Second Wind Thermistor

Features

- Highly accurate
- No active electronic components
- High reliability and stability
- No calibration necessary

Description

The SWI Thermistor is designed specifically for use with the Nomad 2 wind resource assessment data logger. It consists of a 10K type thermistor encased in an aluminum shaft, and comes pre-wired with 3.5 meters of sensor cable. The thermistor’s resistance changes with temperature, following a known but non-linear curve. The Nomad 2 measures the resistance of the thermistor and uses a lookup table with over 4,096 values to determine the temperature. The sensor is wired to 2.5V+ excitation on the data logger’s terminal strip, and will run on the 9V power being supplied to the logger.

Sensor Mounting

The thermistor is designed to be housed in a radiation shield to minimize error from gains due to direct sunlight. The thermistor mounts inside a six-plate Radiation Shield (part no. 144). The shield can be mounted to a 1-2" diameter pipe with a U-bolt clamp or to a larger diameter tower with a hose clamp.

Specifications

| Dimensions: | 2.17" length, 0.50" diameter (probe)  
|            | 0.0625" wall thickness (probe)  
|            | 4.7" x 10.6" (shield)  
| Sensor:    | NTC MC65 Thermistor  
| Materials: | Aluminum probe  
|           | Thermally conductive epoxy fill  
|           | UV stabilized white thermoplastic plates  
|           | Aluminum mounting bracket  
|           | Stainless steel U-bolt clamp  
| Accuracy: | ±0.2°C between 0° to 50°C  
|           | ±0.5°C between -40° to 105°C  
| Temperature Range: | -40° to 105°C (-40° to 221°F)  
| Humidity Range: | 0 to 100% RH  
| Output Signal: | 0 to 2.5 Volts  
| Maximum Power at 25°C: | 25mW  
| Ordering Information: | Thermistor - Part Number 395  
|           | Shield - Part Number 144  

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