WindObserver II

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.

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/RS485 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.
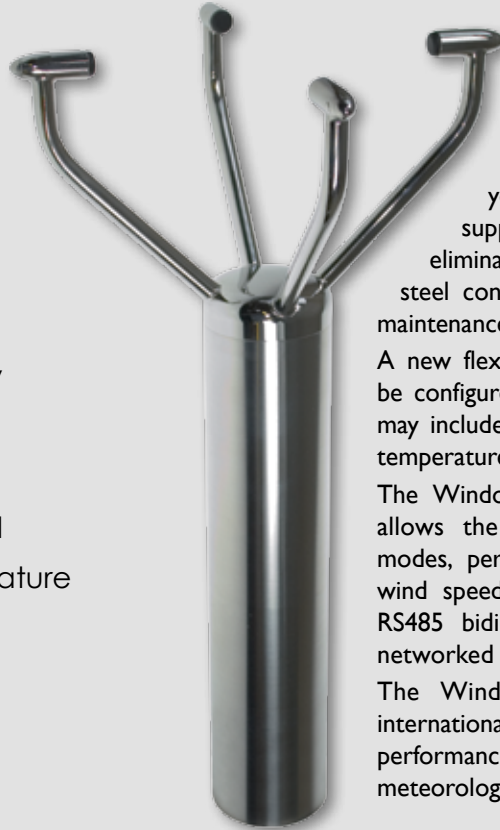
Key Features

- Ultrasonic Technology
- Maintenance Free
- Robust Construction
- Lloyd's Type Approval
- Optional Low Temperature De-Icing

Specification

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

Direction

Range	0 - 359º
Dead Band Direction	None
Accuracy	±2º @ 12 m/s
Resolution	1º

Sonic Temperature

Range	-40ºC to +70ºC

Measurement

Ultrasonic Output Rate	1Hz, 2Hz, 4Hz, 5Hz, 8Hz and 10Hz
Parameters	UV, Polar, NMEA, Tunnel
Units	m/s, knots, mph, kph, ft/min
Averaging	Flexible 1-3600 seconds

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	9-30V DC (40mA @ 12V DC)
Heating Optional	3A @24V AC or DC

Analogue Output - Optional

Quantity	3 (Speed, direction, status or sonic temp)
Scale	Multiples of ±10 m/s up to ±70 m/s
Type	±2.5V, 0-5V 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

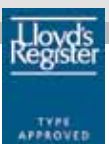|	
Protection Class	IP66 (NEMA4X)
Humidity	< 5% to 100% RH
OperatingTemperature	-55°C to +70°C (Heated Option)
Precipitation	300mm/hr
EMC	EN 61000-6-2: 2001, EN 61000-6-3: 2001
Icing	MILSTD810E Method 521.1 Procedure 1

Approvals

Standards	Traceable to NAMAS standards Lloyd's Register Type Approved
Site Calibration	None Required. Integrity Check Unit (Zero wind) supplied as optional extra

Accessories

Pipe Mount	Contact Gill
WindView Software	Display/Logging Software
WindCom Sotware	Configuration, Display & Logging software

