# WindSonic 75 Wind Speed & Direction Sensor

## **Key Features**

- Wind Speed & Direction Sensor
- 0-75m/s (146 knots) Wind Speed
- 0-359° Wind Direction
- NMEA output

- Low Power consumption
- Fast start-up
- Solid-state maintenance-free
- Corrosion Free

The Gill WindSonic is a low-cost, high speed 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 - 75m/s (146 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 - 359° (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 (vec-<br>tors) |
| Units of Measure       | m/s, knots, mph, kph, ft/min                     |

#### OUTPUTS

|                   | 06222   |
|-------------------|---|
| Option 1          | RS232   |
| Option 2          | RS232 + RS422 + RS485*** + NMEA*                              |
| Option 3          | RS232 + RS422 + RS485*** + NMEA*<br>0-5V or, 0-20mA or 4-20mA |
| Baud Rate         | 2400 to 38400   |
| Anemometer Status | Supplied as part of standard message                          |

### POWER REQUIREMENT

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

#### MECHANICAL

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

#### ENVIRONMENTAL

| Protection Class     | IP66            |
|----------------------|-----------------|
| OperatingTemperature | -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

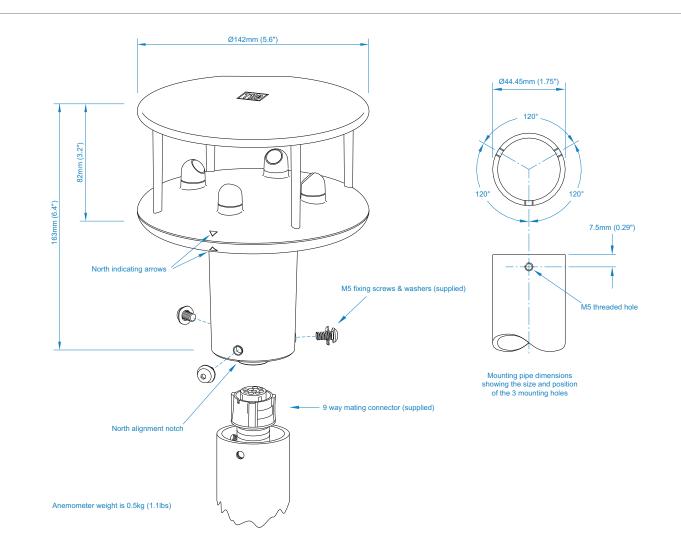
| Pipe Mounting | 44.45mm (1.75 in) diameter        |
|---------------|-----------------------------------|
| Wind Software | Display / Logging**               |
| Cables        | Available to match output options |
| Display       | See Gill Display datasheet        |



## **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.



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