



Compact all-in-one weather sensor for measurement of temperature, relative humidity, precipitation intensity, precipitation type, precipitation quantity and air pressure.

## **Parameters measured**

Temperature, relative humidity, precipitation intensity, precipitation type, precipitation quantity and air pressure

# Measurement technology

NTC/T, Capacitive/RH, MEMS capacitive/Pressure, 24 GHz Doppler radar/Precipitation

### Product highlights

Compact all-in-one weather sensor, low power, heater, aspirated radiation shield, maintenance-free operation, open communication protocol

#### Interfaces

RS485 with supported protocols UMB-Binary, UMB-ASCII, Modbus-RTU, Modbus-ASCII, XDR and SDI-12

#### Article number

8369.2, 8369.1

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, precipitation intensity, precipitation type, precipitation quantity and air pressure. One external temperature sensor is connectable.













General	
Dimensions	Ø ca. 150 mm, height ca. 280 mm
Weight	Approx. 1.3 kg
Interface	RS485, 2 - wire, half - duplex
Power supply	11 32 VDC
Power supply	5 11 VDC (electronics with limited precision of measurements)
Power supply	24 VDC +/- 10% (heater)
Power consumption	20 VA (heater)
Frequency range	24.150 GHz – 24.250 GHz (Europe)
	24.075 GHz – 24.175 GHz (North America)
Frequency range	24.150 GHz – 24.250 GHz (Europe; Article no. 8369.2)
	24.075 GHz – 24.175 GHz (North America; Article no. 8369.1)
Operating temperature	-5060 °C (with heater)
Operating rel. humidity	0100 % RH
Protection level housing	IP66
Mast mounting suitable for	Mast diameter 60 - 76 mm

Temperature	
Principle	NTC
Measuring range	-50 60 °C
Unit	°C
Accuracy	±0.2 °C (-2050 °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 (040 °C)

Precipitation (liquid)	
Droplet size	0,3 5 mm
Detection sensitivity	0,01 mm/h
Particle velocity	0.9 15.5 m/s
Precipitation types	rain/ snow
Solid precipitation	5.1 ~30 mm
Intensity range	0200mm/h
Intensity resolution	0.01 mm/h
Amount resolution	0.1 mm
Accuracy	20 % under laborary conditions
Reproducibility	Typical >90 % under laborary conditions





