

A75-101R

3-Cup Anemometer

DESIGNED FOR HIGH VOLTAGE APPLICATIONS

FEATURES

- Elegant Design
- Dirt and Water Resistant
- Corrosion Resistant Construction
- Modified Teflon bearing system

APPLICATIONS

- Research Measurements
- Engineering Studies on wind effects on structures
- Control Anemometer for new or existing wind warning devices
- Wind Resource Assessment



SPECIFICATIONS

- Accuracy: 5m/s to 25 m/s (11 MPH to 55 MPH) ± 0.1 m/s (0.2 MPH)
- Threshold: Starting - less than 1.5 m/s (3.35 MPH)
Cup Distance Constant - 3.0m (10 ft)(63% recovery)
- Materials: Rotor and Housing Body - Injection molded black polycarbonate (Lexan)
Shaft - Beryllium Copper (Fully Hardened)
Bearing - Modified Teflon, self lubricating
Rated PV factor of 20,000 (at 6.7 m/s or 15 MPH, PV is approx. 500; at 45 m/s or 100 MPH PV is approx. 2,000)
Upper Bearing is centered in the plane of cup thrust for optimal loading
Permanent Magnet Indox - 1, 25 mm (1in) diameter, 13 mm (0.5 in) long, 4 pole
- Weight: 0.1 kg (0.2 lbs)
- Dimensions: 3-Cup Conical Cross Section - 51 mm (2 in) diameter
Swept Diameter of Rotor - 190 mm (7.5 in)
Overall Height - 81 mm (3.2 in)
Moment of Inertia of rotor assembly - 68×10^{-6} S - ft²
- Electrical: Reed Switch: MAX Voltage - **24 VDC**
MAX Current - 10 mA
Lifetime - 10⁹ Cycles
Output Signal: Contact transfer rate varies linearly with wind speed.
120 contact transfers per second at 102.5 MPH
- Environmental: Operating Temperature - -55°C to 65°C (-67°F to 150°F)
Operating Humidity - 0-100% RH
Gust Survival Speed - 232 MPH
Lifespan - 3-5 Years under normal conditions