

## Air Temperature Sensors

Met One Instruments' temperature sensors are precision, extended-range thermistor devices that accurately measure 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.

The Model 065 uses the same sensing network as the Model 061, but is configured to mount directly to the Model 073B or 074 Radiation Shield. The sensor is supplied with a screw-type connector which connects directly to the signal cable.

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 (  $\Delta T$  ). 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.

### Applications

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



065 Air Temperature Sensor



061 Air Temperature Sensor



T-200 Air Temperature Sensor

### 065 Specifications

Housing:	Mounting plate, white machined 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:	±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°C to +50°C (-22°F to +122°F)
Accuracy:	±0.15°C (0.27°F) throughout range
Connection:	1 ft pigtails (for use with 076B Radiation Shield)

### T-200 Specifications

Temperature:	-50° to +50° C (-58 to +122° F)
Optional Calibrations:	-50°C to +70°C or -40°C to +60°C (-58°F to +158°F or -40°F to +140°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.*