



**Met One  
Instruments**

# WS-201 Wind Sensor System

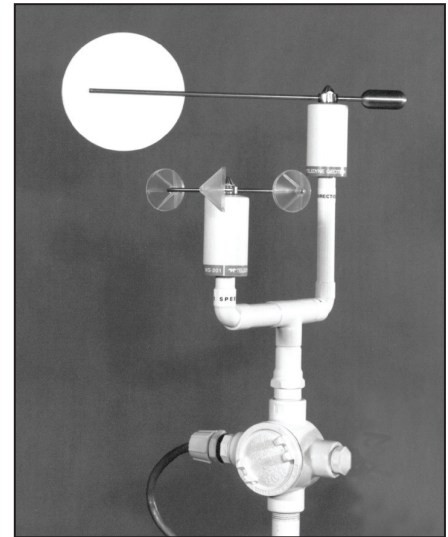
*Specialized Wind Sensors*

The WS-201 Wind Sensor System is designed to meet the need for a highly reliable, robust system.

The electronic components in the wind speed sensor are conservatively rated and are completely solid state. The wind direction sensor uses a high-reliability potentiometer to sense the vane position.

## FEATURES

- Extremely rugged
- Low power drain
- Corrosion resistant stainless steel and anodized aluminum
- Design wind tunnel tested at over 200 mph (89.4 m/s)
- Installation on standard one-inch pipe thread
- Speed sensor output is variable frequency range, impedance and power
- Maintain with a minimum of spare parts and tools



*WS-201 Wind Sensor*

## SPECIFICATIONS

### *Wind Speed Sensor*

#### PERFORMANCE CHARACTERISTICS

Range:	0 - 200 mph (0 - 90 m/s)
Starting Threshold:	Less than 2 mph (0.9 m/s)
Accuracy:	±1 mph (0.5 m/s) or 2%
Distant Constant:	15 ft (4.6 m) maximum

#### ELECTRICAL CHARACTERISTICS

Power Required:	6 mA max. at 10.5 to 15.0 VDC
Signal Output:	6V p-p minimum, square wave into 600 ohms; F(hz) ≈ 22 x wind speed (m/s) ≈ 10 x wind speed (mph)

#### PHYSICAL CHARACTERISTICS

Cup Turning Radius:	4.38 in (11.2 cm)
Weight:	0.75 lb (0.34 kg)

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# WS-201 Wind Sensor System

## SPECIFICATIONS

### Wind Direction Sensor

#### PERFORMANCE CHARACTERISTICS

Range:	0° - 360°
Starting Threshold:	Less than 2 mph (0.9 m/s)
Accuracy:	±3.6°
Dead Band:	4° maximum
Distant Constant:	5 ft (1.5 m) maximum
Damping Ratio:	0.2 standard, 0.4 optional

#### ELECTRICAL CHARACTERISTICS

Potentiometer Resistance:	10 K ohms
Power Required:	0.5 mA at 5 VDC; voltage can be varied up to 25 VDC maximum
Signal Output:	DC voltage from wiper of potentiometer, level dependent upon input voltage

#### PHYSICAL CHARACTERISTICS

Vane Turning Radius:	12.75 in (32.4 cm)
Weight:	1.38 lbs (0.62 kg)

#### COMPLETE SYSTEM

Operating Temperature:	-40°C to +60°C (-40°F to +140°F)
Physical Characteristics	
Length:	9.25 in (235 mm)
Diameter:	0.94 in (24 mm)
Weight:	12 lb (5.4 kg)

### Model WS-201J Basic Wind System

SS-201-1	Wind Speed Sensor (with C-201 cup assembly)
SD-201-1	Wind Direction Sensor (with V-201 vane)
JB-201-A	Junction Box (with terminal block)

### Sensors sold individually as:

SS-201-C	Wind Speed (with 1" NPT mounting pipe - PM201)
SD-201-C	Wind Direction (with 1" NPT mounting pipe - PM201)

*Specifications are subject to change at any time.*

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