

THP[pro] Temperature- humidity-air pressure (WMO & ICAO)



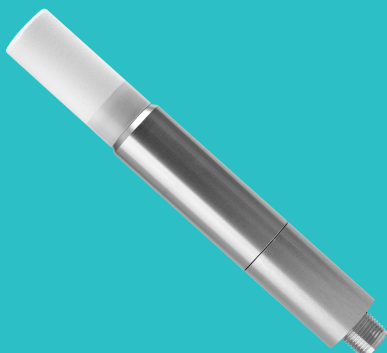
POSSIBLE APPLICATIONS

- Worldwide weather observation according to WMO standards
- Health and safety regulations
- Marine weather stations
- Helicopter decks

Leading multi-sensor technology for the highest WMO standards

The THP[pro] sensor meets the highest WMO and ICAO standards and is ideal for applications where precise environmental measurements are essential. It provides high-precision readings for air temperature, relative humidity and air pressure. The dew point, absolute humidity and wet bulb temperature are automatically calculated from these three parameters. These derived values can be conveniently read out via Modbus registers. An integrated LED status light and a USB-C connection for configuration enable easy handling and quick diagnostics.

- Precision according to WMO and ICAO standards: Reliable measurements, recognized worldwide
- Low energy requirement - perfect for low-power applications
- Fail-safe and redundant pressure measurement thanks to three independent ICs
- Integrated USB-C port for configuration and LED for clear status display



PRODUCT OVERVIEW

THP[pro] Temperature- humidity-air pressure (WMO & ICAO)

Professional Line	THP[pro]
Ident-No.	00.08095.300000
Air temperature measuring range	-40...+80 °C
Measuring range rel. humidity	0...100 % RH
Air pressure measuring range	300...1200 hPa
Air temperature accuracy	Typically ± 0.1 °C
Relative humidity accuracy	Typically ± 1 % RH
Air pressure accuracy	Typical ± 0.15 hPa; relative ± 0.06 hPa
Air temperature resolution	0.1 °C
Resolution rel. humidity	0.1% RH
Air pressure resolution	0.1 hPa
Protocols	Modbus RTU (preconfigured); SDI-12; NMEA
Interface	Serial RS-485; SDI-12
Supply voltage	4.8...33 VDC
Power consumption	Low-power mode: 1.1 mA at 12 VDC; 0.9 mA at 24 VDC
Measuring elements	Temperature sensor Capacitive humidity sensor Air pressure sensors (3 independent pressure ICs, redundant)
Dimensions	H143 mm x \varnothing 20 mm
Housing	Aluminum
Protection class	IP65 (housing)
Weight	Approx. 80 g
Standards and norms	DIN EN 60945 DIN EN 61000-4-2, 3, 4, 6, 11
Accessories (order separately)	32.14567.060010 Cable 15 m, 4-pin 00.08141.600000 Sensor shelter with natural ventilation

As of June 9, 2026