WindObserver II

The WindObserver II provides the best solution on the market for reliable, accurate and cost-effective wind speed and directional measurement.

The sensor combines the latest patented advances in ultrasonic technology. The elimination of moving parts, together with a rugged stainless steel construction means that the WindObserver II is virtually maintenance free and requires no calibration on site. The heated head keeps the unit free from ice and snow, providing continuous use even in the most extreme weather conditions.

A new flexible design ensures that the WindObserver II can be configured by the user to their exact requirements, which may include analogue outputs, 10 Hz output, heating or sonic temperature.

Communication is via an RS-422 bidirectional link, which allows several units to be networked together and data to be logged on demand. The WindObserver II has been rigorously tested to internationally recognized standards and meets the stringent performance criteria specified by airport, marine, oil, production, meteorological and utility organizations around the world.

- Ultrasonic technology
- Robust construction
- Low temperature de-icing
- Wind turbine control
- Aircraft landing systems

Measurement

Output	1 Hz, 4 Hz, 10 Hz
Parameters	UV, Polar, NMEA, Tunnel
Units	m/s, Knots, MPH, KPH ft/min
Averaging	flexible 1 - 3600 seconds

Wind speed

Range	0 - 65 m/s (0 - 145 mph)
Starting threshold	0.01 m/s
Accuracy	2 %
Resolution	0.01 m/s
Offset	± 0.01 m/s
Weight	approximately 2,5 kg

Direction

Range	0 - 360 °
Dead band direction	none
Accuracy	± 2°
Resolution	1°

Dimensions

Size	405 x 210 mm
Weight	1.5 kg

Sonic temperature

Range	- 40 to + 70 °C

Power requirement

Anemometer only	9 - 30 V DC (40 mA @ 12 V DC)
Heating optional	3 A @24 V AC or DC

Digital output

Communication	RS-422, full duplex
Baud rates	1200, 2400, 4800, 9600, 19200, 38400
Formats	8 data, odd, even or no parity
Anemometer eter Status	supplied as part of standard message

Analog output (optional)

Quantity	3 (speed, direction, status)
Scale	multiples of ±10 m/s up to 70 m/s
Type	± 2.5 V, 0 - 5 V or 4 - 20 mA
V output resistance	60 Ohms
4 - 20 mA loading	10 - 300 Ohms

Materials

External construction	stainless steel 316

Enviromental

Moisture protection	IP 66 (NEMA4X)
Operating temperature	- 55 °C to + 70 °C
Humidity	5 % to 100 % RH
Precipitation	300 mm/hr
EMC	EN 61000-6-2: 2001 EN 61000-6-3: 2001
Icing	MILSTD810E Method 521.1 Procedure 1