WS300-UMB Smart Weather Sensor





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

Parameters measured

Temperature, relative humidity, air pressure

Measurement technology

NTC/T, Capacitive/RH, MEMS capacitive/Pressure

Product highlights

Compact all-in-one weather sensor, low power, aspirated radiation shield, maintenance-free operation, variable communication protocols

Interfaces

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

Article number

8372.1

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

General	
Dimensions	Ø approx. 150 mm, height approx. 223 mm
Weight	Approx. 1 kg









Technical Data

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Interface	RS-485 (half-duplex); SDI-12
Power supply	6 28 VDC
Power supply	24 VDC +/- 10% (preferred for aspirated operation mode)
Power consumption	135mA at 24VDC (aspirated mode), 7 mA (non-aspirated mode)
Operating temperature	-5060 °C
Operating rel. humidity	0100 % RH
Protection level housing	IP66
Standards/Regulations	Compliant to IEC 61724-1:2021
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)









