

# Model 5711

## Wind Speed Sensor

- Weather-Resistant Construction
- Low Moment of Inertia
- Rapid Response to Gusts & Lulls



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### DESCRIPTION:

The Model 5711-00 Wind Speed Sensor has proven itself to be rugged, reliable, and highly accurate in wind tunnel, and mountain-top tests.

Its low moment of inertia and unique bearings permit very rapid response to gusts and lulls. The black polycarbonate cups (virtually shatter-proof) have thermal properties which let it resist and shed ice far more effectively than metal assemblies. Because of its output linearity, this sensor is ideal for use with various data collection systems used in meteorological monitoring.

The sensor features a 3-cup anemometer assembly which produces a sine wave signal with frequency directly proportional to wind speed. This AC signal is induced in a coil by a two pole circular magnet mounted on the cup wheel shaft. Two full cycles are produced for each rotation. If using sensor on a transmitter other than HSE's 3306, Model 5711-02 Pre-Divide Signal Conditioning Board maybe required. Talk to your local HSE Sales Representative for more information on Model 5711-02.

### SPECIFICATIONS:

Measurement Range	4 to 214 MPH (1.8 to 95.7 m/s)
Sensor Output	AC sine wave @ 2 cycles per revolution
Sensor Output Function	Air speed = [1.965/ AC frequency (Hz)] - 0.1
RPM Frequency	Linear with wind speed
Moment of Inertia	Rotor assembly = $68 \times 10^{-6}$ S-ft <sup>2</sup>
Cable	25 ft (7.6 m) 3-conductor, 24 AWG
Operating Temperature	-67° to 130° F (-55° to 54° C)
Operating Humidity	10 to 100% RH
<b>Dimensions</b>	
Cups	3; conical cross-section, 2 in (5.1 cm) diameter
Swept Diameter of Rotor	7.5 in (19.1 cm)
Diameter Low Housing	2 in (5.1 cm)
Overall Assembly Height	3.2 in (8.1 cm)
Weight	0.5 lbs (227 g)

### ORDERING GUIDE:

Model 5711-00	Wind Speed Anemometer; Includes Sensor, 25 ft (7.62 m) signal cable with MS Connector. <i>Cross Arm Assembly sold separately.</i>
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### OPTIONS/SPARE PARTS:

Model 5711-01	Cross Arm Assembly; Includes Mounting Arm and Hardware.
Model 5101-00	Signal Cable; 3-conductor 24 AWG (Price per foot)

See [www.highsierraelectronics.com](http://www.highsierraelectronics.com) for more specification and ordering information.

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**Environmental Monitoring Solutions**

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