

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

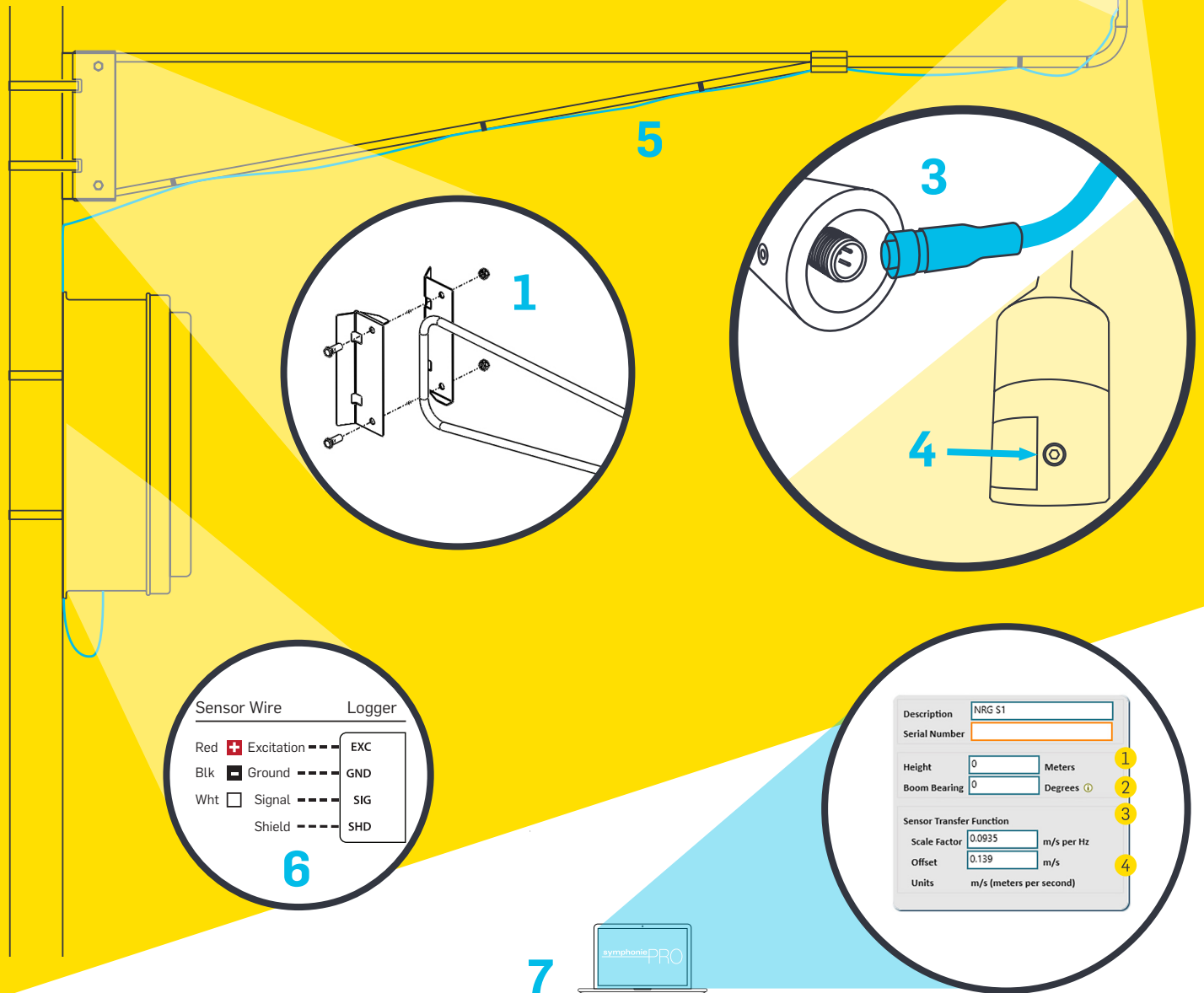
Measurement Range	0.6 to 75 m/s
Signal Type	Form: Square Wave Frequency: 532.9 Hz @ 50 m/s (112 mph) Amplitude: Equal to supply voltage, max. 15 V
Transfer Function	Refer to individual calibration report for anemometer transfer function. All NRG S1 anemometers are calibrated per IEC 61400-12-1, Annex 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



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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 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.
7. Program SymphoniePRO Logger.



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SymphoniePRO Logger Programming

Use the SymphoniePRO 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.