

u[sonic] Modbus ULTRASONIC WIND SENSOR



Combined ultrasonic sensor u[sonic] Modbus...
for wind direction and wind speed. The Modbus RTU interface simplifies sensor installation and integration into networks. This seawater resistant ultrasonic sensor is perfectly heated and ideal for use under cold climate conditions. The connection of the u[sonic] Modbus is compatible with all meteorology sensors of the Modbus series.

- without moving measuring elements
- 2 parameters measurable
- intelligent heating depending on wind speed and wind direction
- easy installation, easy to maintain

APPLICATIONS

- professional meteorological applications
- building automation
- photovoltaic systems
- industrial meteorology

Professional Line	u[sonic] Modbus Ultrasonic wind sensor
Id-No.	00.16470.100130
Meas. range wind direction	0...359.9°
Meas. range wind speed	0...75 m/s
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)
Resolution wind direction	0.1°
Resolution wind speed	0.1 m/s
Trigger threshold	0.1 m/s (adjustable for wind direction)
Protocols	Modbus RTU

Continued on page 2

Professional Line	u[sonic] Modbus Ultrasonic wind sensor
Interface	RS 485
Measuring rate	0.1...10 Hz • (internal measurement 50 Hz)
Operating conditions	-40...+70 °C • 0...100 % r. h.
Supply voltage	24 VDC
Current consumption	sensor: typ. 35 mA at 24 VDC • 60 W at 24 VDC
Measuring principle	Ultrasound
Heating data	configurable (factory-setting) 60 W • max. 120 W
Dimensions	Ø 199 mm • height 149 mm
Housing	seawater resistant aluminium
Protection class	IP 66
Weight	approx. 2 kg
Connection technology	4-pole M12 plug connector
Accessories (order separately)	32.14567.060010 sensor cable, 15 m, 4 pole, M12 plug 32.14567.060000 sensor cable, 12 m, 4 pole, M12 plug

As of: 02.09.2020