

# Met One Instruments, Inc.

# Air Temperature Sensors

Met One Instruments' temperature sensors are precision, extended-range thermistor devices that accurately measures ambient air temperature in field settings. This precise performance is a benefit of the sensors' high resistance sensitivity, which eliminates problems associated with line lead length, noisy environments, and poor connections.



Met One Instruments' Model 061 is designed for general-purpose ambient air temperature measurement. The solid-state, multi-element thermistor devices produce a relatively large resistance change per degree of temperature change, allowing the use of normal signal voltages without self-heating of the sensor. When used with signal conditioning modules, the resultant output is a precise analog voltage. The 061 mounts in Met One Instruments' 076B Motor Aspirated Shield.

Model T-200 is a highly stable,100 Ohm platinum based RTD, designed for accurate wide range temperature measurements outside the range of the thermistor probes. Each calibrated standard T-200 sensor has a unique calibration constant that can be programmed into your measuring device for higher accuracy making it ideal for differential temperature (T). The T-200A mounts in both the 076B and 074 Radiation Shields.

#### **Features**

- 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.



065 Air Temperature Sensor



061 Air Temperature Sensor



T-200 Air Temperature Sensor

## **Applications**

- Ambient Air Monitoring
- Environmental Surveys
- Public & Workspace Monitoring
- Government Networks



### **Specifications**

### **Air Temperature Sensors**

065 Specifications

Housing: Mounting plate, white mechined plastic with crenelations, with military

quality screw connector for sensor cable. Thermistor bead is protected

by a plastic bumper.

Range: -30°C to +50°C (-22°F to +122°C)

Accuracy:  $\pm 0.15$ °C (0.27° F)

Cable: P/N 1958 Cable Assembly; specify length in feet or meters

**061 Specifications** 

Housing: 3/8 in (9.5 mm) OD x 6 in (152.4 mm)Range:  $-30^{\circ}\text{C to } +50^{\circ}\text{C } (-22^{\circ}\text{F to } +122^{\circ}\text{F})$ Accuracy:  $\pm 0.15^{\circ}\text{C } (0.27^{\circ}\text{F}) \text{ throughout range}$ 

Connection: 1 ft pigtails (for use with 076B Radiation Shield)

**T-200 Specifications** 

Temperature:  $-50^{\circ}$  to  $+50^{\circ}$  C (-58 to +122° F)
Optional Calibrations:  $-50^{\circ}$  C to  $+70^{\circ}$  C or  $-40^{\circ}$  C to  $+60^{\circ}$  C

 $(-58^{\circ}F \text{ to } +158^{\circ}F \text{ or } -40^{\circ}F \text{ to } +140^{\circ}F)$ 

Sensitivity: Alpha 0.00385 +/- 0.00002 Ohm/ohm/deg C

Operational RH: 0-100%

Nominal Resistance: -100 ohm +/- 0.1 ohm resistance (Ro)

Time Constant: 45 sec, approx. in moving air

Accuracy: +/- 0.1°C (0.18°F) throughout the range, PSD compliant

Configuration: 4 Wire Connection

Connection: 8" pigtails (for use with 076B Radiation Shield)

Specifications are subject to change at any time.