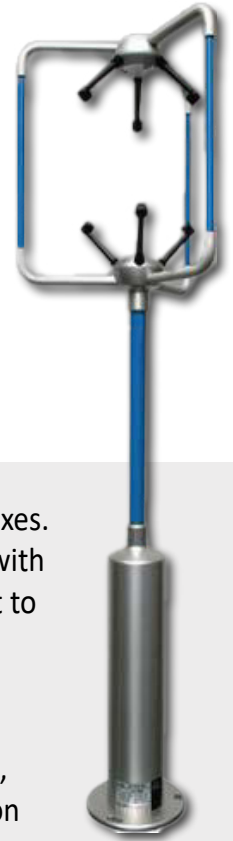




WINDMASTER 3-AXIS ULTRASONIC WIND SPEED & DIRECTION



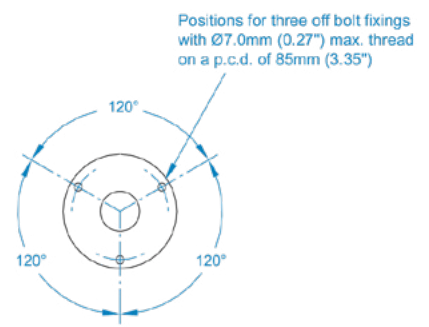
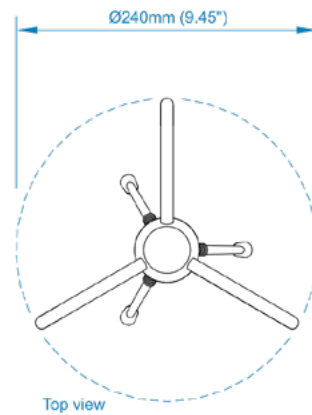
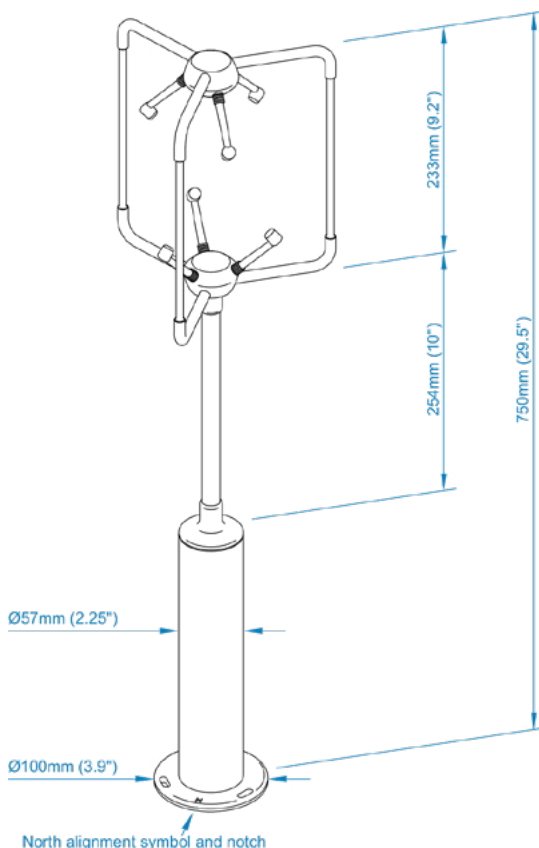
Product Description

The MUNRO WindMaster is a precision anemometer offering three-axis wind measurement data.

This instrument will monitor wind speeds of 0-50m/s and provides sonic temperature, speed of sound and U, V & W vector outputs at 20Hz (32Hz optional). This anemometer is of aluminium/carbon fibre construction & is ideal for the understanding of turbulent flows,

surface energy balance and scalar fluxes. Each WindMaster can be calibrated with an optional MUNRO wind tunnel test to provide optimum performance.

This 3D sonic anemometer is ideally suited to the measurement of air turbulence around bridges, buildings, wind turbine sites, building ventilation control systems, meteorological & flux measurement sites.



WINDMASTER



Pipe Mount 34mm diameter option with Terminal Strip junction Box.

Features:

- Precision 3-axis sonic anemometer
- 20Hz output rate
- 0-50m/s wind speed
- 0-359° wind direction
- U, V, W vector outputs
- Sonic temperature output
- Aluminium/Carbon fibre construction
- Optional custom calibration.

Typical Applications:

- Power Lines • Bridges • Viaducts • Building ventilation control systems • Measurement Masts
- Skyscrapers • Wind Turbine Test Sites
- Meteorological & Flux measurement sites.

Technical Specifications

WIND SPEED	
Range	0-50 m/s
Resolution	0.01 m/s
Accuracy	<1.5% RMS @12 m/s <1% RMS @12 m/s (Custom)
WIND DIRECTION	
Range	0 - 359°
Resolution	0.1°
Accuracy	2° @12 m/s 0.5° @12 m/s (Custom)
SONIC TEMPERATURE	
Range	-40°C to +70°C
Resolution	0.01°C
Accuracy	-20°C to +30°C within ±2°C of ambient temperature
SPEED OF SOUND	
Range	300-370 m/s
Resolution	0.01 m/s
Accuracy	< ±0.5% @ 20°C
MEASUREMENT	
Internal sample rate	20 Hz or 32 Hz
Output Parameters	1, 2, 4, 8, 10, 16, 20 & 32 (Option) Hz
Units of Measure	m/s, mph, kph, knots, ft/min
Formats	UVW or Polar
DIGITAL OUTPUT	
Communication	RS232, 422, 485, Binary
Baud Rates	2400 - 57600
Format	ASCII
ANALOGUE OUTPUTS - OPTIONAL	
Resolution 12 bits or 14 bits	4 channels available
Selectable Range	User selectable full scale wind speed
Output type	0-20mA, 4-20mA, 0-5 V, ±2.5 V, ±5 V
ANALOGUE INPUTS - OPTIONAL	
Resolution 12 bits or 14 bits	Up to 4 single ended or 2 differential
Input Type	±5 V
POWER REQUIREMENT	
Anemometer	9-30 VDC (55mA @ 12 VDC)
MECHANICAL	
Weight / Size	1.0kg / 750mm x 240mm