

## ULTRASONIC ANEMOMETER

The Ultrasonic Wind Speed Sensor is a solid-state sensor module designed to measure wind speed accurately without mechanical moving parts. It operates using ultrasonic Time-of-Flight (TOF) technology, making it reliable, low-maintenance, and suitable for IoT, weather monitoring, and environmental sensing applications. With a robust, corrosion-free polycarbonate housing, this small, lightweight wind sensor is recommended for use in harsh environmental conditions, offering maintenance-free operation in a wide range of applications.

### FEATURES

- Non-contact measurement.
- High accuracy and real-time measurement capability.
- Wide operating range suitable for indoor and outdoor conditions.
- Real time data monitoring with IoT-enabled website for data visualization and analysis.
- No moving parts → high durability and low maintenance.



### SPECIFICATIONS

WIND SPEED	
Range	0 – 60 m/s
Accuracy	±0.1m/s - ±0.2 m/s
Resolution	0.01m/s
Response time	0.25 – 5 seconds

WIND DIRECTION	
Range	0 - 360°
Resolution	1°
Response time	0.25 – 5 seconds

POWER AND OUTPUT SPECIFICATIONS	
Supply voltage	3.3 – 5V
Power consumption	30 – 60mA
Output Format	RS232 OR RS485

ENVIRONMENTAL	
Protection class	IP66
Operating temperature	-40°C to +70°C

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OUTPUT CONNECTORS	
Red wire	VCC
Black wire	GND
Blue wire	A(RS232), RX(RS485)
Yellow wire	B(RS232), TX(RS485)

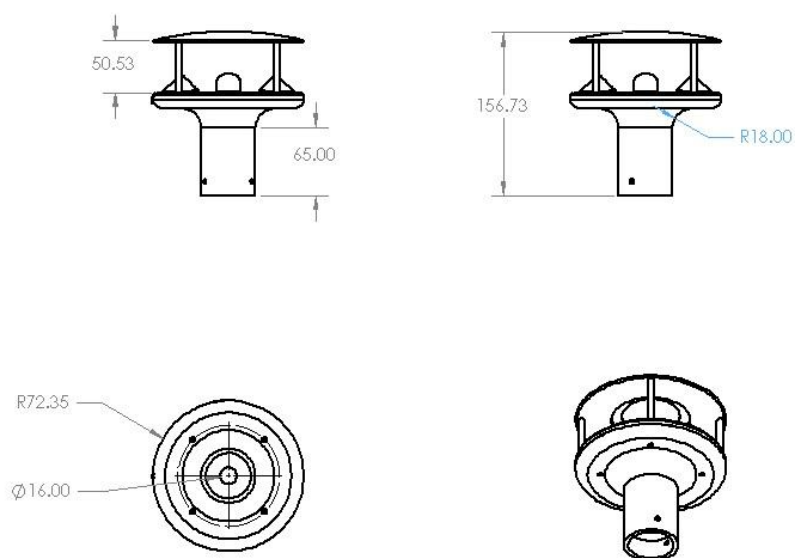
APPLICATIONS

- Weather monitoring stations
- Smart agriculture
- IoT-based environmental sensing
- UAVs and drones (in-flight wind analysis)
- Industrial airflow monitoring
- Small airports and helipads

ENCLOSURE SPECIFICATIONS

Material	Acrylonitrile Butadiene Styrene (suitable for outdoor use)
Ingress Protection	IP66 (dust-tight, protected against low-pressure water jets)
Dimensions	Height 157mm, Diameter 73mm
Weight	0.6kg
Color	Black (for minimal solar heating)
Mounting Options	Pole-mount with stainless steel brackets
Cable Entry	4 Pin Connector
UV Resistance	Rated for > 5 years outdoor exposure

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