Streamline Measurement Ltd

Windsonic Ultrasonic Wind Speed and Direction Sensor

Key Features

- **Wind Speed & Direction Sensor**
- **0-60m/s (116 knots) Wind Speed**
- **0-359º 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 - 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 (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* 0-5V or, 0-20mA or 4-20mA
Option 4	SDI-12 (refer to manual or separate datasheet for technical specification)
Baud Rate	2400 to 38400
Anemometer Status	Supplied as part of standard message

* NMEA 0183

POWER REQUIREMENT

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

MECHANICAL

External Construction	LURAN S KR 2861/1C ASA/PC
Size	142mm x 160mm
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
EMC	EN 61326: 1998

OPERATIONAL

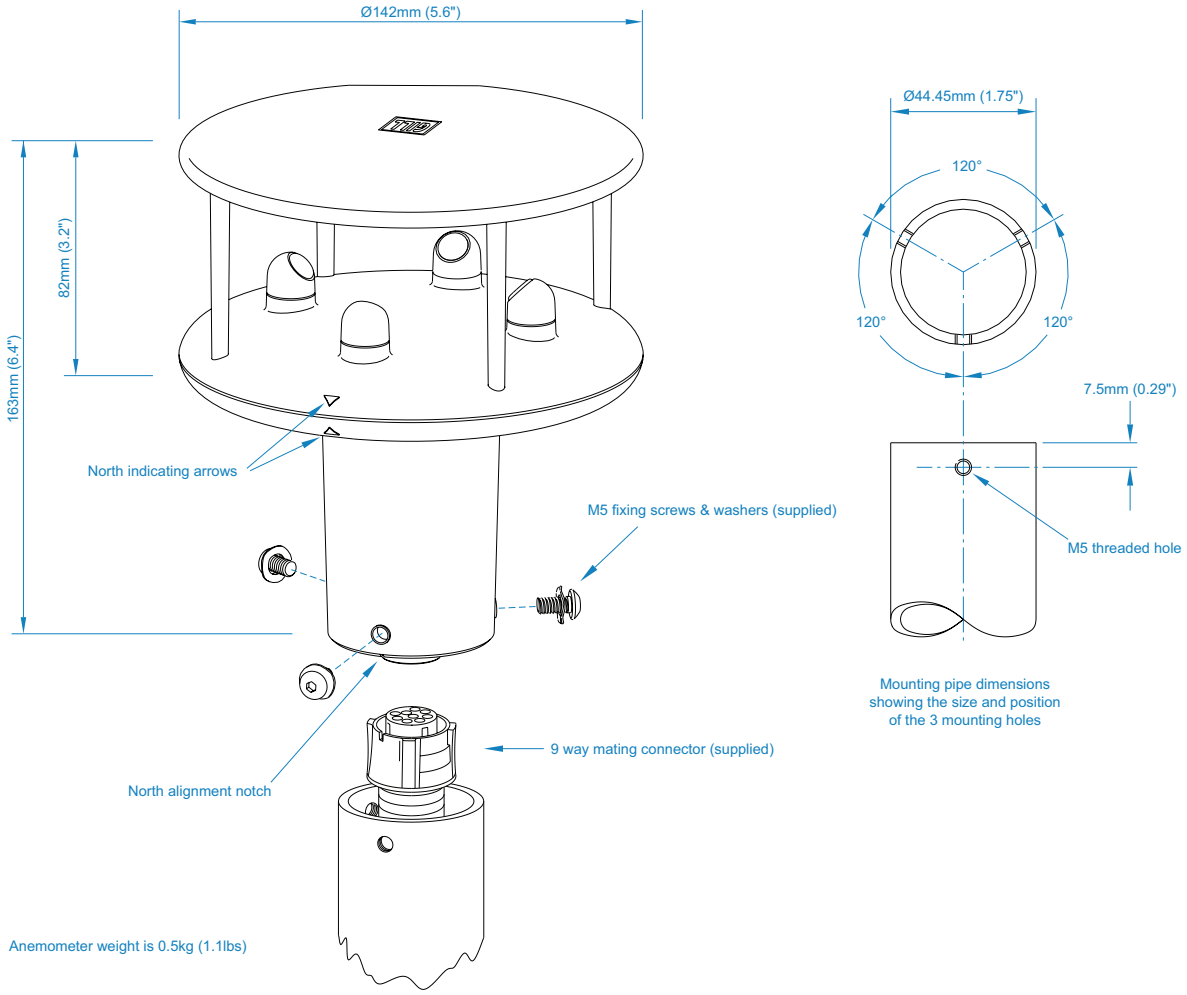
MTBF	15 years
Warranty	2 years
Factory Calibration	Traceable to National Standards

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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