WindObserver// Ultrasonic Anemometer

Key Features

- Precision Ultrasonic Anemometer
- 0-65m/s Wind Speed
- 0-360° Wind Direction
- Free data logging software

Optional De-Icing System

- Stainless Steel construction
- Lloyds Register Type Approved
- Averaging/gusts to WMO guidelines

The Gill WindObserver II is a precision, solid-state ultrasonic anemometer which has been type approved by the Lloyds Register for use in marine and offshore applications. The WindObserver II provides wind speed and direction data via 1 digital and 3 analogue outputs and features and IP66 rated stainless steel housing, which is particularly suitable for use in salt-water environments.

Offering a high wind speed measurement range, this anemometer has an optional de-icing system enabling the sensor to operate effectively in environmental conditions experienced at high altitude or at sea and is recommended for use in aviation, marine and offshore applications.

Customer selectable vector rolling average and 3 second gust in accordance with WMO - No. 8 Seventh Edition 2008 ISBN 978-92-63-10008-5.

WIND SPEED

Range	0 - 65 m/s (0-145mph)
Starting threshold	0.01 m/s
Accuracy	±2% @12 m/s
Resolution	0.01 m/s
Offset	±0.01 m/s

WIND DIRECTION

Range	0 - 360°
Dead band direction	None
Accuracy	±2° @12 m/s
Resolution	10

MEASUREMENT

Ultrasonic output rate	1Hz, 2Hz, 4Hz, 5Hz, 8Hz or 10Hz
Parameters	UV, Polar, NMEA, Tunnel
Units	m/s, knots, mph, kph, ft/min
Average (Selectable)	Rolling average - 1, 2, 10 m.n, Gust - 3s
Block average	0-3600s

DIGITAL OUPUT

Communication	RS422/RS485 full duplex/half duplex
Baud rates	1200, 2400, 4800, 9600, 19200, 38400
Formats	8 bit data; odd, even or no parity
Anemometer status	Supplied as part of standard message

POWER REQUIREMENT

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

ANALOGUE OUTPUT

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

MECHANICAL

External Construction	Stainless steel 316
Size	381mm x 213mm
Weight	1.4kg

ENVIRONMENTAL

Protection Class	IP66 (NEMA4X)
Humidity	< 5% to 100% RH
Operating Temperature	-55°C to +70°C (Heated option)
Precipitation	300mm/hr
EMC	EN 60945: 2002, EN 61326-1: 2013
lcing	MILSTD810F Method 521.2 Procedure I

APPROVALS

Standards	Traceable to national standards Lloyds Register type approval
Site Calibration	None required. Integrity check unit (Zero wind) supplied as optional extra

ACCESSORIES

Pipe Mount	Contact Gill
WindView Software	Display/logging software



GILL

Typical Applications

- Aircraft Landing Systems
- Marine Vessel Dynamic Positioning Systems
- Ports and Harbours
- Road and Rail Monitoring and Safety Systems
- Wind Turbine Control Systems
- Building Control and Structural Safety
- High Altitude Weather Monitoring
- Power Generation and Transmission Safety



Specifications may be subject to change without prior notice.



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