ULTRASONIC SENSOR "u[sonic]"

Wind direction and wind speed

u[sonic]

The all new combined ultrasonic sensor u[sonic]...

for wind direction and wind speed. This seawater resistent sensor is perfectly heated and ideal for use under cold climate conditions.
The equipment is connected by an 8 pole screw connector. The measured values can be requested over a variety of interfaces.

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

professional meteorological application • wind turbines on- and off-shore • ship weather station • building automation • traffic meteorology • industrial meteorology • wind warning

NO MOVING PARTS
Al METAL MATERIAL
SEAWATER RESISTENT
NMEA DATA PROTOCOL
4 ... 20mA ANALOG OUTPUT

Professional Line	**(16470)**	**Combined Ultrasonic Wind Sensor u[sonic]**		**Id-No. 00.16470.000000**
Parameter:		Measuring range:	Accuracy:	Resolution:
Wind direction:		0...359.9°	< 2° (> 1 m/s) RMSE	0.1°
Wind speed:		0...75 m/s	± 0.2 m/s RMSE (v < 10 m/s); ± 2 % RMSE (10 m/s < v < 65 m/s)	0.1 m/s
Response threshold:		0.1 ms (adjustable for wind direction)		
Measuring rate:		0.1...10 Hz • (internal measurement 50 Hz)		
Operating conditions:		-40...+70 °C (with heating -50...+70 °C) • 0...100 % r. h.		
Protocols:		NMEA 0183 • WIMWV · WIMTA • SDI-12 • Modbus (update in progress)		
Power supply:		6...60 V_{DC} • 24 $V_{AC/DC}$		
Current consumption and power input:		sensor: typ. 35 mA at 24 V_{DC} and deactivated analog output • with heating: configurable 60 W/ 120 W/ 240 W/ max. 310 W at 24 $V_{AC/DC}$		
Housing:		seawater-resistant aluminium · IP 65		
Dimensions/ Weight:		Ø 199 mm · height 149 mm · approx. 2 kg		
Analog output:		0...20 mA • 4...20 mA • 0...5 V • 0...10 V • free scalable		