



# High Speed WindObserver

Wind Speed & Direction Sensor

Range 0-75 m/s (168mph)

HIGH SPEED WINDOBSERVER



## HEATED ULTRASONIC WIND SENSOR FOR HIGHER WIND SPEED APPLICATIONS

- SELECTABLE OUTPUTS
- SMALL TRANSDUCERS INSENSITIVE TO RAIN
- OPPOSING TRANSDUCERS ENSURING OPTIMUM EFFICIENCY / PERFORMANCE
- ADVANCED DATA QUALITY CONTROL CHECKS DEVELOPED BY GILL
- US NAVY RELIES ON GILL ULTRASONIC TECHNOLOGY
- OPTIONAL TEST CHAMBER FOR FIELD VERIFICATION
- 72W (PEAK) / TRANSDUCER HEATING TO PREVENT ICING

## HIGH SPEED WINDOBSERVER - ULTRASONIC WIND SENSOR

The High Speed WindObserver provides the best solution on the market for reliable, accurate and cost-effective high wind speed and direction measurement. It combines the latest patented advances in ultrasonic technology together with Gill's twenty 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 the High Speed WindObserver 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. The opposing transducers provide maximum possible directional ultrasonic signals, used to provide wind data. This configuration

provides a robust system which does not share ultrasonic signals with other transducers. In bad weather and in high wind speed conditions a four transducer system proves superior to three, providing increased signal reception to opposing transducers. The flexible design ensures that the High Speed WindObserver can be configured by the user to their exact requirements, which include a 1Hz output, and heating. Communication is via an RS422 bidirectional link, which allows data to be logged on demand. The first class WindObserver FC has been rigorously tested to internationally recognised standards and meets the stringent performance criteria specified by airport, offshore, meteorological and environmental applications.

**The High Speed WindObserver has been specifically designed to measure wind speeds up to 75 m/s, with a high degree of accuracy.**

<b>DIMENSIONS</b>		<b>MATERIALS</b>	
Size	405mm x 210mm	External Construction	Stainless Steel 316
Weight	1.5kg	<b>ENVIRONMENTAL</b>	
<b>MEASUREMENT</b>		Moisture Protection	IP66 (NEMA4X)
Output	1Hz,	Operating Temperature	-55°C to +70°C
Parameters	UV, Polar, NMEA,	Humidity	0% to 100% RH
Units	m/s, Knots, MPH, KPH	Precipitation	300mm/hr
Averaging	Flexible 1-3600 seconds	EMC	EN 61000-6-2 : 2001 EN 61000-6-3 : 2001
<b>WIND SPEED</b>		Icing	MILSTD810E Method 521.1 Procedure I
Range	0 - 75 m/s (168mph)	<b>MISC</b>	
Starting Threshold	0.01 m/s	Standards	Traceable to NAMAS standards
Accuracy	2% @ 12 m/s	Site Calibration	None Required Integrity Check Unit (Zero Wind) supplied as optional extra
Resolution	0.01 m/s	<b>POWER REQUIREMENT</b>	
<b>DIRECTION</b>		Anemometer only	20 - 30V DC (50mA typical)
Range	0 - 359°	Heating Optional	3A @24V AC or DC
Dead Band Direction	None		
Accuracy	± 2° @ 12 m/s		
Resolution	1°		
<b>DIGITAL OUTPUT</b>			
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		

The WindObserverFC 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.

