Compact all-in-one weather sensor from the WS-Series. Measurement of temperature, relative humidity, air pressure, wind direction, wind speed and radiation.

- **Parameters measured**
  Temperature, relative humidity, air pressure, wind direction, wind speed, radiation

- **Measurement technology**
  Ultrasonic/Wind, NTC/T, Capacitive/RH, MEMS capacitive/Pressure, Tiltable Pyranometer Kipp&Zonen/Radiation

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

- **Interfaces**
  RS485, 2-wire, half-duplex

- **Article number**
  8375.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, air pressure, wind direction, wind speed and radiation. One external temperature or rain sensor is connectable.

General	
Dimensions	Ø approx. 150 mm, height approx. 392 mm

Weight	Approx. 1.5 kg
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
Cable length	10 m
Protection level housing	IP66
Mast mounting suitable for	Mast diameter 60 - 76 mm

Radiation	
Unit	W/m^2

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)

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

Wind speed	
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