

WIND SENSOR - AIR QUALITY

5600-0202, 5600-0204



FEATURES

- Excellent fidelity in fluctuating wind conditions
- Lightweight, carbon fiber thermoplastic, helicoid propeller, sensor body of UV stabilized plastic with stainless steel and anodized aluminum fittings
- AC sine wave voltage signal with frequency directly proportional to wind speed (This AC sine wave is then squared to 0 to 5 VDC so signal is compatible with Model 8200A/8210 data loggers frequency inputs on the 5600-0202 only.)
- No slip rings or brushes
- Direction sensed by precision potentiometer that produces a DC voltage directly proportional to vane angle the instrument is removed for maintenance

ORDERING

5600-0202	Wind Sensor - Prop Vane, for Air Quality (includes amplifier) for 8200/8210A
5600-0204	Wind Sensor - Prop Vane for Air Quality (without amplifier) for Xpert/XLite

ACCESSORIES

6411-1151-1	Cable Assy, WS/WD, 30 ft for 8200A/8210, Xpert, XLite
6411-1152-1	Cable Assy, WS/WD, 30 ft for 8004

HIGH RESOLUTION WIND SENSOR
DESIGNED SPECIFICALLY FOR AIR
QUALITY APPLICATIONS

SPECIFICATIONS

WIND SPEED

Range	0 - 112 mph (0-45m/s)
Accuracy	±0.4 mph (±0.2 m/s)
Threshold	Propeller - 0.9mph (0.4m/s)
Dynamic Response	Propeller distance constant (63% recovery) 6.9 ft (2.1m)
Output	Magnetically induced AC voltage, shaped to 5 volt square wave, 1800 rpm (90 Hz) = 19.7 mph (8.8m/s)
Power Requirement	8 VDC MIN - 20 VDC MAX (TO MA @ 12VDC)

WIND DIRECTION

Range	360° mechanical, 355° electrical (5° open)
Accuracy	±3 degrees
Threshold	Vane - 1mph (0.5m/s) at 10° displacement
Vane Delay Distance	50% recovery 3.9 ft (1.2m)
Damping Ratio	0.45
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Wavelength	16.1 ft (4.9m)
Output	10K potentiometer, LINEARITY 0.25%
Power Requirement	15 VDC max

GENERAL SPECIFICATIONS

Life Expectancy	50 million revolutions
Height	15 in (38 cm)
Length	25.6 in (65 cm)
Weight	Sensor 1.5 lb (0.7 kg)

HELPFUL HINTS

Connect speed output to counter input of 8200A or 8210 Recorder. Connect direction output to analog input. Note: you must use the wind speed/wind direction sensor definition in the Enable sensors menu in the 8200A/8210 setup. Failure to do so will provide incorrect i.e. non-vectored reading. Refer to chapter 6 and 7 of the 8200A/8210 Operations Manual for setup information.

SUTRON