



# COMBINED SENSOR

Temperature · Humidity · Pressure

## Proven measurement technology

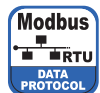
The sensor 8095 is a combined measuring instrument for measuring relative humidity, air temperature and air pressure. The sensor is characterised by high reliability and energy-saving electronics. Also with Modbus or customised protocols realisable.

- combined measuring instrument for high-quality use
- capacitive humidity measuring element
- low maintenance
- signal output humidity: RS 422/ Talker · NMEA
- for use in all climatic zones
- suitable sensor shelter type 8141.6 optional available

hydrology • building technology • power plants • industry



Sensor shelter 8141.6 (optional)



Standard Line	(8095) THP Sensor	Id-No. 00.08095.000 000
<b>Temperature</b>		
Measuring range:	-40...+70 °C	
Resolution:	0.1 °C	
Accuracy:	± 0.3 °C at (v > 2 m/s) • ± 0.4 °C (10 ... 40 °C) • ± 0.8 °C (-10 ... 70 °C)	
<b>Relative humidity</b>		
Measuring range:	0...100 % r. h.	
Resolution:	0.1 % r. h.	
Accuracy:	± 3 % (10...90 %) r. h. <sup>1)</sup> • ± 4 % (0...100 %) r. h. Reaction time rel. humidity (at v = 1.5 m/s): 30 s <sup>2)</sup>	
<b>Barometric pressure</b>		
Measuring range:	500...1100 hPa	
Resolution:	0.1 hPa	
Accuracy:	± 2 hPa (-30...+70 °C) • ± 1 hPa (-10...+60 °C)	
Supply voltage:	4.8...33 V DC	
Current consumption <sup>3)</sup> :	4 mA at 24 V DC • 6 mA at 12 V DC • 11 mA at 4.8 V DC	
Housing:	M12 Plug connector (4-pole) • protection class IP65/IP68/IP69K (with plug inserted)	
Weight/ Dimensions:	Aluminium especially-coated • IP 65 (housing) approx. 80 g • H 140 mm x Ø 20 mm	
Interface:	Serial RS 422/ Talker • Baudrate 4800 • 1 Hz • 8 N 1 • Modbus RTU	
Protocols:	NMEA 0183 • WIMHU • WIMMB • WIMTA	

<sup>1)</sup> Temperature influence of the shelter: < ± 0.1 % r.h. at +10...+40 °C

<sup>2)</sup> with filter membrane <sup>3)</sup> at NMEA without terminating resistor