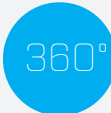# Windsonic 75 Anemometer

The Windsonic 75 is a low-cost anemometer utilizing proven ultrasonic technology to provide wind speed and direction data via one serial or two analogue outputs. To confirm correct opreration, outputs are transmitted together with an instrument status code.

Compact wind speed and direction sensor

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 and offshore (ships, data buoys) and land based installations. The Windsonic 75 has no moving parts, offering maintenance-free operation in a wide range of applications.

Wind speed

Range	0 to 75 m/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

Wind direction

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

Power requirement

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

Measurement

Ultrasonic output rate	0.25, 0.5, 1, 2 or 4 Hz
Parameters	wind speed and 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
Baud rate	2400 to 38400
Anemometer status	Supplied as part of a 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