

# 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 protocols:  
ASCII, UMB, SDI12, MODBUS

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



Aspirated temperature/humidity measurement

Open communication protocol:

- ASCII
- UMB
- SDI12
- MODBUS
- Analoge outputs in combination with 8160.UDAC