

## Wind Speed & Direction Sensor

### Key Features

- Wind Speed & Direction Sensor
- 0-60m/s (116 knots) Wind Speed
- 0-360° Wind Direction
- NMEA output
- Low Power consumption
- Fast start-up
- Solid-state – maintenance-free
- Corrosion Free

The Gill WindSonic is a low-cost anemometer, which utilises Gill's proven ultrasonic technology to provide wind speed and direction data via one serial or two analogue outputs. To confirm correct operation, outputs are transmitted together with an instrument status code.

With a robust, corrosion-free polycarbonate housing, this small, lightweight wind sensor is recommended for use in harsh environmental conditions and is particularly suited to marine & offshore (ships, data buoys) and land based installations. The WindSonic has no moving parts, offering maintenance-free operation in a wide range of applications.



#### WIND SPEED

|               |                        |
|---------------|------------------------|
| Range         | 0 - 60 m/s (116 knots) |
| Accuracy      | ±2% @12 m/s            |
| Resolution    | 0.01 m/s (0.02 knots)  |
| Response Time | 0.25 seconds           |
| Threshold     | 0.01 m/s               |

#### DIRECTION

|               |                         |
|---------------|-------------------------|
| Range         | 0 - 360° (No dead band) |
| Accuracy      | ±2° @12 m/s             |
| Resolution    | 1°                      |
| Response Time | 0.25 seconds            |

#### MEASUREMENT

|                        |   |
|------------------------|---|
| Ultrasonic Output Rate | 0.25, 0.5, 1, 2 or 4 Hz                     |
| Parameters             | Wind Speed & Direction or U and V (vectors) |
| Units of Measure       | m/s, knots, mph, kph, ft/min                |

#### OUTPUTS

|                   |   |
|-------------------|---|
| Option 1          | RS232   |
| Option 2          | RS232 + RS422 + RS485*** + NMEA*  |
| Option 3          | RS232 + RS422 + RS485*** + NMEA*<br>0-5V or, 0-20mA or 4-20mA               |
| Option 4          | SDI-12 (refer to manual or separate data-sheet for technical specification) |
| Baud Rate         | 2400 to 38400   |
| Anemometer Status | Supplied as part of standard message  |

#### POWER REQUIREMENT

|               |   |
|---------------|---|
| Anemometer    | 5-30VDC Option 1 & 2  |
|               | 7-30VDC Option 3  |
|               | 9-30VDC Option 4  |
| Current Drain | Dependent on option selected e.g.<br>< 2mA @ 12V (SDI-12)<br>to 44mA @ 12V (4-20mA)<br>Refer to manual for further advice |
|               | Start up time < 5 seconds   |

#### MECHANICAL

|                       |                           |
|-----------------------|---------------------------|
| External Construction | LURAN S KR 2861/1C ASA/PC |
| Size                  | 142mm x 163mm             |
| Weight                | 0.5kg                     |

#### ENVIRONMENTAL

|                       |                 |
|-----------------------|-----------------|
| Protection Class      | IP66            |
| Operating Temperature | -35°C to +70°C  |
| Storage Temperature   | -40°C to +80°C  |
| Operating Humidity    | < 5% to 100% RH |
| Precipitation         | 300mm/hr        |
| EMC                   | EN 61326: 1998  |

#### OPERATIONAL

|                     |                                 |
|---------------------|---------------------------------|
| MTBF                | 15 years                        |
| Warranty            | 2 years                         |
| Factory Calibration | Traceable to National Standards |

#### ACCESSORIES

|                          |                                   |
|--------------------------|-----------------------------------|
| Wind Software            | Display / Logging**               |
| Pipe Mounting (optional) | 44.45mm (1.75 in) diameter        |
| Cables (optional)        | Available to match output options |
| Display (optional)       | See Gill Display datasheet        |

