



New class of Smart Weather Sensors with high-quality aluminum housing: WS3000 Climate Reference Sensor for Calibration / Verification of Air Temperature, Relative Humidity, Air Pressure

- **Parameters measured**
Temperature, relative humidity, air pressure (redundant pressure as option)
- **Measurement technology**
PT100/Temp, Capacitive/RH, MEMS Resonant Pressure transducer
- **Product highlights**
high-quality full-metal construction with ventilated radiation shield for air temperature / humidity measurements, Traceable accuracy, Modular architecture, Drift-free sensing technologies, Easy maintenance and calibration possibilities
- **Interfaces**
RS485, 2-wire, half-duplex/WiFi
- **Article number**
8390.U01, 8390.U02

Relative humidity is measured by means of a heated capacitive sensor element; a precision PT100 measuring element is used to measure air temperature. A resonant pressure transducer is employed for precise pressure measurement.

Accuracy in Detail:

- Temperature better than +/- 0.1°C
- Relative Humidity better than +/- 2%

- Air Pressure better than +/- 0.1 hPa

Measurement output can be accessed by the following protocols: UMB-Binary, UMB-ASCII, UMB-ASCII 2.0, SDI-12, NMEA.

General	
Dimensions	Ø ca. 250 mm, height approx. 470 mm
Weight	Approx. 5 kg
Interface	RS485, 2 - wire, half - duplex/WiFi
Power consumption	24 VDC / typical 4W
Operating temperature	-40...60 °C (with optional test expendable to -60...60 °C)
Operating rel. humidity	0...100 % RH
Protection level housing	IP66

Temperature	
Principle	PT100
Measuring range	-80...80 °C
Unit	°C
Accuracy	±0.1 °C (@ -40...60 °C)
Resolution	0.01 °C

Relative humidity	
Principle	Capacitive
Measuring range	0...100 % RH
Unit	% RH
Accuracy	±2 % RH
Resolution	0.1 % RH

Air pressure	
Principle	MEMS Resonant Pressure transducer
Measuring range	300...1100 hPa
Unit	hPa
Accuracy	±0.1 hPa
Resolution	0.01 hPa