

Ultrasonic wind sensor

Which is used for wind direction and wind speed. The seawater resistant sensor is perfectly heated and ideal for use in cold climate conditions. The measured values can be requested over a variety of interfaces.



High accuracy of wind speed and direction measurement, maintainfree.

Without moving measuring elements
2 parameters measurable
Optimally heatable
Installation and maintain is easy

Application field:

Wind energy; Meteorology; Industrial automation; Ships etc.

Technical Data

Wind speed

Principle	Ultrasonic
Measuring range	0~75m/s
Resolution	0.1m/s (standard)
Accuracy	± 0.2m/s RMSE (<2m/s) ± 1.5% RMSE (>=2m/s) of measurement
Response time	0.1m/s
Measuring rate	60 partial measurements/ 15 full measurements per second
Measurement output rate	1~10 sec adjustable, default 10 s
Unit	m/s; km/h; mph; kts

Wind direction

Principle	Ultrasonic
Measuring range	0~360°
Resolution	0.1° (standard)
Accuracy	± 1° RMSE >1,0m/s
Response time	0.1m/s
Measuring rate	1 Second

Virtual temperature

Principle	Ultrasonic
Measuring range	-50°C~+70°C
Resolution	0.1K
Accuracy	± 2.0K (without heater and without sun exposure)
Measuring rate	1 Second

Data output digital

Interface	RS 485 semi/full duplex, isolated
Baud rate	1200~57600
Measurement rate instantaneous value	1~10s
Measurement Avg (arithmetic, vector)	1~10min
Status	Heating, sensor failure

Data output analog

output signal	4~20 mA (instantaneous, avg, min, max)
Load	max. 300 Ohm
Resolution	16bit

General Information

Operating temperature	-40°C~+60°C (with heating)
Bus operation up to 255 devices	up to 255 devices
Operating voltage electronics	8~36 V DC or 24 V DC/1,2 VA
with heater	24 V DC, max. 200 VA
connection	8 pole plug, Thies-compatible
Housing material	Anodized aluminium, seawater-proof
Protection	IP 65
Dimensions	Ø 150 x 145 mm
Weight	approx. 2,5 kg
Pole diameter	50 mm / 2"
Measurements protocol	yes