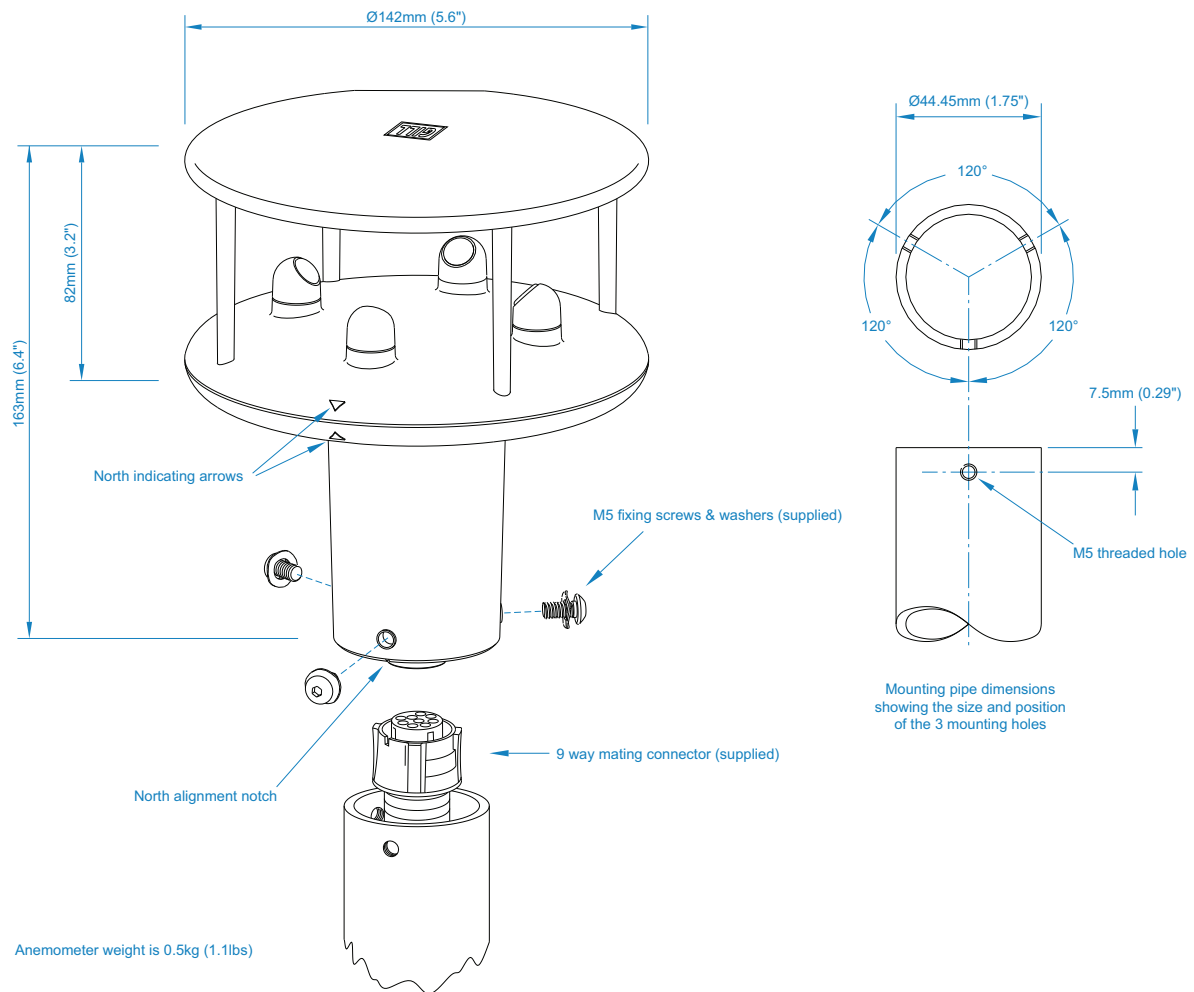
\* NMEA 0183

\*\* Download software free from [www.gillinstruments.com](http://www.gillinstruments.com)

\*\*\* 2-wire is point to point only

## Typical Applications

- Remote weather monitoring stations
- Building controls
- Data buoys
- Marine vessels
- Small airports & helipads
- Road & rail tunnels
- Environmental field sites
- Ports & harbours
- Mobile weather monitoring vehicles
- Coastal weather monitoring stations



Specifications may be subject to change without prior notice.

# GILL

### Gill Instruments Limited

Saltmarsh Park, 67 Gosport Street  
Lymington, Hampshire  
SO41 9EG United Kingdom

Tel: +44 (0) 1590 613 500

contact@gillinstruments.com

[gillinstruments.com](http://gillinstruments.com)

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Registered Office: Towngate House, 2-8 Parkstone Road, Poole. BH15 2PW