

WindObserver™ RH

Ultrasonic Airflow Sensor



Key Features

- Precision Ultrasonic Air Flow Sensor
- 0-65m/s Wind Speed
- 0-359° Wind Direction
- Free data logging software
- Remote Measurement Head
- IP66 rated stainless steel construction
- Averaging/gusts to WMO guidelines

The Gill WindObserver RH - Remote Head is a precision, solid-state ultrasonic anemometer providing wind speed and direction data via digital outputs and features an IP66 rated stainless steel housing, which is particularly suitable for use in salt-water environments.

This anemometer is able to operate effectively in extreme environmental conditions and is recommended for use in a wide variety of industrial, transport, marine and agricultural applications, where installation space is at a premium.

The anemometer provides 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 - 359°
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 min, 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 (30mA @12 VDC)
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MECHANICAL

External Construction	Body & Head - Stainless steel 316, 1.5m Thermoplastic Rubber Coated Galvanized Steel (Flexible Conduit*)
Connection	19 Way ITC Connector
Size	Refer to diagram overleaf
Weight	2.3kg

* minimum bend radius: 50mm

ENVIRONMENTAL

Protection Class	IP66 (EN60529)
Humidity	0% to 100% RH ¹
Operating Temperature	-20°C to +70°C (EN60068-2-1, EN60068-2-2)
Precipitation	300mm/hr
EMC	EN 61326-2-1: 2013, FCC CFR Title 47, Part 15, Subpart B, Class B Digital Device
Vibration	EN60068-2-6: 2008 (5-150Hz, 10m/s, 20 cycles)

¹ tested to 95% RH @ 40°C to EN60068-2-30

APPROVALS

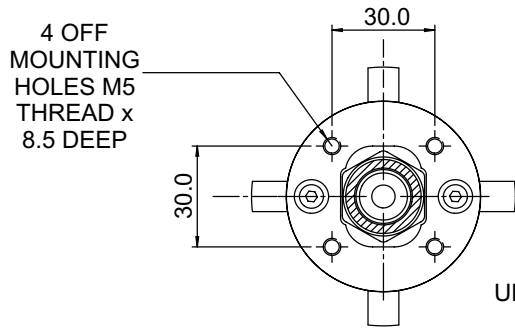
Standards	Traceable to national standards
Site Calibration	None required

ACCESSORIES

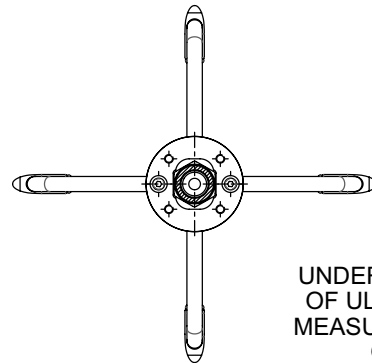
Mounting Brackets	Optional, Contact Gill
WindView Software	Display/logging software

Typical Applications

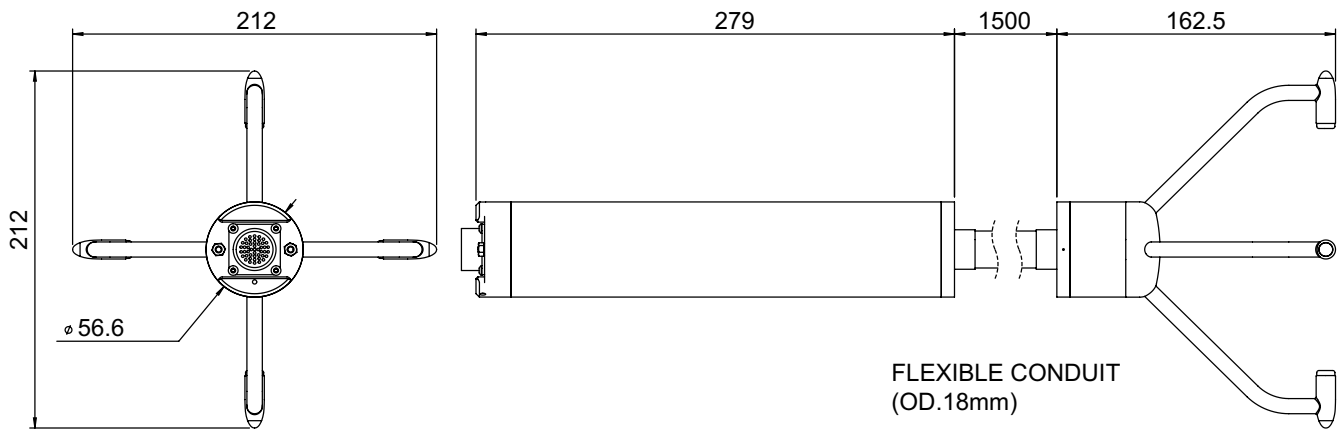
- Building Controls/Structural Safety
- Machine Control Systems
- Flow Monitoring in Ducts
- Road & Rail Tunnels/Transport Safety
- Agricultural/Industrial Process Monitoring
- Unmanned Vehicles



UNDERSIDE VIEW OF ULTRASONIC MEASURING HEAD SHOWING MOUNTING HOLES



UNDERSIDE VIEW OF ULTRASONIC MEASURING HEAD ONLY



FLEXIBLE CONDUIT (OD. 18mm)
NOTE:
MINIMUM PERMITTED BEND RADIUS IS 50mm

Specifications may be subject to change without prior notice.



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