



ULTRASONIC ANEMOMETER. WNT

A sensor for measuring horizontal wind speed and direction. It can be used with Aanderaa Wind Display Panels 3300/3400.

This ultrasonic anemometer, with no moving parts, is especially useful in areas with severe vibrations and in harsh environments. The sensor is based on ultrasonic principles and outputs both wind speed and direction. The sensor connects directly to Wind Display Panels 3300 and 3400.

Standard connecting cables with different lengths are available. For installation the sensor will fit onto a 42mm vertical tube.

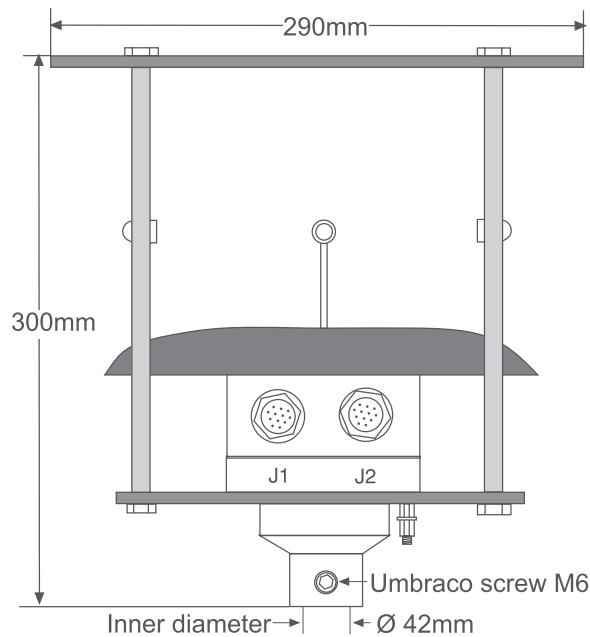
The sensor is based on an average time delay measurement method. This technique compensates for environmental influences including barometric pressure, humidity and air temperature. The sensor is

supplied with a user-selectable RS 232 interface or an analog output for speed and direction.

The sensor operates over a wide temperature range and environmental conditions.

An automatic heating system is integrated into the sensor and heat is switched on and off depending on the ambient temperature. The ON/OFF switch is activated at +5°C. While the heating is on the current drain is at its maximum. The heating will also be turned on when the measurement signal is disturbed or erratic. This is normally caused by the formation of dew or moisture on the sensor.

SPECIFICATIONS FOR ULTRASONIC ANEMOMETER, WNT 918020



Measuring range:

Wind speed: 0-60m/s

0-112knots(optional)

Wind direction: 0-359°

Output signal format RS-232/NMEA AQ183

Resolution:

Wind speed: 0.1m/s

Wind direction: 1°

Accuracy:

Wind speed: ± 0.7 m/s

Wind direction: $\pm 3^\circ$

Sampling rate: > 1Hz

Power supply:

Powered from the Wind Display Panel 3300

Power consumption: 300mA typical

400mA with heater on

Operating Temperature: -20 to + 50°C

Enclosure Rating: IP 67

Dimensions: Ø 290mm, Height: 300mm

Weight: 3.6 kg

Mounting: Ø 42mm tube

Accessories:

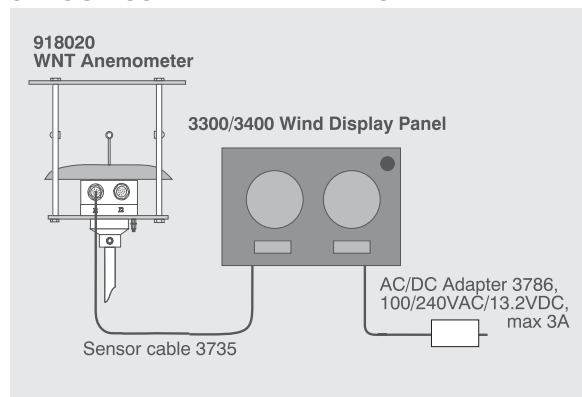
Connecting Cable 3735

SPECIFICATIONS, NMEA0183 SIGNAL:

\$	Start of sentence
WI	Weather instrument
MWV	Sentence formatter, wind speed and angle
123.77	Wind angle (example)
R	Relative (T for true reading)
32.66	Wind speed (example)
M	Unit m/s (N: knots, K: Km/h)
A	Status of data
<CR><LF>	End of sentence

Example: \$WIMWV,123.77,R,32.66,M,A<CR><LF>

SENSOR USED WITH WIND DISPLAY PANEL



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Aanderaa Data Instruments AS
Sanddalsringen 5b, P.O. Box 103
Midtun, 5828 Bergen, Norway
Tel +47 55 60 48 00
Fax +47 55 60 48 01