

THP[pro] TEMPERATURE-HUMIDITY-PRESSURE SENSOR



Industry-leading multisensor technology for the highest WMO standards

The THP[pro] sensor meets the highest standards of the WMO and ICAO, making it ideal for applications where precise environmental measurements are essential. It provides highly accurate readings of air temperature, relative humidity, and barometric pressure. Based on these three parameters, the device automatically calculates dew point, absolute humidity, and wet bulb temperature. These derived values can be conveniently accessed via Modbus registers. An integrated LED status light and a USB-C configuration port ensure easy handling and fast diagnostics.

- Precision as per WMO and ICAO standards: Reliable measurements, globally recognized
- Low energy requirement - perfect for low-power applications
- Fail-safe and redundant pressure measuring with three independent ICs
- Built-in USB-C for configuration and LED for clear status feedback

APPLICATIONS

- Global weather monitoring according to WMO standards
- Health and safety regulations
- Ship weather stations
- Helicopter decks

Professional Line	THP[pro]
Id-No.	00.08095.300000
Meas. range air temperature	-40...+80 °C
Meas. range rel. humidity	0...100 % r.h.
Meas. range barometric pressure	300...1200 hPa
Accuracy air temperature	Typically ± 0.1 °C
Accuracy rel. humidity	Typically ± 1 % r. h.
Accuracy barometric pressure	Typically ± 0.15 hPa; relatively ± 0.06 hPa
Resolution air temperature	0.1 °C

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Professional Line	THP[pro]
Resolution rel. humidity	0.1 % r.h.
Resolution barometric pressure	0.1 hPa
Protocols	Modbus RTU (preconfigured); SDI-12; NMEA
Interface	Serial RS-485; SDI-12
Supply voltage	4.8...33 V DC
Power consumption	Low power mode: 1.1 mA at 12 VDC; 0.9 mA at 24 VDC
Dimensions	H 143 mm x Ø 20 mm
Housing	Aluminum
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)	32.14567.060010 Cable 15 m, 4 pole 00.08141.600000 Sensor shelter with natural ventilation

As of: 26.08.2025