



ULTRASONIC SENSOR "u[sonic]"

Wind direction and wind speed

The combined ultrasonic wind sensor u[sonic]...

for wind direction and wind speed.
This seawater resistant 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



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)		
Measurement rate:	0.1...10 Hz • (internal measurement 50 Hz)		
Operating conditions:	-40...+70 °C (with heating -50...+70 °C) • 0...100 % r. h.		
Analog output:	0...20 mA • 4...20 mA • 0...5 V • 0...10 V • free scalable		
Interfaces:	RS 485/ RS 422 • SDI-12 • RS 232 (optional)		
Protocols:	NMEA 0183 • WIMWV • WIMTA • SDI-12 • Modbus (optional) • other protocols on request		
Power supply:	6...60 VDC • 24 V AC/DC		
Current consumption and power input:	sensor: typ. 35 mA at 24 VDC and deactivated analog output • with heating: configurable (factory-setting) 60 W · 120 W · 240 W (standard) · max. 310 W at 24 V AC/DC		
Housing:	seawater-resistant aluminium • IP 66 • IP 67		
Dimensions/ Weight:	∅ 199 mm · height 149 mm · approx. 2 kg		
Accessory: (order separately)	Sensor cable, 15 m, 8-pole bayonet plug (Id.-No. 32.16470.060000)		