



# 063 Temperature Sensor

The Met One 063 Temperature Sensor is a device that precisely measures air, water and soil temperature over extended ranges. The thermistor sensor is encapsulated in a silicone oil-filled stainless steel jacket that is particularly well suited for field applications, as it exhibits high resistance sensitivity. This eliminates problems associated with line lead length, noisy environments and poor connections.

## FEATURES

- Stainless steel jacket allows direct measurements of air, water and soil
- High resistance sensor values minimize signal line resistance errors
- Sensors may be interchanged without requiring system recalibration
- Several ranges are available to meet exact customer requirements
- Suited for direct input to a variety of dataloggers and translators

## Operation

The solid state thermistor produces a large resistance change per degree of temperature change, allowing the use of normal signal voltages without self-heating the sensor.

## Construction

The sensor housing is composed of two stainless steel tubes. The smaller one contains the sensor and silicone oil; the larger one secures and seals the cable. In addition to providing a uniform temperature environment, the oil also provides a strain free mounting for the thermistor sensor. A weather-proof epoxy is used to provide a positive bond for cabling and assembly.



063 Temperature Sensor

## SPECIFICATIONS

### PERFORMANCE CHARACTERISTICS

	Maximum Range	Linearity	Accuracy
Model 063-1	-50°C to +50°C (-58°F to 122°F)	±0.15°C (0.27°F)	±0.1°C (0.18°F)
Model 063-2	0°C to 100°C (32°F to 212°F)	±0.21°C (0.37°F)	±0.15°C (0.27°F)
Self-heating:	None		
Time Constant:	60 seconds		

### PHYSICAL CHARACTERISTICS

Diameter:	0.54 in (13.7 mm)
Length:	6 in (152.4 mm)

### CABLE & MOUNTING

Cable Length:	Supplied with 50 ft of cable, terminating in pigtails. Additional cable length may be ordered.
Mounting:	Mount in Model 073B and 5980 radiation shields for air temperature; mounts directly in soil or water for soil or water temperature.

*Specifications are subject to change at any time.*