



## WS200-UMB

### Applications

Meteorological Observation  
Hydro-Meteorological Monitoring  
Solar Energy  
Wind Energy  
Road Weather Monitoring  
Aviation Weather Monitoring  
Railway Weather Monitoring  
Building Automation

# Compact All-in-One Weather Sensor

## Automatic wind measurement station

**Intelligent measurement transducers with digital interface for environmental applications**

**Designed to measure: Wind direction and speed**

**One external temperature or rain sensor is connectable**

**Maintenance-free operation – no moving parts that can wear out**

**Open communication protocol**

### Two-in-one wind sensor

Two-in-one housing concept of a compact wind sensor combining measurement of wind direction and speed in one housing with only one cable connection. Built-in data pre-processing, universal interfaces and selectable output protocols.

### Ideal addition to existing pyranometer setup

The WS200 adds reliable wind monitoring to an existing pyranometer setup. It measures speed and direction of wind with accurate ultrasonic technology. A temperature or rain sensor can be connected easily.

### Suitable for all climate zones

Due to its integrated heater, the WS200 can operate even in cold conditions with the risk of snowfall and frost.

### Protocols and interfaces

Easy integration into any SCADA system. Communicates via RS-485 interface in Modbus® and various other protocols. Compatible with many commercially available dataloggers and PLS systems.

# Technical Specifications

## WS200-UMB

Article number	8371.U01
Dimensions	Ø 150 mm, height 223 mm
Weight	1 kg
Interface	RS-485, 2-wire, half-duplex
Power supply	4 ... 32 VDC
Power supply	5 ... 11 VDC (electronics with limited precision of measurements)
Power supply	24 VDC +/- 10 %
Power consumption	135 mA at 24 VDC, resulting in a power of approximately 3.25 W
Operating temperature	-50 ... 60 °C
Operating relative humidity	0 ... 100 % RH
Protection level housing	IP66
Mast mounting suitable for	Mast diameter 60 ... 76 mm
Cable length	10 m

### Temperature

Principle	NTC
Measuring range	-50 ... 60 °C
Unit	°C
Accuracy	±0.2 °C (-20 ... 50 °C), otherwise ±0.5 °C (> -30 °C)

### Relative humidity

Principle	Ultrasonic
Measuring range	0 ... 359.9 °
Unit	°
Accuracy	< 3° RMSE > 1.0 m/s

### Air pressure

Principle	Ultrasonic
Measuring range	0 ... 75 m/s
Unit	m/s
Accuracy	±0.3 m/s or 3 % (0 ... 35 m/s) ±5 % (> 35 m/s) RMS
Resolution	0.1 m/s

## Dimensions

