# NRG S1 ANEMOMETER FOR WIND APPLICATIONS TECHNICAL PRODUCT SHEET



### **Tools Required**

- #2 Phillips Screwdriver
- 1/4" Nut Driver
- Electrical Tape
- Small NRG Screw Driver
- 9/16" Wrench
- 5/16" Nut Driver
- 12 mm or 1/2" Wrench
- · Allen Wrench

### **Overview**

This uniquely low cost, class 1 anemometer reduces measurement uncertainty in wind resource assessment campaigns and power performance testing.

### **Specifications**

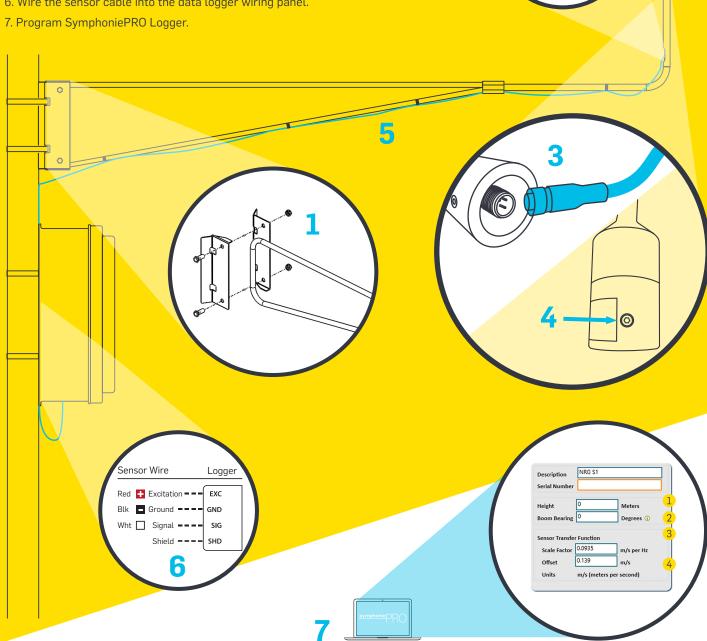
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Measurement Range	0.6 to 75 m/s
Signal Type	Form: Square Wave Frequency: 532.9 Hz @ 50 m/s (112 mph)  Amplitude: Equal to supply
Transfer Function	voltage, max. 15 V  Refer to individual calibration report for anemometer transfer function.  All NRG S1 anemometers are calibrated per IEC 61400-12-1, Annex F.
Output Signal	0 Hz to 800 Hz
Supply Voltage	5 to 28 VDC
Supply Current	0.9 mA at 12V
Sensor Cable	3C cable: Cable-Assy, S1, 3C, 22AWG, with the M12 connector
Mounting	Onto 25 mm (1") diameter mast with 2 set screws



# telener360°

### **S1** Anemometer Installation Process

- 1. Install the 2.4m mounting boom according to the diagram. Use 9/16" wrench and socket to secure brackets to boom. Feed hose clamps through each bracket hole. Use 5/16" nut driver bit to secure boom to tower.
- 2. Feed the cable through the boom extension.
- 3. Connect the cable to the sensor using small profile 12 mm or  $\frac{1}{2}$  inch wrench
- 4. Place sensor on boom tip and tighten set screws on sensor with allen wrench.
- 5. Wrap and/or secure the cable along the boom and down the tower to the data logger.
- 6. Wire the sensor cable into the data logger wiring panel.



## **SymphoniePRO Logger Programming**

Use the Symphonie PRO Desktop Application to program the sensor settings into the data logger:

- 1. Enter serial number
- 2. Enter height of anemometer cups
- 3. Enter direction the boom is pointing (Boom Bearing) in degrees
- 4. Enter the unique Scale Factor and Offset if the sensor has been calibrated in a wind tunnel.

