



MS301

WIND DIRECTION SENSOR

- ***High Quality and ruggedness***
- ***Reliable***
- ***Accurate***
- ***Low Cost***



The Wind Direction Vane is a professional quality sensor. Its unique qualities make it ideal for use in many applications in environmental testing and meteorology. Although moderately priced, these sensors offer a level of quality and reliability often found only at a very high premium.

The thermoplastic and stainless steel components resist corrosion, and contribute to a high strength-to-weight ratio. The Vane is elegantly engineered, employing a minimum number of parts while maximizing functional performance. The vane is directly connected to a precision conductive plastic potentiometer located in the main body.

An analog voltage output directly proportional to the wind direction is produced when a constant DC excitation voltage is applied to the potentiometer.

General Characteristics

- Simple mechanical construction
- Long life, professional quality potentiometer
- No slip rings or brushes result in high reliability, low cost
- Corrosion-resistant materials
- Multiple mechanical and contact seals
- Very stable and smooth response to wind changes
- Fully balanced sensor vane

Mechanical

Range: Direction–360° mechanical, continuous rotation
Sensitivity: Approx. 1 m/s

Materials

Direction vane and housing: black UV stabilized injection molded plastic
Balance weight: stainless steel
Terminals: three solid brass studs with nuts
stainless steel shaft in two shielded precision grade, stainless steel ball bearings,
conductive plastic potentiometer element mounted in a machined aluminum housing
Hardware: all stainless steel construction



Dimensions

Overall length: 210mm
Swept diameter: 270mm
Overall height: 120mm
Vane size: 60 mm high x 100 mm long
Main housing diameter: 50mm
Mounting: 13mm diameter mast with cotter pin and mast set screw
Weight: 0.1kg

Electrical

Direction Range: 352° electrical (8° open)
Analog DC voltage from conductive plastic potentiometer 10K linearity 1.0%, life expectancy of more 50 million revolutions (3-6 years normal operation)
Power Requirements: Regulated potentiometer excitation of 1 to 15 VDC

Technical characteristics subject to change without notice