

# WIND

## Ultrasonic Anemometer WP

**Part number: 4.3880.xx.xxx**

It has been developed especially for the application in harsh environments, and is eminently suited for the use on wind power plants thanks to the compact construction and low weight. The serial or analogue output of the data occurs optionally as instantaneous value or as moving average value with settable time frame.

If necessary, the instrument is automatically heated at critical ambient temperatures. The risk of malfunction by freezing is thus minimized. The ultrasonic transducers are heated, as well as all essential housing components.



## Specification

**Part number: 4.3880.xx.xxx**

<b>Wind speed</b>	
Measuring range	0 ... 75 m/s
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)
<b>Wind direction</b>	
Measuring range	0 ... 360 °
Resolution	1 ° 1 ° (standard) < 1 ° (user defined)
Accuracy	±2 ° @ 2 m/s < WS < 50 m/s
<b>Virtual temp.</b>	
Measuring range	-40 ... +70 °C
Resolution	0.1 K
<b>Data output digital</b>	
Interface	RS485 / RS422
Baudrate	1200 ... 921600 Baud
Data values	instant. values, average values
Output range	1 per 100 msec up to 1 per 50 sec
Status signals	heating, Meas section error, Temperature of meas section
Protocol	ASCII, MODBUS RTU, NMEA WV
<b>Data output analog</b>	

Wind speed	0 ... 20 mA 4 ... 20 mA 0 ... 10 V 2 ... 10 V
Stromausgang	max. 500
Wind direction	0 ... 20 mA 4 ... 20 mA 0 ... 10 V 2 ... 10 V
Voltage output	min. 50 k
Resolution	16 bit
<b>Operating voltage</b>	
Electronic	8 ... 40V DC or 12 ... 28 V AC / 2.5 W
Heating	24 V AC/DC, typ 100 W
<b>Heating</b>	
Heated components	base plate, cover plate, connecting pipes, ultrasonic transducers
<b>General</b>	
Bus operation	up to 98 Sensors
Electr. connection	8 pol. connector
Housing	seawater-proof, stainless steel (V4A) and aluminium
Protection	IP 67
Dimension	Ø 100 mm x 120 mm

## Versions

As per 4.3880.xx.xxx, but:

### Product number 4.3880.00.000

<b>General</b>	
Mounting	on a mast tube 1 "
Weight	0.9 kg

### Product number 4.3881.00.000

<b>General</b>	
Mounting	on a mast tube 1,5 "
Weight	1.1 kg

## Accessories

Product	Product name	Brief description
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Connecting cable 50775x	Suitable cable for 4.3820/30/75/80/81	
	<ul style="list-style-type: none"> <li>▪ length: see versions</li> </ul>	
	<b>General</b>	
	Cable length	see versions
Cable	PUR 4 x 0,75 + 2x2x0,14 mm <sup>2</sup>	

