



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**
8377.1

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 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 |
| 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 |