# Sonic Anemometer

**DS-2** 

# **Measure Wind Speed and Direction**

The DS-2 is a sonic anemometer that measures horizontal wind speed and direction. The DS-2 is a rugged, research grade sensor.





we measure the world

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### **Applications**

- Characterize microclimate
- Modeling PET and ET
- Surface-atmosphere energy exchange
- Transport of mass and energy (particulate matter, gases, heat)
- Monitoring fertilizer/pesticide/herbicide
  applications
- Fire weather assessment, fire behavior forecasting
- Mobile sampling platforms

#### Accurate at Low Wind Speeds

The DS-2 has a lower measurement threshold of 0 m/s. Because of friction, cup anemometers have a lower measurement threshold of 0.5 m/s.

#### **Never Needs Calibration**

Sonic anemometers use ultrasonic sound waves to measure wind velocity. Because the measurement is founded on first principles, the sensor doesn't need calibration.

#### **Requires No Maintenance**

No moving parts means you don't have to oil or replace anything.

#### **Uses Very Little Power**

Built to run for 6 months or more on the 5 AA batteries in your Em50 series data logger (also compatible with other data loggers).

#### Affordable

High accuracy and low per-sensor cost make acquiring vertical wind profiles and greater spatial coverage possible.

## **Specifications**

#### Wind Speed

**Range:** 0 to 30 m/s. **Resolution:** 0.01 m/s. **Accuracy:** 0.30 m/s or 3%, whichever is larger.

#### Wind Direction

**Range:** 0 to 359 degrees. **Resolution:** 1 degree. **Accuracy:** ±3 degrees.

Diameter: 100 mm. Sensor body height (w/mount): 155 mm. Communication: SDI-12. Maximum sampling speed: 1 Hz. Connector types: 3.5 mm (stereo) plug or stripped & tinned lead wires. Data logger compatibility: (not exclusive) Decagon Em50 series, Campbell Scientific.