

Ultrasonic Anemometer *2D (heated)*



Description

Sensor for the inertia-free measurement of the horizontal wind speed. As the sensor contains no moving parts, it is maintenance-free.

Two opposite pairs of ultrasonic transducers measure the horizontal components of the wind vector. A built-in processing unit converts the raw signals into analog signals. Additional serial RS232 and RS485 ports allow the direct connection to the networked data logger **blueberry NDL 485**, a PC, or an industrial controller.

A built-in electronical heating ensures continuous operation under icing conditions.

Technical Data

Sensor

Sensing element Ultrasonic transducers

Data processing Microprocessor

Outputs

Analog 0..70 m/s = 0..5 V

$$0,360' = 0,5 \text{ V}$$

Digital.....RS232 or RS485,

1200, 2400, 4800, 9600, 38400 baud

Data formatsASCII Text, RMYT, NMEA, SDI-12

Resolution

Wind speed.....0.1 m/s

Wind direction 1°

Accuracy

Wind speed.....0.5 m/s ±0.1 m/s

5..30 m/s ±2% of reading

>30 m/s $\pm 3\%$ of reading

Wind direction+2°

Power Supply

Supply voltage 9..16 VDC

Power consumption 140 mA max., 30 mA average typical, <1 mA standby

Heating

Heating power 60 W

Supply voltage 24 VDC

Casing

Material Anodized aluminium / plastic

Protection class IP 65

Dimensions $\varnothing 170 \times 340$ mm

Weight 0.7 kg

Mounting The sensor mounts on a standard one inches pipe with
 $\varnothing 34$ mm outside diameter

Electrical Connection

Junction box Terminal strips

Environmental Conditions

Operating temperature $-50..+50$ °C

Relative humidity 0..100%



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