- hydrology
- building technology
- power plants
- industry

Professional Line	THP[pro] Temperature-Humidity-Pressure Sensor
Id-No.	00.08095.100000
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)
Accuracy rel. humidity	typ. ± 1.5 % (0...80 %) r. h. • ± 2 % (>80 %) r. h. • Reaction time relative humidity (at v = 1.5 m/s): 30 s
Accuracy barometric pressure	± 2 hPa (-30...+70 °C) • ± 1 hPa (-10...+60 °C) • ± 0.5 hPa at 25 °C
Resolution air temperature	0.1 °C

Continued on page 2

Professional Line	THP[pro] Temperature-Humidity-Pressure Sensor
Resolution rel. humidity	0.1 % r.h.
Resolution barometric pressure	0.1 hPa
Protocols	NMEA 0183 (default) · WIMHU · WIMMB · WIMTA · Modbus RTU
Interface	Serial RS 422/ Talker • baud rate 4800 • 1 Hz • 8 N 1 • SDI-12 *)
Supply voltage	4.8...33 V DC
Power consumption	Without terminating resistor: 4 mA at 24 VDC • 6 mA at 12 VDC • 11 mA at 4,8 VDC
Dimensions	H 140 mm x Ø 20 mm
Housing	Aluminium especially-coated • M12 connector plug (4 pole)
Protection class	IP 65 (housing)
Weight	approx. 80 g
Standards	NMEA 0183 • WIMHU • WIMMB • WIMTA
Options (order separately)	*) Service: 97.08095.000010 · Pre-configuration of the standard THP[pro] to SDI-12 Cable: 32.05005.001500 · 5 pole M12, 15 m
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

As of: 28.09.2020