

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 | 1° |

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 OUTPUT

| | |
|-------------------|--------------------------------------|
| 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 |
| Type | ±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 |
| Icing | MILSTD810F Method 521.2 Procedure I |

APPROVALS

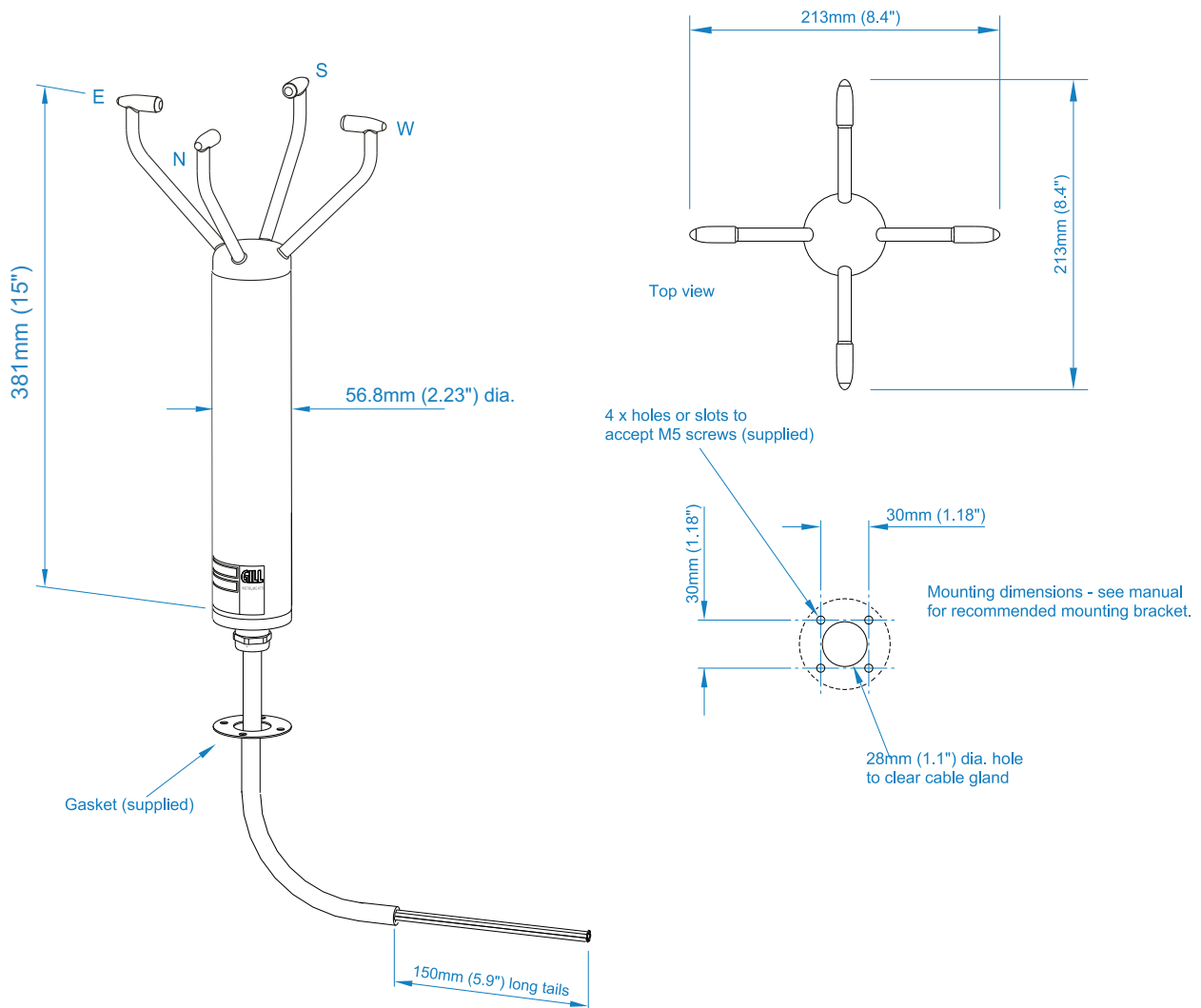
| | |
|------------------|--|
| Standards | Traceable to national standards Lloyds Register type approval |
| Site Calibration | None required. Integrity check unit (Zero wind) supplied as optional extra |

ACCESSORIES

| | |
|-------------------|--------------------------|
| Pipe Mount | Contact Gill |
| WindView Software | Display/logging software |

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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For pricing or any further information, please contact Omni Instruments Ltd.