

WIND SPEED & DIRECTION SENSOR

WINDOBSERVER II



ALL WEATHER SENSING TECHNOLOGY

- *ULTRASONIC TECHNOLOGY*
- *MAINTENANCE FREE*
- *ROBUST CONSTRUCTION*
- *LLOYD'S TYPE APPROVAL*
- *LOW TEMPERATURE DE-ICING*
- *USER SELECTABLE OUTPUT FORMAT*
- *TRANSPORT SAFETY*
- *WIND TURBINE CONTROL*
- *SHIP DYNAMIC POSITIONING SYSTEMS*
- *AIRCRAFT LANDING SYSTEMS*
- *METEOROLOGICAL SYSTEMS*
- *STRUCTURAL SAFETY*

The WindObserver II provides the best solution on the market for reliable, accurate and cost-effective wind speed and directional measurement. It combines the latest patented advances in ultrasonic technology together with Gill's fifteen years experience as the recognised world leading supplier of all-weather ultrasonic wind sensors. The elimination of moving parts, together with a rugged stainless steel construction means that 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.

The Windows™ based WindCom communications package allows the user to operate the anemometer in various modes, permitting the measurement of U & V vectors or wind speed and direction. Communication is via an RS422 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 recognised standards and meets the stringent performance criteria specified by airport, marine, oil, production, meteorological and utility organisations around the world.

DIMENSIONS		ANALOGUE OUTPUT - OPTIONAL	
Size	405mm x 210mm	Quantity	3 (speed, direction, status or sonic temp)
Weight	1.5kg	Scale	Multiples of ±10 m/s up to 70 m/s
MEASUREMENT		Type	± 2.5V, 0 - 5V or 4 - 20mA
Output	1Hz, 4Hz, 10Hz	V output resistance	60 Ohms
Parameters	UV, Polar, NMEA, Tunnel	4 - 20mA loading	10 - 300 Ohms
Units	m/s, Knots, MPH, KPH ft/min	MATERIALS	
Averaging	Flexible 1-3600 seconds	External Construction	Stainless Steel 316
WIND SPEED		ENVIRONMENTAL	
Range	0 - 65 m/s (0 - 145mph)	Moisture Protection	IP66 (NEMA4X)
Starting Threshold	0.01 m/s	Operating Temperature	-55°C to +70°C
Accuracy	2%	Humidity	5% to 100% RH
Resolution	0.01 m/s	Precipitation	300mm/hr
Offset	± 0.01 m/s	EMC	EN 61000-6-2 : 2001 EN 61000-6-3 : 2001
DIRECTION		Icing	MILSTD810E Method 521.1 Procedure I
Range	0 - 359°	MISC	
Dead Band Direction	None	Standards	Traceable to NAMAS standards
Accuracy	± 2°	Site Calibration	None Required
Resolution	1°		Integrity Check Unit (Zero Wind) supplied as optional extra
SONIC TEMPERATURE		POWER REQUIREMENT	
Range	-40°C to + 70°C (refer to user manual)	Anemometer only	9-30 V DC (40mA @ 12 V DC)
DIGITAL OUTPUT		Heating Optional	3A @24V AC or DC
Communication	RS422, full duplex		
Baud Rates	1200 2400 4800 9600 19200 38400		
Formats	8 data, odd, even or no parity		
Anemometer Status	Supplied as part of standard message		



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The WindObserver II is part of the Solent range of ultrasonic anemometers. The range is in continuous development and therefore specifications may be subject to change without prior notice.

