

Windsonic Anemometer

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.





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 option 1 & 2 7 to 30 V DC option 3 9 to 30 V DC option 4
Current Drain	Dependent on option selected e.g. < 2 mA @ 12 V (SDI-12) to 44 mA @ 12 V (4 - 20 mA)
	start-up time < 5 seconds

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

Option 1	RS-232
Option 2	RS-232, RS-422, RS-485, NMEA 0183
Option 3	RS-232 + RS-422 + RS-485, NMEA 0183 0 - 5 V or, 0 - 20 mA or 4 - 20 mA
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

Environmental specifications

Protection class	IP 66
Operating temperature	-35 °C to +70 °C
Storage temperature	−40 °C to +80 °C
Operating humidity	< 5 % to 100 %RH
Precipitation	300 mm/hr
EMC	EN 61326: 1998

Mechanical specifications

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

Operational specifications

MTBF	15 years
Warranty	2 years
Factory calibration	traceable to national standards

Accessories

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

