



## Wind Speed (only)

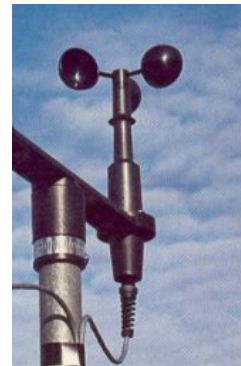
S1147Z

- **High wind speed survivability**
  - **Rugged**
  - **Economical**

This anemometer is a professional quality wind sensor suitable for a wide range of wind measurement applications. It is primarily of thermoplastic construction, providing excellent corrosion resistance, low sensor weight, and minimal parts count.

The anemometer has three hemispherical molded plastic cups. Cup wheel rotation produces an AC sine wave voltage signal with frequency directly proportional to wind speed. This AC voltage signal is induced in a coil by a two pole circular magnet, mounted on the cup wheel shaft. One complete sine wave cycle is produced for each cup wheel revolution.

Strain reliefs with seals are provided for cable entry to the sensor. A 3 meter (10 ft) long cable is supplied pre-connected to the sensor.





## Technical Specifications

S1147Z

Wind Speed Range:	0 - 50 m/s (112 mph)
Gust Survival:	60 m/s (134 mph)
Azimuth:	360° mechanical, 355° electrical (5° open)
Cup Anemometer Threshold:	1.1 m/s (2.5 mph)
Cup Wheel Distance Constant (63% recovery):	2.3 m (7.5 ft)
Signal Output	
Wind Speed:	Magnetically induced AC voltage/ 1 pulse per revolution. 1800 rpm (30 Hz) = 22.8 m/s (51.0 mph)
Azimuth:	Analog DC voltage from conductive plastic potentiometer.
Resistance:	10k
Linearity:	0.5%
Life Expectancy:	20 million revolutions
Power	
Potentiometer Excitation:	5 - 15 VDC regulated (recommended)
Sensor Interface Circuit:	5 - 15 VDC unregulated
Line Driver Circuit:	12 - 30 VDC unregulated (depending upon line and load resistance)

### PHYSICAL

#### Dimensions

Cup Wheel:	12 cm (4.7 in) diameter
Height (Anemometer):	15 cm (5.9 in)
Weight (Anemometer):	0.2 kg (0.5 lbs)