PRODUCT-VIEW

LAMBRECHT meteo

AN aem BRAND

u[sonic]WS6 Modbus WEATHER SENSOR

Multi parameter sensor with Modbus

The u[sonic]WS is the newest, most compact and system-capable addition to the LAMBRECHT meteo weather sensor series. The sensor has no moving measuring elements and is therefore low-maintenance. The intelligent heating system works in relation to the wind speed and direction and keeps the sensor ice-free even under extreme weather conditions.
The u[sonic]WS6 easily meets the special challenges of alpine and maritime applications. A wide variety of interfaces and protocols are available. There are no limits for the u[sonic]WS6 when it comes to its applications.

- No moving measuring elements, no wear
- Six weather parameters: wind direction and speed, air temperature, rel. humidity, barometric pressure, dew point
- Intelligent heating depending on wind speed and wind direction
- Lamella shelter for accurate measurements of the temperature-humidity sensor
- Easy to install, easy to maintain

APPLICATIONS

- Professional meteorological applications
- On- and offshore wind turbines
- Maritime weather stations
- Building and environmental technology
- Traffic and industrial meteorology
- Wind warning and event technology
- Large-scale photovoltaic systems
- Alpine applications

Professional Line	u[sonic]WS6 Modbus
Id-No.	00.16480.000130
Meas. range wind direction	0...359.9°
Meas. range wind speed	0...65 m/s
Meas. range air temperature	-40...+70 °C
Meas. range rel. humidity	0...100 %
Meas. range barometric pressure	300...1100 mbar
Accuracy wind direction	2° (> 1 m/s) RMSE
Accuracy wind speed	± 0,2 m/s RMSE (v 10 m/s) • ± 2 % RMSE (10 m/s v 65 m/s)
Accuracy air temperature	± 0.1K (0...60 °C) • ± 0.2K (-40...0 °C)

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Accuracy rel. humidity	typ. ± 1.5 % (0...80 %) r.h. • ± 2 % (80...100 %) r.h.
Accuracy barometric pressure	± 0.5 mbar
Resolution wind direction	0.1°
Resolution wind speed	0.1 m/s
Resolution air temperature	0.1 °C
Resolution rel. humidity	0.1 %
Resolution barometric pressure	0.1 mbar
Trigger threshold	0.1 m/s
Protocols	Modbus RTU
Interface	RS485
Measuring rate	0.1...10 Hz
Operating conditions	-40...+70 °C (with heating: -50...+70 °C) • 0...100 % r. h.
Supply voltage	without heating: 6...60 VDC • with heating: 24 V AC/DC ± 20 %
Current consumption	sensor: typ. 50 mA at 24 VDC • with heating: max. 10 A at 24 V AC/DC
Heating data	60 W
Dimensions	Ø 199 mm • height 238 mm
Housing	seawater resistant aluminium
Protection class	IP 66 • IP 67
Weight	approx. 3.1 kg
Standards	Low voltage guide line: 72/23 EWG Protection class: DIN EN 60529 MIL-STD-810G DIN EN 50121-4:2016 Salt fog: EN 60945 Cold test Ad acc. to DIN EN 60068-2-1 (01/2008) Condensation test CH acc. to ISO 6270-2 (09/2005) and DIN EN ISO 12944-6 (07/1998), category C4 Salt mist test based on DIN EN ISO 7253 (04/2002) and DIN EN ISO 12944-6 (07/1998), category C4
EMC standards / Electrical safety	DIN EN 60945 • DIN EN 61000-4-2, 3, 4, 6, 11
Accessories (order separately)	32.14567.060010 sensor cable, 15 m, 4-pol. M12-plug

As of: 24.04.2024