



# WINDSONIC WIND SPEED & DIRECTION SENSOR



### Product Description

The MUNRO WindSonic is a low-cost anemometer, which utilises proven ultrasonic technology to provide wind speed & direction data via one serial or two analogue outputs. To confirm correct operation, outputs are transmitted together with an instrument status code.

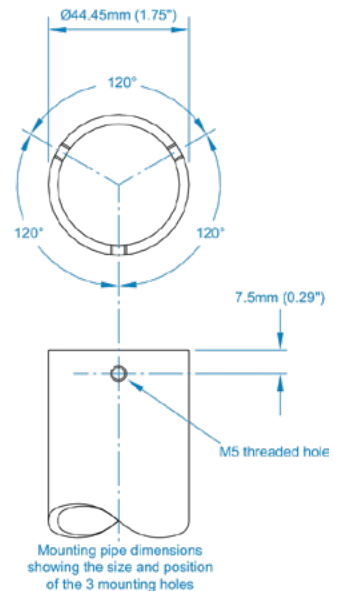
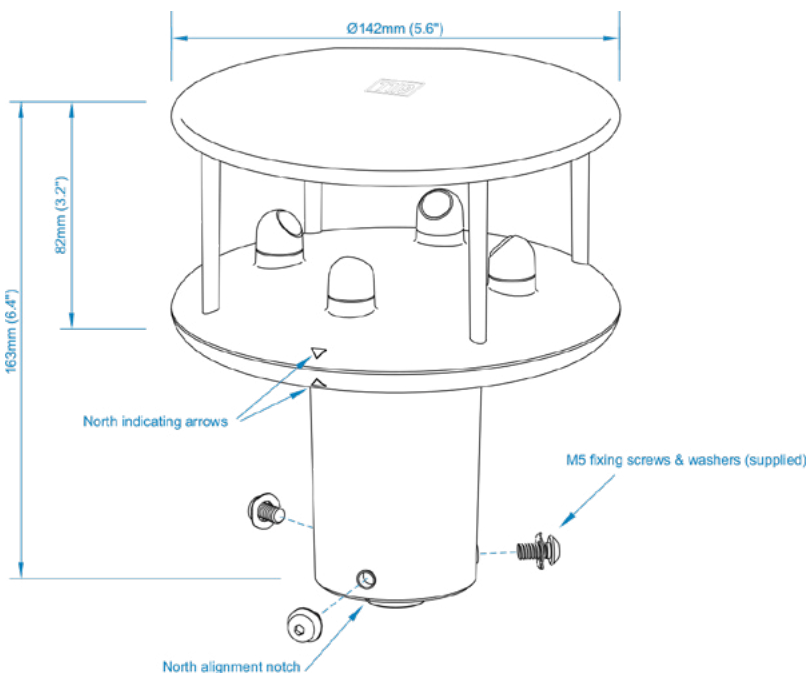
With a robust, corrosion-free polycarbonate housing, this small, lightweight wind sensor is recommended for use in harsh environmental conditions and is particularly suited to marine & offshore (ships, data buoys) & land based installations. The WindSonic has no moving parts, offering maintenance-free operation in a wide range of applications.

### Features

- Wind Speed & Direction Sensor.
- 0-60m/s (116 knots) Wind Speed.
- 0-360° Wind Direction.
- NMEA output.
- Low Power consumption.
- Fast Start-up.
- Solid-state – maintenance-free.
- Corrosion Free.

### 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.



## Technical Specifications

## WINDSONIC

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 - 360° (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* 0-5 V or, 0-20mA or 4-20mA
Option 4	SDI-12 (refer to manual or separate data-sheet for technical spec.)
Baud Rate	2400 to 38400
Anemometer Status	Supplied as part of standard message
POWER REQUIREMENT	
Anemometer	5-30 VDC Option 1 & 2 7-30 VDC Option 3 9-30 VDC 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 163mm
Weight	0.5kg
ENVIRONMENTAL	
Protection Class	IP66
Operating Temperature	-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	
Wind Software	Display / Logging**
Pipe Mounting (optional)	44.45mm (1.75 in) diameter
Cables (optional)	Available to match output options
Display (optional)	See MUNRO Display datasheet