



# Model 2100-130 Wind Sensor



## Model 2100-130 Advantages

- Wind speed and direction in a single unit.
- Long field life
- Durable aluminum and stainless steel construction
- Low starting threshold
- Stainless steel bearings
- Low power operation
- Easy Maintenance

## Operation

The 2100-130 is designed to operate within a temperature range of  $-30^{\circ}$  to  $+70^{\circ}$  C and with wind speeds up to 167 mph (75 m/s). Wind speed is measured using a sealed reed switch which provides a series of pulses at a rate proportional to wind speed. Aluminum cups are used for durability and strength.

Wind direction is measured using an aluminum vane directly coupled to a precision potentiometer. Variations in wind direction produce a corresponding change of voltage.

Mounting the 2100-130 with the alignment adapter (P/N 2100-130-1) provides alignment maintenance even if the sensor is removed.

The alignment adapter mounts the 2100-130 Wind Sensor to tubing or pipe. Improved potentiometer mounting, makes replacement and field re-alignment even easier!

## Ordering Information:

- Model No: 2100-130
- Mounting Adaptor, P/N 2100-130-1



**Optical Scientific Inc.**

2 Metropolitan Court Suite 6 • Gaithersburg, MD, 20878 • USA

Ph. 301-963 3630 • Fax 301-948-4674

email: [sales@opticalscientific.com](mailto:sales@opticalscientific.com) [www.opticalscientific.com](http://www.opticalscientific.com)

## Model 2100-130 Wind Sensor Specifications

Performance Specification	
<b>Wind Speed</b>	
Range	0 – 165 mph (0 – 75 m/s)
Starting Threshold	0.9 mph (0.75 m/s)
Accuracy < 22.7 mph (10 m/s)	.25 mph, 0.1 m/s
Accuracy > 22.7 mph (10 m/s)	±1%
<b>Wind Direction</b>	
Range (Mechanical)	0-360°
Range (Electrical)	0-356
Starting Threshold	0.9 mph (0.4 m/s)
Accuracy	± 4°
Damping Ratio	.25

Electronic Specification	
Power Requirements	12 VDC
Wind Speed Output Signal	Pulsed contact closure
Wind Direction Output Signal	Potentiometer output (0 – 10 KΩ)

Environmental Specification	
Temperature Range	-30 to +70° C
Humidity	0 to 100%

Physical Specification	
Sensor Weight:	1 lb 12.5 oz (0.81 kg)
Shipping Weight:	4 lbs 3 oz (1.90 kg)
Mounting	Mounts with P/N 2100-130-1 Adaptor to 1 inch (25.4 mm) tubing or pipe

Specifications are subject to change without notice.



**Optical Scientific Inc. (OSi)**  
2 Metropolitan Court Suite 6  
Gaithersburg, MD 20877 USA  
Ph. 301-963-3630  
Fax 301-948-4674  
website: [www.opticalscientific.com](http://www.opticalscientific.com)  
email: [sales@opticalscientific.com](mailto:sales@opticalscientific.com)



**For the world's best performing and most reliable meteorological instruments, contact OSi today!**