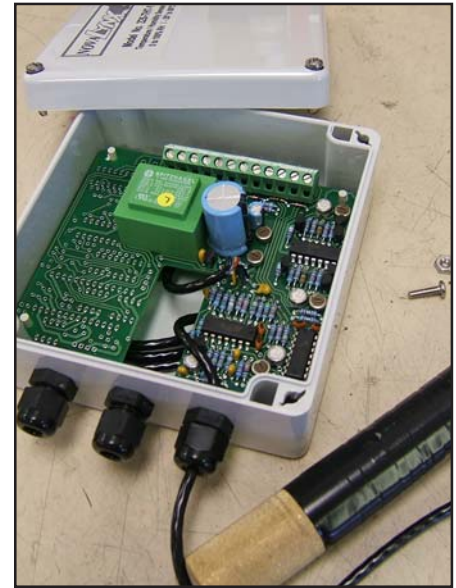# 225-THT-1 Temperature & Humidity Sensor

The **225-THT-1 Temperature & Humidity Sensor** is configured for measuring relative humidity and temperature in environmental control systems, where condensation or dust will commonly be encountered. A fully gasketed watertight enclosure, locking strain relief connections, and a brass sintered filter protect the electronics and sensors from environmental or mechanical damage.

An electronic circuit in the enclosure converts the capacitance to a voltage output which is linearly proportional to the ambient relative humidity. Temperature is sensed by a 100 ohm platinum resistance element and converted to a linear analog output. The sensor should be mounted in a solar radiation shield when placed outdoors. The remote probe comes with four feet of cable and a mounting clamp.

The sensor can be powered by 10-30Vdc, 120Vac 50/60Hz, or 220Vac 50/60Hz. It features three outputs for relative humidity and three outputs for temperature, 0-1V, 0-5V, and 4-20mA. All six outputs are available on a terminal strip inside the enclosure and can be used at the same time.

Ordering Information

225-THT-1	Temperature and Humidity Sensor
225-THT-BC	Battery Cable, per foot
225-THT-PC6	AC Power Cable (115V plug), 6'
225-THT-PC25	AC Power Cable (115V plug), 25'
330-0524	Signal Cable, per foot
380-281-THT	Solar Radiation Shield with mast mounting harware

Specifications

Sensors:
Relative humidity: Capacitive (thin film)
Temperature: PT100 RTD

Range:
Relative Humidity: 5.0% to 95% RH
Temperature: -5° to 175°F (-20° to 80°C)

Accuracy: ±2% RH, ±0.5°C

Response time (without filter):
Relative humidity: 90% of measured value in 15 seconds
Temperature: approximately 60 seconds

Output:
0 to 1 Vdc for 0-100% RH
0 to 5 Vdc for 0-100% RH
4 to 20 mA for 0-100% RH
0 to 1 Vdc for -20° to 80°C
0 to 5 Vdc for -20° to 80°C
4 to 20 mA for -20° to 80°C

Operating range: -4° to 180°F (-20° to 80°C)

Power supply required:
120 Vac, 50/60 Hz or
220 Vac, 50/60 Hz or
10 to 30 Vdc

Housing: ABS plastic, watertight, with strain reliefs
Filter: sintered brass

Dimensions:
Housing: 4.8" x 4.8" x 2.2"
Probe: 6.25" x 1" diameter, includes 4' cable

Weight/Shipping: 18 oz/2 lbs