

## Wind Speed



An **anemometer** is a device for measuring wind speed, and is a common weather station instrument. It measures the horizontal wind speed. Cup type anemometers are the general standard type of anemometer. It consists of three hemispherical cups which are mounted at equal angles to each other on a vertical shaft. They are robust and resistant to turbulence and skew winds caused by masts and traverses.

<b>Sensor type:</b>	Optically scanned cup anemometer
<b>Range:</b>	0.5 to 60 m/sec
<b>Survival Range:</b>	80 m/s
<b>Resolution:</b>	0.1 m/s
<b>Accuracy:</b>	± 0.5 m/s
<b>Threshold:</b>	0.5 m/sec
<b>Response Time:</b>	< 10 sec
<b>Operating Temp Range:</b>	-40 to +85 deg c

### High resolution wind sensor designed specifically for air quality applications:

- Combines simplicity and corrosion resistance with low starting threshold
- Fast response
- Excellent fidelity in fluctuating wind conditions
- Lightweight, optically scanned plastic body with stainless steel and anodized aluminum fittings
- DC voltage output directly proportional to wind speed
- No slip rings or brushes
- Operated with 5 volt, 10mA Dc supply
- Low power consumption
- Robust and weatherproof

## Wind Direction



The wind direction sensor is a sensitive wind direction indicator that provides azimuth data as indication of wind direction. A Hall Effect angular position sensor is used for accurate position measurement of the wind direction vane. This provides full 360 degree detection. Utilizing Hall Effect detection technology makes the sensor more sensitive, accurate, with a higher resolution, while significantly enhancing the reliability and durability of the sensor.

<b>Sensor type:</b>	Propeller Vane
<b>Range:</b>	0 to 359 degrees
<b>Survival Range:</b>	80 m/s
<b>Resolution:</b>	1 degree
<b>Accuracy:</b>	± 5 degrees
<b>Threshold:</b>	0.5 m/sec
<b>Response Time:</b>	< 10 sec
<b>Operating Temp Range:</b>	-40 to +85 deg c

### Features:

- Fully 360 degree measurement
- Azimuthally visual indication of wind direction
- Magnetic Hall Effect sensing
- Low friction ceramic bearings
- Low starting torque
- Good dynamic characteristics
- Long operating life
- Operated with 5 volt, 10mA Dc supply
- Low power consumption
- Robust and weatherproof