



Key Features

- Precision 3-axis sonic anemometer
- 32Hz output rate
- 0-65m/s wind speed
- 0-359° wind direction
- U, V, W vector outputs
- Sonic temperature output
- Stainless steel construction
- Optional custom calibration

The Gill WindMaster Pro™ is a precision anemometer offering three-axis wind measurement data. This instrument will monitor winds speeds of 0-65 m/s and provides sonic temperature, speed of sound and U, V & W vector outputs at 32Hz as standard. The unit also features improved vertical (W) resolution and speed of sound accuracy and less distortion due to wind loading. Each WindMaster Pro™ is calibrated with a Gill wind tunnel test to provide optimum performance. Optional analogue inputs and outputs plus a PRT are available with 14 bit resolution.

This anemometer is of stainless steel external construction and is particularly suitable for precision wind measurement applications requiring 3-axis data involving high wind speeds.



Wind Speed

Range	0 - 65 m/s
Resolution	0.01 m/s
Accuracy*	<1.5% RMS @12 m/s
Accuracy*	<1% RMS @12 m/s (Custom)

Direction

Range	0 - 359°
Resolution	0.1°
Accuracy	2° @12 m/s
Accuracy	0.5° @12 m/s (Custom)

Sonic Temperature

Range	-40°C to +70°C
Resolution	0.01°C

Speed of Sound

Range	300-370 m/s
Resolution	0.01 m/s
Accuracy	< ±0.5% @ 20°C

Measurement

Internal sample rate	32 Hz
Output parameters	1, 2, 4, 8, 10, 16, 20 & 32 Hz
Units of measure	m/s, mph, kph, knots, ft/min
Formats	UVW, Polar or NMEA
Averaging	Flexible 0-3600 s

Digital Output

Communication	RS232, 422, 485
Baud rates	2400 - 115200
Format	ASCII

Analogue Outputs - Optional

Resolution 14 bits	4 channels available
Selectable range	User selectable full scale wind speed
Output type	0-20mA, 4-20mA, 0-5 V, ±2.5 V, ±5 V

Analogue Inputs - Optional

Resolution 14 bits	Up to 4 single ended or 2 differential plus PRT 100 input
Input type	±5 V

Power Requirement

Anemometer	9-30 VDC (30mA @12 VDC)
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Mechanical

Weight	1.7 kg
Size	750mm x 240mm

Environmental

Protection class	IP65
Operating temp	-40°C to +70°C
Humidity	< 5% to 100% RH
Precipitation	300mm/hr
EMC	BS EN 61000 - 6 - 3 (Emissions) BS EN 61000 - 6 - 2 (Immunity)

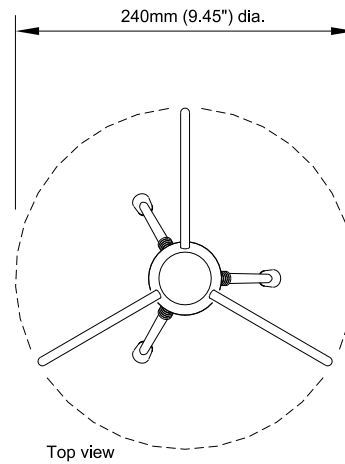
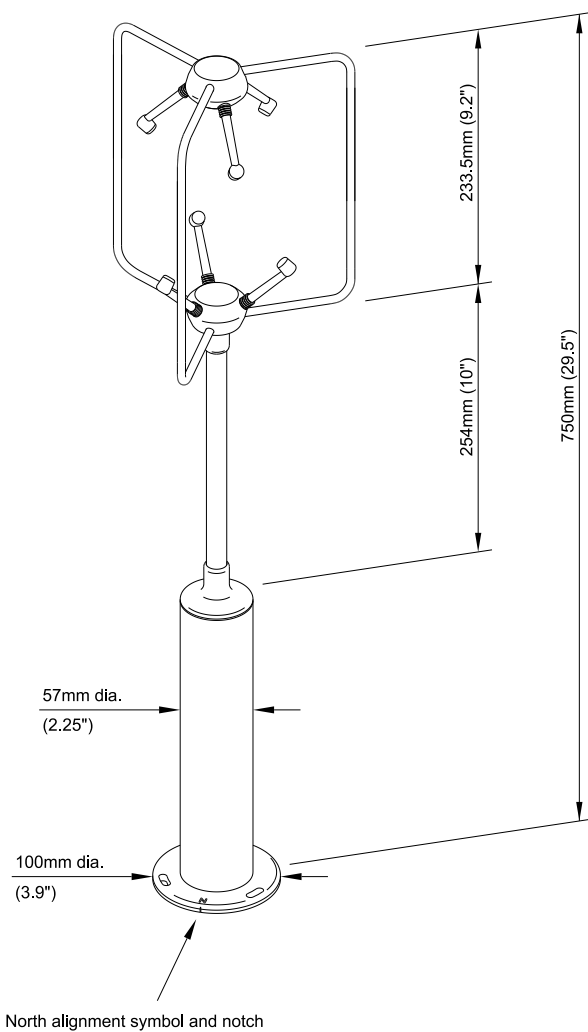
*Accuracy spec applies for wind speed, and for wind incidence up to ±30° from the horizontal

WindMaster Pro™

3-Axis Ultrasonic Anemometer

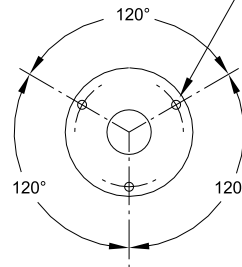
Typical Applications

- Meteorological Systems
- Flux Systems
- Structural Safety
- Wind Profiling
- Marine Research
- Wind Turbine Site Survey



Top view

Positions for three off bolt fixings with 7.0mm (0.27") max. thread dia. on a p.c.d. of 85mm (3.35").



This product is in continuous development and therefore specifications may be subject to change without prior notice.



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