



**Met One  
Instruments**

# 50.5 Solid State Wind Sensor

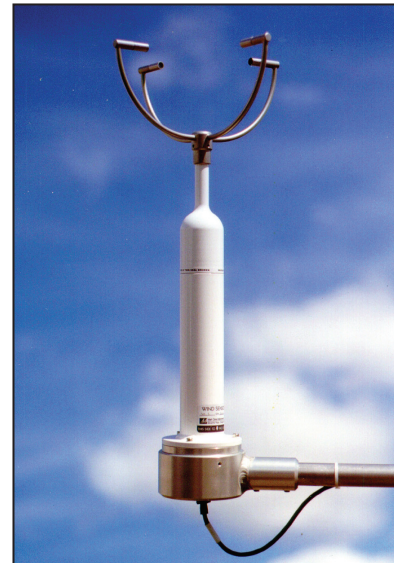
*High Quality Sonic Wind Sensors*

The 50.5 Solid State Wind Sensor is a continuation of the development work started with NOAA on sonic wind sensors over 25 years ago. This sensor design contains the same wind distortion algorithm and factoring that has been proven and accepted in applications around the world.

No other sensor technology has the history of time proven field performance comparable to the Solid State Series 50.5 Sensor.

## FEATURES

- No moving parts
- Digital and analog outputs
- Built-in sensor emulation
- 16-point wind tunnel calibration with each sensor
- Data output is field set to user requirements
- Optional heating unit allows continuous operation in ice and snow
- Low maintenance



*50.5 Solid State Wind Sensor*

## SPECIFICATIONS

### WIND SPEED

Range: 0 - 50 m/sec standard  
 Accuracy:  $\pm 0.2$  m/sec < 11.3 m/sec or  $\pm 2\%$  > 11.3 m/sec  
 Resolution: 0.1 m/sec

### WIND DIRECTION

Range: 0° - 360°  
 Accuracy:  $\pm 3^\circ$   
 Resolution: 1°

### OPERATION

Sampling Rate: 5 per second  
 Data Output Rate: 1 per second  
 Sonic Frequency: 200 kHz

### OUTPUT SIGNALS

Wind Speed Voltage: 0 to 1, 2.5 or 5 VDC (*specified at time of purchase*)  
 Wind Direction Voltage: 0 to 1, 2.5 or 5 VDC (*specified at time of purchase*)  
 RS-232: 1200 to 19.2K Baud (9600 Baud Standard)  
 Optional Digital Outputs: SDI-12, RS-422, RS-485 (*specified at time of purchase*)

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## 50.5 Solid State Wind Sensor

### SPECIFICATIONS

#### POWER REQUIREMENT

Sensor:	9-18 VDC 10 mA at 12 VDC – average power .75 amp pulse for 2 msec. – peak power
External Heater:	15 Volts DC @ 50 watts

#### ENVIRONMENTAL

Operating Temperature:	-40°C to +55°C (-40°F to +131°F) no ice
Extended Temperature Range:	-50°C to +55°C (-58°F to +131°F) with external heater

#### PHYSICAL CHARACTERISTICS

Weight:	5.5 lbs (2.5 kg)
Finish:	Anodized aluminum & stainless steel

#### CABLE & MOUNTING

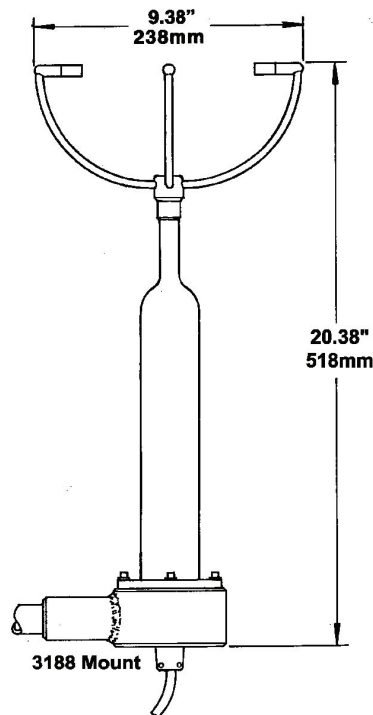
PN 9574	Cable Assembly; specify length in feet or meters
Mounting:	PN 3188 Mounting & Orientation Fixture

#### OPTIONS

PN 50.5H	Wind Sensor with External Heater & Control Box
PN 50.5PS	External Heater Power Source (100 to 240 VAC 50/60 Hz) – 15 VDC @ 4 amps

Heater option must be specified at time of purchase.

*Specifications are subject to change at any time.*



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