

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

- **Parameters measured**
  Temperature, relative humidity, precipitation and air pressure
- **Measurement technology**
  NTC/T, Capacitive/RH, Tipping bucket/Precipitation, MEMS capacitive/Pressure
- **Product highlights**
  Compact all-in-one weather sensor, low power, aspirated radiation shield, open communication protocol
- **Interfaces**
  RS485 with supported protocols UMB-Binary, UMB-ASCII, Modbus-RTU, Modbus-ASCII, XDR and SDI-12
- **Article number**
  8377.U01

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 and air pressure. One external temperature sensor is connectable.

Beschreibung	Wert
Technical data	

Dimensions	Ø ca. 150mm, height ca. 380mm
Weight	Approx. 1.5 kg
Interface	RS485, 2-wire, half-duplex
Power supply	4 ..11...32 VDC
Power supply	5...11 VDC (electronics with limited precision of measurements)
Power supply	24 VDC +/- 10% (heater)
Power consumption	40 VA (heater)
Operating temperature	-50 ... 60°C (with heater)
Operating rel. humidity	0 ... 100% RH
Cable length	10m
Protection level housing	IP66
Mast mounting suitable for	mast diameter 60 - 76mm

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)

Precipitation	
Resolution	0.2 mm
Accuracy	±2 %
Max. intensity	360 mm/h

Precipitation with reduction ring	
Resolution	0.5 mm
Accuracy	±2 %
Max. intensity	144 mm/h