



## **011 E-Class One Wind Sensor**

Applications for horizontal wind speed measurement, such as power performance assessment in the wind energy industry, require a combination of high accuracy and linearity over the wind speed range of interest. The 011 E-Class One Wind Sensor has been specially designed to meet this challenge through modern engineering, materials choice, and field-proven performance.

### **Versatility**

Designed to meet anemometry performance criteria for “Class 1” in accordance with IEC 61400-12-1

### **Reliability**

Based upon legacy 010C platform characterized by many years of field-proven performance at thousands of installations worldwide

### **High Accuracy**

High accuracy and linearity over the wind speed range of interest that includes wind turbine generator operation and wind gust measurement

### **Optimized Dynamic Response**

Optimized dynamic response provides accurate horizontal wind speed measurement in flat and complex terrain environments

### **Innovative Design**

Patent pending innovative asymmetrical aerodynamic cup set design for superb cosine response

## Long-lasting Performance

High strength polymer cup design reduces stress points for long-lasting performance

## Specifications

<b>Performance</b>	
<b>Operating Range*</b>	0-60+ m/s
<b>Starting Threshold*</b>	0.27 m/s
<b>Accuracy*</b>	± 0.1 m/s or 1% FS
<b>Resolution</b>	0.04 meter wind run
<b>Temperature Range</b>	-50°C to + 85°C
<b>Distance Constant*</b>	3.0 m
<b>Electrical</b>	
<b>Power Requirements</b>	9-27 VDC, 3 mA @ 12 VDC
<b>Output Signal</b>	Pulse (frequency) output (amplitude is power supply)
<b>Output Impedance</b>	100 ohms
<b>Physical</b>	
<b>Weight</b>	0.68 kg (1.5 lbs)
<b>Finish</b>	Anodized aluminum body; high strength polymer cups
<b>Mounting</b>	PN 191 cross-arm or PN 10392 vertical pipe mount
<b>Cabling</b>	PN 10432-XX (specify length)



## 014A Wind Speed Sensor

### Durable Quality

3003 aluminum cups. 6061-T6 aluminum hub and arms. 18-8 Stainless Steel hardware

### Easy Maintenance

Field replaceable bearings and electronics

### Versatility

Compatible with existing mounting hardware

## Specifications

<b>Performance</b>	
<b>Operating Range*</b>	0.45 m/sec to 60 m/sec
<b>Starting Threshold*</b>	0.45 m/s
<b>Accuracy*</b>	± 0.11 m/sec or 1.5% of Full Scale
<b>Resolution</b>	0.04 m/sec
<b>Linearity</b>	Less than 0.25%
<b>Output</b>	Two contact closures per revolution
<b>Basic Slope and Offset</b>	.79984 slope, 0.45 offset for m/sec range*
<b>Contact Rating</b>	10 mA maximum
<b>Connection</b>	Two wires to compression screw terminal block
<b>Operating Temperature</b>	-50°C to +85°C
<b>Weight</b>	0.18 Kg
<b>Mounting</b>	1/2" diameter vertical mast
<b>Construction</b>	All aluminum with two stainless steel bearing assemblies

*\*Output calculation M/sec (Frequency X 0.79984) + 0.45*

Specifications based on standard aluminum cup assembly 1812