

## Wind Speed Sensor

The Global WE550 Water Wind Speed Sensor is constructed of high-impact materials, ensuring its durability and ruggedness even in severe weather conditions. The wind speed indicator has a very low threshold, and it responds accurately to subtle changes in wind speed. The wind speed transmitter is molded to 25 ft of marine grade cable, with lengths up to 500 ft available upon request. The WE550 output is 4-20 mA with a two wire configuration. The wind speed transmitter's electronics are completely encapsulated in marine grade epoxy within a rubber sleeve.

Global Water's PC320 Wind Speed Alarm and Controller uses the WE550 sensor's output to trigger motors and alarms. In addition, Global Water offers the GL500 Wind Speed Recorder, which adds recording capabilities to the WE550 Wind Speed indicators. The GL500 Wind Speed Recorder connects to the anemometer's 4-20mA output to record data.

- 4-20 mA output
- Marine grade cable with strain relief
- Fully encapsulated electronics
- 1 inch mounting elbow

### Why Measure Wind Speed?

Wind speed is an important weather parameter to monitor and record for many applications including meteorology, aviation, shipping, industry, construction, and many more. Some of the more common applications are for predicting and supporting weather forecasts, determining the safety of operating mechanical equipment like cranes and lifts in industry, estimating the efficiency of operating power generating wind farms, navigation and safe operation in the shipping industry, aircraft safety, wastewater and landfill odor control, and others.

Wind Speed is caused by air pressure gradients or the regions between weather fronts, air moves in the direction of the low pressure system. The steeper the gradient the stronger the wind. Additionally, wind speed is determined by many other factors including the Coriolis effect, friction, and land topography. Wind speed is typically reported in meters per second or miles per hour in the United States. For the shipping or boating industry wind speed can be reported in knots (a knot equal to one nautical mile per hour or approximately 1.15 miles per hour or approximately 0.5 meters per second).

Ideal for agriculture, education, environmental studies, landfills, reclamation, wastewater facilities, water conservation, and more.



The WE550 can be used with the GL500-2-1 and GL500-7-2 dataloggers for data recording.

## Specifications

<b>Sampler</b>	
Type	Three cup anemometer
Threshold	<=3 mph (1.35 m/s)
Output	4-20mA
Range	>=4 to 110 mph (>=1.8 to 50 m/s)
Accuracy	0.2 mph over the range 11 to 55 mph (0.09 m/s from 4.9 to 24.6 m/s)
Operating Voltage	10-36 VDC
Current Draw	Same as sensor output
Warm Up Time	3 seconds minimum
Operating Temperature	-40 ° to +131 °F (-40 ° to +55 °C)
Sensor Size	7 inch diameter x 8.5 inch (18cm diameter x 21.6 cm)
Weight	1 lb (0.5 kg)
<b>For ordering information and options, please visit <a href="http://www.globalw.com/products/we550html">www.globalw.com/products/we550html</a>.</b>	

Global Water Instrumentation  
151 Graham Road, P.O. Box 9010, College  
Station, TX 77842-9010  
T: 800.876.1172/979.690.5560  
[www.globalw.com](http://www.globalw.com)  
Email: [globalw@globalw.com](mailto:globalw@globalw.com)

