Capture more data in more conditions.

The PV-1 Wind Vane from Second Wind

Situation: For decades, the wind power industry has relied on the same technology to measure wind direction. This technology too often fell short in its ability to accurately capture data in every direction and in cold, icy environments.

Solution: The Second Wind PV-1 Wind Vane has an innovative design featuring drip overhang to prevent icing. Combine this with a reduced deadband of as little as three degrees, and you get more reliable performance and accurate reads all the way around.

Know exactly where the wind is coming from, all day, all year.

You get all the features you expect in an affordable, high-performance wind vane: simple construction, stable/smooth response to wind change and perfect balance.

- Plus a conductive plastic body that dissipates static electricity to the specially designed ground bracket that provides more contact to both the vane and metal mount.
- Exclusive anti-icing design for more worry-free, reliable performance.
- Typical deadband that is 25 percent smaller than competitive products for more accurate measurement.

SECONDWIND

Measurement. Management. And more.

Model PV-1 Wind Vane Features

The results of two decades of wind direction measurement experience

After more than 20 years of leadership in wind vane design and installation, Second Wind's Model PV-1 answers the call for a more accurate, reliable, easy-to-use measurement device. Standard features include:

- Simple mechanical construction from corrosion-resistant materials
- No setscrews on wind vane to vibrate loose
- Multiple mechanical and contact seals

For more information:

For more information about the PV-1 (part #983) and other Second Wind measurement devices, visit secondwind.com.

The PV-1 is a continuous-rotation potentiometric wind direction vane. It is ideal for applications including wind resource assessment, meteorological studies, and environmental monitoring. The mechanical range is a full 360 degrees with continuous rotation, and the instrument is compatible with all Nomad data loggers from Second Wind and similar data logging devices.

Specifications

- Signal type is analog DC voltage from conductive plastic potentiometer, 10 k-ohms nominal
- Output signal is a ratiometric voltage
- Accuracy of potentiometer linearity is within 1%
- Deadband is a maximum of 5 degrees, 3 degrees typical
- Output signal range is 0 V to excitation voltage (excluding deadband)
- Power requirements of supply voltage are regulated potentiometer excitation of 1 Vdc to 15 Vdc
- Threshold of response is 1.0 m/s (2.2 miles per hour)
- Installs by mounting to a 0.5 inch diameter mast with cotter pin and setscrew contacting ground bracket
- Installation requires one 5/16 inch nut driver
- Operating temperature range is –55°C to 60°C (–67° F to 140°F)
- Operating humidity range is 0 to 100% RH
- Lifespan is 50 million revolutions (2–6 years of normal operation)
- Connections include 6-32 brass hex nut/post terminals
- Weight is 0.13 kg (0.29 pounds)
- Dimensions are 20.5 cm (8.1 inches) length x 11.4 cm (4.5 inches) height, 25.9 cm (10.2 inches) swept diameter
- Anti-icing drip overhang 2.5 mm (0.10 inches)
- Materials include:
  - Black, UV stabilized, static-dissipating polycarbonate plastic base
  - Aluminum shaft
  - Lead-free silicon bronze nose
  - Stainless steel bearings
  - Black UV stabilized polycarbonate plastic vane
  - Blue PVC sensor terminal boot included
  - Brass terminals
  - Stainless steel ground bracket

CE RoHS COMPLIANT 2002/95/EC

SECONDWIND
Measurement. Management. And more.

Second Wind Inc. 366 Summer Street, Somerville, MA 02144 USA
Tel. 617-776-8520 • Fax 617-776-0391 • www.secondwind.com