

Intrinsically Safe WindObserver Wind Speed & Direction Sensor

I.S. WINDOBSERVER



ALL WEATHER SENSING TECHNOLOGY

- APPROVED TO EEx ia IIC T5
- NO ONSHORE MAINTENANCE
- FACTORY CALIBRATED FOR LIFE
- STAINLESS STEEL CONSTRUCTION
- ISOLATED POWER SUPPLY
- NMEA OUTPUT
- NO MOVING PARTS
- WIND SPEED RANGE 0-75 m/s
- OIL PLATFORMS
- PETROCHEMICAL INSTALLATIONS
- HAZARDOUS AREAS
- OIL TANKERS
- CHEMICAL PLANTS
- METEOROLOGICAL SYSTEMS

INTRINSICALLY SAFE WINDOBSERVER - ULTRASONIC WIND SENSOR

The Intrinsically Safe WindObserver has been developed specifically for use in hazardous areas and in particular for offshore applications. The system combines the latest development in technology with Gill's considerable expertise in the production of solid state anemometers. The Intrinsically Safe WindObserver is a lightweight, robust unit, completely sealed and constructed in stainless steel.

With a low start-up speed (0.01 m/s) and no moving parts, the Gill anemometer exhibits significant benefits over standard three cup anemometers. The Intrinsically Safe WindObserver requires no calibration or maintenance. Wind speed and direction data is provided via a RS422 or RS232 bi-directional

link and the output may be configured by the user to provide a variety of communication formats, including a choice of units of measure and averaging periods. Sophisticated error checking and a fault reporting system are supplied as standard, ensuring the user's confidence in the reported data.

The system is supplied complete with an isolated power supply, the cable is supplied by the customer. The isolated power supply is provided complete with a gland plate for cable entry. The Gill Intrinsically Safe WindObserver represents the best all weather solution on the market for providing reliable and accurate wind speed and direction information in hostile and hazardous environments.

MEASUREMENT

Ultrasonic Output rate	1 Hz or 4 Hz	
Parameters	Windspeed & direction or UV	
Units	m/s, Knots, MPH, KPH, ft/min	
Averaging	3 sec, 5 sec, 10 sec	

WIND SPEED

Range	0 - 75 m/s	
Accuracy	0 - 25 m/s - 2%	26 - 75 m/s - 5%
Resolution	0.01 m/s	
Offset	±0.01 m/s	

DIRECTION

Range	0 - 359°	
Accuracy	0 - 25 m/s - 2°	26 - 75 m/s - 4°
Resolution	1°	

POWER REQUIREMENT

Anemometer system	100V - 120V 10VA, 200V - 250V 10VA
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DIGITAL OUTPUT

Communication	RS422 from anemometer RS422 and RS232 from power supply and interface
Baud Rates	1200, 2400, 4800, 9600, 19200, 38400
Formats	8 data, odd, even or no parity

DIMENSIONS

Anemometer	
Size	405mm x 210mm
Weight	2kg
PCI	
Size	325mm x 230mm
Weight	7kg
Power Requirement	1) 100V ac - 120V ac, 10VA 2) 200V ac - 250V ac, 10VA

ENVIRONMENTAL

Ingress protection	IP66
Operating Temp	-30°C to +70°C
Humidity	5% to 100% RH
Precipitation	300mm / hr
EMC	BS EN 50081-1: 1992 (Emissions class B) BS EN 50082-2: 1992 (Immunity)

GENERAL

Suitable for exposure to a marine environment

APPROVALS

EEx ia IIC T5
Complies with ATEX directive



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The I.S. WindObserver 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.