

# ULTRASCHALL ANEMOMETER WP



**Especially designed for use  
in harsh environmental conditions**

- Icing-resistant\*
- Automatic heating of all components
- Compact and rugged construction
- Maintenance-free
- Serial and analogue data output

# ULTRASCHALL ANEMOMETER WP

## TECHNICAL DATA

The Ultrasonic Anemometer US WP is especially suited for the use in the fields of:

- Wind power plants
- Maritime use
- Traffic control
- Industry
- Energy supply
- Environmental monitoring

Order-No.: 4.388x.xx.xxx

### Wind Speed

Measuring range	0 ... 75 m/s Scaling of analogue output freely selectable
Resolution	0.1 m/s (standard) 0.01 m/s (user-defined)
Accuracy	±0.2 m/s rms (<5 m/s) ±2% rms (5 ... 50 m/s)

### Wind Direction

Measuring range	0 ... 360°
Resolution	1° 1° (standard) <1° (user-defined)
Accuracy	±2° at 2 m/s < WG <50 m/s

### Virtual Temperature

Measuring range	-40 ... +60 °C
Resolution	0.1 K

### Measuring Rate

Measuring range	up to 125 Hz
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### Data output, digital

Interface	RS485 / RS422 (galv. isolated)
Baud rate	1200 ... 921600 baud
Data values	Instantaneous values, mean values
Output rate	One per 20 msec up to one per 60 seconds, in increments of 1 msec freely selectable
Status signals	Heating, measured path failure, path temperature ...
Protocol	ASCII, MODBUS RTU, NMEA WV

### Data output, analogue

Outputs	0/4 ... 20 mA; 0/2 ... 10 V Galv. isolated from supply
Resolution	16 bit

### Operating voltage

Electronics	8 V ... 40 V DC or 12 V ... 28 V AC 50 Hz / 60 Hz; 0.7 W @ 24 V
Heating	24 V AC / DC ±15%, 100 VA typical

### General

Bus operation	Up to 98 sensors
Electrical connection	8-pin plug
Housing	ASI316L (V4A), aluminum hard anodized, seawater-proof
Protection	IP 67
Ambient temperature	-40 ... +60 °C
Dimensions	Ø 100 mm x 120 mm

### Optionally

With magnetic compass	Measuring range 0 ... 359°
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Order-No.: 4.3880.00.000

### General

Mounting	Mast tube Ø 33.4 mm
Weight	0.9 kg

Order-No.: 4.3881.00.000

### General

Mounting	Mast tube Ø 48.3 mm
Weight	1.1 kg

Patented:

EP 1 448 966 B1,  
US 7,149,151 B2

\*Thies factory standard icing 012002

Please contact us for your system requirements. We advise you gladly.



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