



## Compact all-in-one weather sensor for measurement of temperature, relative humidity, radiation and air pressure.

- **Parameters measured**  
Temperature, relative humidity, radiation and air pressure
- **Measurement technology**  
NTC/T, Capacitive/RH, Tiltable Pyranometer Kipp&Zonen/Radiation, MEMS capacitive/Pressure
- **Product highlights**  
Compact all-in-one weather sensor, low power, heater, aspirated radiation shield, maintenance-free operation, open communication protocol
- **Interfaces**  
RS485, 2-wire, half-duplex
- **Article number**  
8374.U11

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, radiation and air pressure. One external temperature or rain sensor is connectable.

General	
Dimensions	Ø approx. 150 mm, height approx. 392 mm
Weight	Approx. 1.5 kg

# Technical Data

WS303-UMB Smart Weather Sensor



Interface	RS485, 2 - wire, half - duplex
Power supply	4...32 VDC
Operating temperature	-50...60 °C
Operating rel. humidity	0...100 % RH
Heating	20 VA at 24 VDC
Protection level housing	IP66
Cable length	10 m
Mast mounting suitable for	Mast diameter 60 - 76 mm

## Radiation

Unit	W/m <sup>2</sup>
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## 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	Capacitive
Measuring range	0 ... 100 % RH
Unit	% RH
Accuracy	±2 % RH

## Air pressure

Principle	MEMS capacitive
Measuring range	300 ... 1200 hPa
Unit	hPa
Accuracy	±0.5 hPa (0...40 °C)