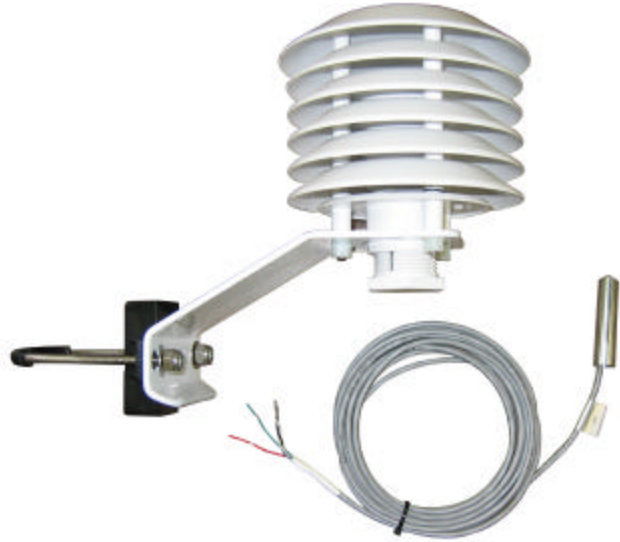


Second Wind Thermistor

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)	Accuracy:	$\pm 0.2^{\circ}\text{C}$ between 0° to 50°C $\pm 0.5^{\circ}\text{C}$ between -40° to 105°C
Sensor:	NTC MC65 Thermistor	Temperature Range:	-40° to 105°C (-40° to 221°F)
Materials:	Aluminum probe Thermally conductive epoxy fill UV stabilized white thermoplastic plates Aluminum mounting bracket Stainless steel U-bolt clamp	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