



064 Temperature Sensor

The 064 Temperature Sensor is a precision, extended-range thermistor device which accurately measures ambient air temperature. The precise performance is a benefit of the sensor's high resistance sensitivity and eliminates problems associated with line lead length, noisy environments, and poor connections. The 064 is ideal for installation on wind turbines and wind resource assessment towers.

Rapid response time; 10 seconds in still air

Calibration traceable to NIST

Interchangeable without recalibration

High resistance values to minimize signal line resistance

'Free air' suspension of thermistor bead

Specifications

Performance	
Housing	Mounting plate, white epoxy finished aluminum, with military quality screw connector for sensor cable. Thermistor bead is protected by a stainless steel bumper.
Range	064-1 -30°C to +50°C (-22°F to +122°C) 064-2 -50°C to +50°C (-58°F to +122°F) (Other ranges available)
Accuracy	064-1 ±0.15°C (0.27° F) 064-2 ±0.1°C (0.18°F), PSD compliant
Cable	PN 1958 Cable Assembly; specify length in feet or meters



092 Barometric Pressure Sensor

The 092 Barometric Pressure Sensor measures absolute atmospheric pressure and converts it into a linear, proportional voltage, using digital computer technology. The standard range of the 092 is 600 to 1100 hPa, which makes it suitable for elevations from sea level to 10,000 ft.

Compact size

Weatherproof enclosure

Digital and analog outputs

Permanent calibration; no service required

Customer configured output

Specifications

Performance	
Range	600 to 1100 hPa (17.72 to 32.48 inch/hg)
Elevation	Sea level to 10,000 ft. (3048 m)
Resolution	0.1 hPa
Temp. Operating Range	-40°C to 55°C (-40°F to 131°F)
Temp. Compensated Range:	-40°C to 55°C (-40°F to 131°F)
Accuracy	±0.35 hPa @ 20°C (68°F) ±1.0 hPa (±0.03 in Hg) over full range or ±0.5 hPa over any 200 hPa range

Long Term Stability	±1.0 hPa in 1 year
Electrical	
Analog Output	0-1, 0-2, 0-2.5 or 0-5 VDC (Analog output automatically adjusts from zero to full scale for range selected.)
Digital Output	RS-232, RS-485 & SDI-12
Digital Protocol	ASCII Terminal Mode RTU for RS-232 and RS-485.
Baud Rates	1200, 2400, 4800, 9600, & 19.2K
Power Requirement	10 mA @ 12 VDC, Typical
Power Range	6-16 VDC
Physical	
Weight	8.8 oz. (250 g)
Dimensions	4.72 x 3.14 x 2.16 in (120 x 80 x 55 mm)
PN 1169	Cable assembly; specify length in feet or meters



083E Relative Humidity Sensor

The 083E Relative Humidity Sensor is a highly sensitive and stable humidity measurement tool that provides outstanding accuracy. It is reliable in the full range of relative humidity conditions from 0 to 100%, performing equally well in meteorological, industrial, laboratory and wind farm settings.

All solid state construction, digital electronics

Fast response of less than 5 seconds to 90% of final value

Low power consumption of 4 mA at 12 VDC

Easily cleaned using distilled water

0-1V output for 0-100% RH

Will operate from a 12 VDC battery

Specifications

Performance	
Input Power	4 mA at 12 VDC (10-14 VDC)
Relative Humidity	
Sensing Element	Thin film polymer capacitor
Range	0 – 100% relative humidity
Temperature Operation Range	-50°C to +50°C (-58°F to 122°F)
Response Time	10 sec. with 2 m/s aspiration
Temperature Coefficient	0.04% RH/°C
Accuracy	±2.0% from 0 – 100% humidity

Output	0 to 1 VDC – Standard (0 to 5.0 VDC Optional)
Temperature	
Weight	Themistor (precision multi-element)
Temperature Operation Range	-50°C to +50°C (-58°F to 122°F)
Accuracy	±.10°C (0.18°C)
Output	Resistive
Physical Characteristics	
Dimensions	.75 in (19.05 mm) diameter 7.5 in (190.5 mm) length
Weight	2.5 oz (70.9 g)