WS300-UMB – Temperature, Air Pressure, Relative Humidity

From the WS product family of professional intelligent measurement transducers with digital interface for environmental applications.

Integrated design with ventilated radiation protection for measuring:

- Air temperature
- Relative humidity
- Air pressure

Relative humidity is measured by means of a capacitive sensor element;
a precision NTC measuring element is used to measure air temperature.

Measurement output can be accessed by the following protocolls:
ASCII, UMB, SDI12, MODBUS

WS300-UMB Compact Weather Station			Order No.
WS300-UMB			**8372.U01**
Technical Data	Dimensions	Ø approx. 150 mm, height approx. 225 mm	
	Weight	approx. 0.8 kg	
Temperature	Principle	NTC	
	Measuring range	–50 … 60 °C	
	Accuracy	±0.2 °C (–20 °C … +50 °C), otherwise ±0.5 °C (>–30 °C)	
Relative humidity	Principle	Capacitive	
	Measuring range	0 … 100 % RH	
	Accuracy	±2 % RH	
Air pressure	Principle	MEMS Capacitive	
	Measuring range	300 … 1200 hPa	
	Accuracy	±1.5 hPa	
General Information	Interface	RS485, 2-wire, half-duplex	
	Protection type housing	IP66	
	Op. power consumption	24 VDC +/-10 % <4 VA	
	Operating humidity range	0 … 100 %	
	Op. temperature range	–50 … 60 °C	
Accessories	Surge protection		**8379.USP**
	Power supply 24 V/4 A		**8366.USV1**
	UMB Interface converter ISOCON		**8160.UISO**
	Digital-analog-converter		**8160.UDAC**

Aspirated temperature/humidity measurement

Open communication protocol:
- ASCII
- UMB
- SDI12
- MODBUS
- Analoge outputs in combination with 8160.UDAC