T60 TEMPERATURE SENSOR
TECHNICAL PRODUCT SHEET

Overview

The T60 is ideally suited for the temperature measurement requirements of remote wind and solar energy studies. Recommended uses of the data from this sensor include:

- Estimating PV panel efficiency
- Calculating energy density
- Calculating atmospheric stability conditions
- Identifying icing conditions in cold climates
- Monitoring air temperature

Specifications

Measurement Range	-40 °C to 70 °C (-40 °F to 158 °F)
Signal Type	Linear analog voltage
Transfer Function	Default Slope: voltage x 44.74364 °C Default Offset: -40.85555 °C
Output Signal	0.020 to 2.480 V DC
Supply Voltage	5 to 15 V DC
Supply Current	1.2 mA max. (no load on output) SymphoniePRO Pulsed: 0.85 mA

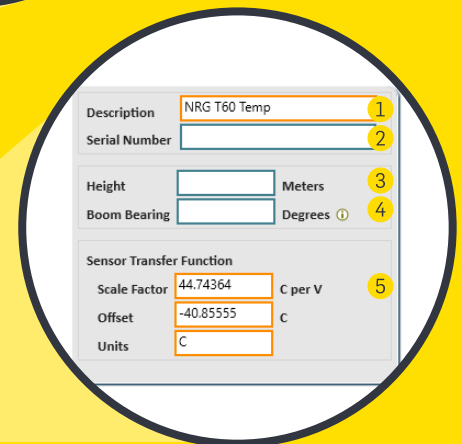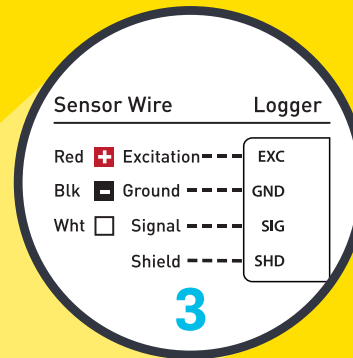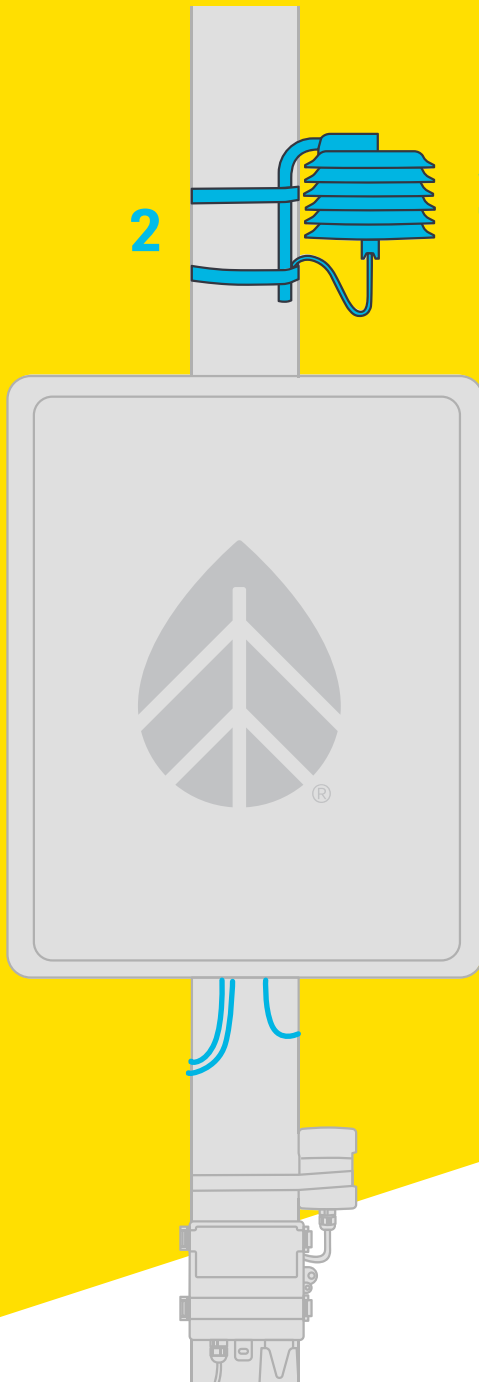### Tools Required

- 8 mm (5/16 inch) nut driver or wrench (electric nut driver preferred)
- Small NRG screw driver
- Sheet metal shears (for trimming hose clamps)

Click for T60 Video

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T60 Temperature Sensor Installation Process

1. Wrap the hose clamp around the tower and begin tightening. Insert the T60 boom and tighten the hose clamp with the nut driver until the sensor is secure. Do not over-tighten.

2. Trim the ends of the hose clamps, or secure them in place so they do not move freely.

3. Wire the sensor cable into the data logger.

4. Program SymphoniePRO Logger.

2

1

Sensor Wire   Logger

Red ✚ Excitation - - -	EXC
Blk ▬ Ground - - - -	GND
Wht ☐ Signal - - - -	SIG
Shield - - - -	SHD

3

Description	NRG T60 Temp		1
Serial Number			2
Height		Meters	3
Boom Bearing		Degrees ⓘ	4
Sensor Transfer Function			
Scale Factor	44.74364	C per V	5
Offset	-40.85555	C	
Units	C		

4

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SymphoniePRO Logger Programming

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

1. Choose "NRG T60" from the "Load From Defaults" drop down menu.

2. Enter the sensor's serial number (found on the end of the sensor cable)

3. Enter the height of sensors from the ground.

4. Enter the direction the sensor is installed on the tower.

5. Enter the sensor's unique slope and offset – found on the sensor's calibration report. Report can be looked up by serial number here.

For more information:

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ISO 9001: 2015 Certified
ISO 14001: 2015 Self-Certified

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