Wind Speed & Direction Sensor

WindObserver II

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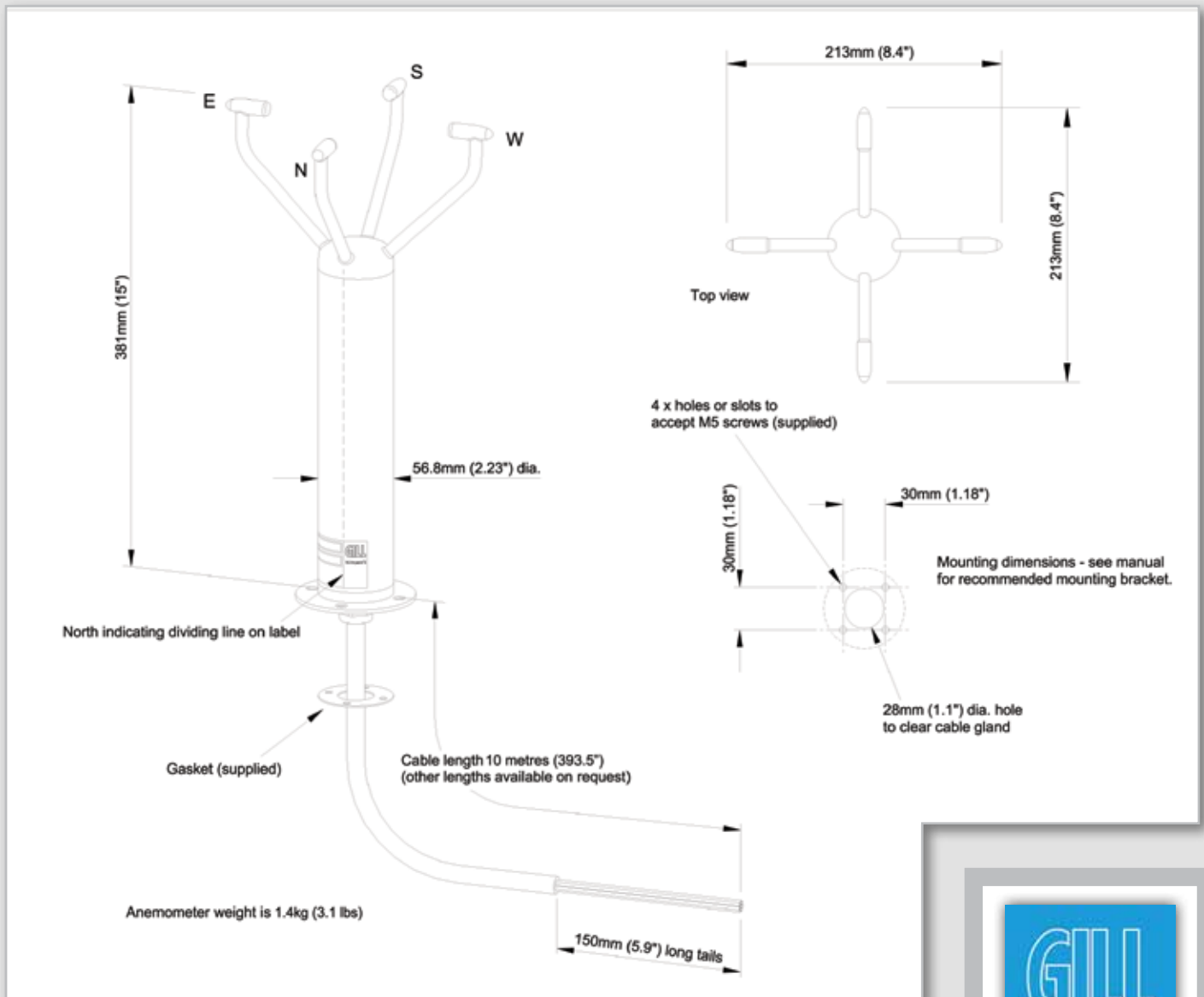
Typical Applications

- Transport Safety
- Wind Turbine Control
- Ship Dynamic Positioning Systems
- Aircraft Landing Systems
- Meteorological Systems
- Structural Safety

Dimensions

381mm (15")

56.8mm (2.23") dia.

North indicating dividing line on label

Gasket (supplied)

Anemometer weight is 1.4kg (3.1 lbs)

Cable length 10 metres (393.5")
(other lengths available on request)

150mm (5.9") long tails

213mm (8.4")

213mm (8.4")

Top view

4 x holes or slots to
accept M5 screws (supplied)

30mm (1.18")

30mm (1.18")

Mounting dimensions - see manual
for recommended mounting bracket.

28mm (1.1") dia. hole
to clear cable gland

The WindObserverII 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.

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ISO 9001
Registered

GILL
INSTRUMENTS