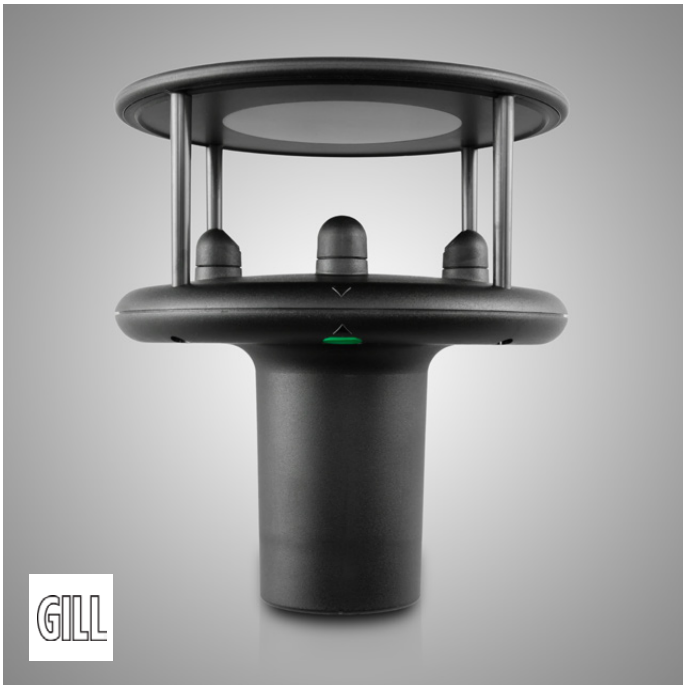
Windsonic M

The Windsonic is a low-cost anemometer utilizing proven ultrasonic technology to provide wind speed and direction data via one serial or two analogue outputs.



- Wind speed & direction from a single unit
- 0 - 359º wind direction fast start-up
- Low power consumption
- No calibration required

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 sensor is designed to withstand installation and use with no fear of the damage commonly experienced with more fragile cups, vanes or propellers. Without the need for expensive on-site calibration or maintenance and with a corrosion free exterior, Windsonic is a true fit and forget unit.

The flexible design enables you to easily configure Windsonic to deliver the information you require. By using the software provided it is possible to select the output rate and choose the units of measurement that suit your application. Ensuring accuracy and reliability, Windsonic automatically transmits an anemometer status code with each output to indicate its operating status. Available in four options, providing a number of different digital and analogue outputs.

Wind speed

Range	0 to 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

Wind direction

Range	0 to 359° (no dead band)
Accuracy	±2° @ 12 m/s
Resolution	1°
Response time	0.25 seconds

Power requirement

Anemometer	5 to 30 V DC (5.5 mA @ 12 V)
Optional heating*	24 V AC/DC (4.2 A @ 24 V)
Analogue Outputs	Current consumption increases if analogue output is selected. Add up to 40mA to nominal power consumption above

** Consult the technical manual for optimum heating supply voltage*

Measurement

Output	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

Digital	RS232 + RS422 + RS485* + NMEA**
Baud Rate	2400 to 38400
Analogue (optional)	0-5v or 0-20mA or 4-20m

** 2-wire is point to point only, ** NMEA 0183*

Environmental specifications

Protection class	IP 66 BS EN 60529 : 1992
Operating temperature	-40°C to +70°C (with heating) -35°C to +70°C (without heating
Storage temperature	–40 °C to +80 °C
Operating humidity	< 5 % to 100 %RH
Precipitation	300 mm/hr
EMC	BS EN 61326 : 2006 & BS EN 60945 : 2002
Impact Resistance	UL2218 Class 1
Compass Safe Distance	BS EN 60945: 2002 Section 11.2
Vibration	BS EN 60945 : 2002

Mechanical specifications

External construction	Al. Alloy 6061 T6
Finish	Hard Anodised
Size	142 x 163 mm
Weight	0.9 kg

Operational specifications

Warranty	2 years
Factory calibration	traceable to national standards

Accessories

Pipe mounting (optional)	44.45 mm (1.75 in) diameter
Wind software	display / logging*
Cables (optional)	available to match output options

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