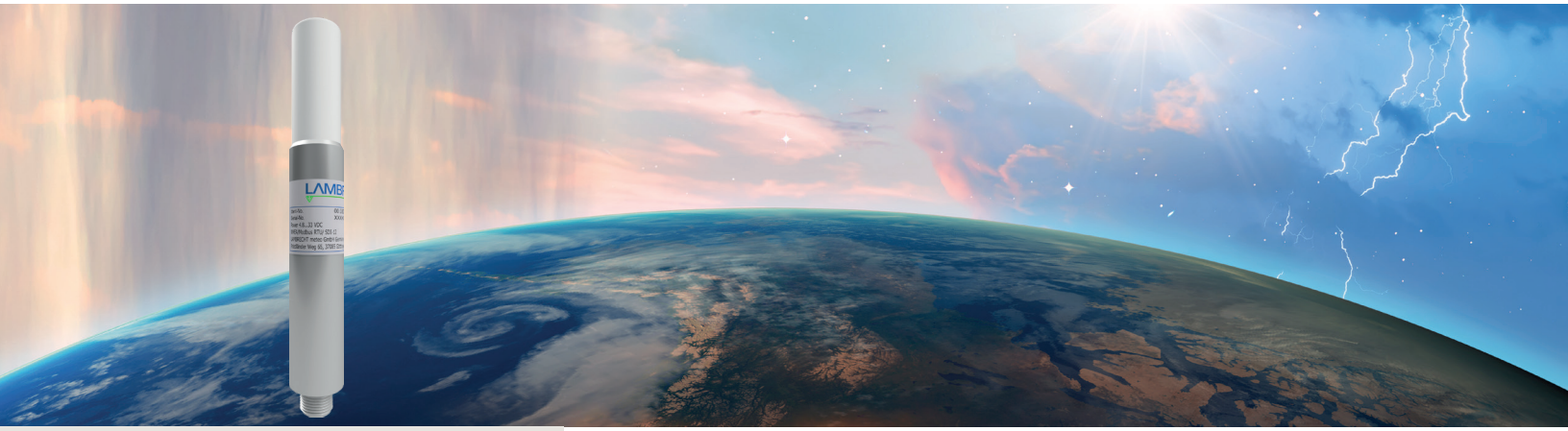
PRODUCT OVERVIEW

THP[pro]

Temperature-Humidity-Pressure Sensor



Ideal for

Global weather monitoring according to WMO standards

Ship weather stations and helicopter decks

Health and safety regulations

Industry-leading multisensor technology for the highest WMO standards

The quality of meteorological data is significantly influenced by the accuracy and reliability of the sensors used. The THP[pro] sensor meets the highest standards of the World Meteorological Organization (WMO) and has been developed for various applications where precise meteorological data is required.

Applications include climate research facilities, airports, agriculture, renewable energy plants, and a wide range of operations where precise environmental measurements are essential for analysis and decision-making.

New Features:

- Three parameters in one sensor for maximum versatility and optimum efficiency
- Precision as per WMO standard: Reliable measurements, globally recognized
- Low energy requirement - perfect for low-power applications
- Fail-safe and redundant pressure measuring with three independent ICs
- Easy configuration with USB-C interface right on the sensor
- Increased operational reliability of the sensor due to integrated LED status light

Health and safety of people in hot environments

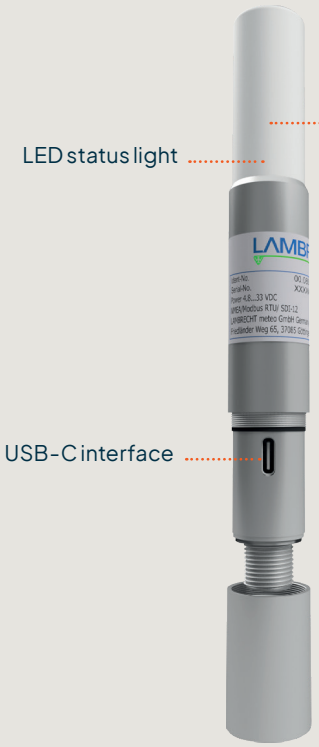
Global climate change is leading to rising temperatures and increases the risk of heat stress, which is a serious threat to health and can even have fatal consequences. In this context, calculated weather parameters such as the “heat index” or the “humidex” are becoming more and more important to protect people from the impact of extreme heat.

With the THP[pro] technology, these parameters can be calculated and made available directly on site and in real-time to inform the public about potential health risks at an early stage and to take appropriate action.

THP[pro] Specifications

COMPONENT	SPECIFICATION
ID No.	00.08095.300030
TEMPERATURE	
Measuring range	-40...+70 °C
Resolution	0.1 °C
Accuracy	± 0.1 K (0…60 °C); ± 0.2 K (-40…0 °C); ± 0.2 K (60…70 °C)
RELATIVE HUMIDITY	
Measuring range	0...100 % r. h.
Resolution	0.1 % r. h.
Accuracy	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.
BAROMETRIC PRESSURE	
Measuring range	500...1100 hPa
Resolution	0.1 hPa
Accuracy	Typically 0.15 hPa (700...1100 hPa)
FURTHER SPECIFICATIONS	
Supply voltage	4.8...33 VDC
Power consumption	Low power mode: 1 mA at 12 VDC; 4 mA at 24 VDC
Housing	Aluminum
Interface	Serial RS-485; SDI-12
Protocol	Modbus RTU (preconfigured); SDI-12; NMEA
ACCESSORY (please order separately)	
ID No. 00.08141.600000	Sensor shelter with natural ventilation
ID No. 32.14567.060010	Cable 15 m, 4 pole

The new THP[pro] in an overview



Sensor shelter

The WMO recommends using a sensor protection to ensure accurate and reliable measurements.

Our sensor shelter has been designed to completely cover the THP[pro] and exclude radiant heat, precipitation, and other conditions that could influence the measurement.

ELEVATE YOUR WEATHER MONITORING CAPABILITIES TODAY

To learn more about our innovative solutions, visit **aem.eco** or contact us at **info@aem.eco**