



MODEL 03002

WIND SENTRY



Model 03002 = 03102 + 03302

The **Model 03002** Wind Sentry Anemometer and Vane set includes crossarm with junction box and mounting for standard 1 inch pipe.

Model 03002V Wind Sentry with Voltage Outputs provides calibrated voltage output signals for wind speed and wind direction. The voltage outputs are convenient for use with many data loggers and recorders.

Model 03002L Wind Sentry with 4-20 mA Outputs provides separate 4-20 mA signals for wind speed and wind direction.

The **03002L** is useful where cables must pass through high noise areas, span distances up to several kilometers, or for certain industrial applications.

For wind speed only, **Model 03102** Wind Sentry Anemometer is available separately. The Wind Sentry Anemometer is also available with voltage and 4-20 mA current output options.

MODEL 03002V outputs 0-1 Vcc	
Power Requirement	8 to 24 Vcc (5 mA @ 12 Vcc)
Output	0 to 1 Vcc full scale / 0 to 5 Vcc
MODEL 03002L outputs 4-20 mA	
Power Requirement	8 to 30 Vcc (40 mA max.)
Output	4 to 20 mA full scale

The **Model 03002** Wind Sentry Anemometer and Vane are professional quality sensors suitable for a wide range of wind measurement applications. These economically priced sensors provide excellent sensitivity, corrosion resistance, and minimal parts count for easy maintenance.

The anemometer uses three lightweight hemispherical cups to measure wind speed. Cup wheel rotation produces an AC frequency that is linearly proportional to wind speed. The vane employs a balanced vane assembly with vane position sensed by a long life precision potentiometer. Precision stainless steel ball bearings are used throughout.

SPECIFICATIONS	
Range	
Wind speed:	0-50 m/s
Azimuth	360° mechanical, 352° electrical 8° open
Accuracy	
Wind speed	±0.5 m/s
Wind direction	±5 °
Threshold	
Cup Anemometer	1.1 m/s (4.02 km/h)
Vane	1.3 m/s (4.66 km/h) to 10°
Dynamic Response	
Cup wheel distance constant	2.3 m
Vane delay distance	0.5 m
Damping ratio	0.2
Signal Output	
Wind speed	AC sine wave, 1 pulse per rev. 1800 rpm (30 Hz) = 22.8 m/s
Wind direction	Analog DC voltage from 10KΩ conductive plastic potentiometer, 1.0% linearity, life expectancy 50 million revolutions.
Power Requirement	
Potentiometer excitation	15 VDC maximum
Dimensions	
Overall height	32 cm
Crossarm length	28 cm between instruments center
Vane length	22 cm
Cup wheel diameter	12 cm
Crossarm Mounting	34 mm diameter (standard 1 inch pipe)
Weight	Shipping weight 1.3 kg