Temperature Probes
Models 107 and 108

The 107 and 108 are rugged, accurate probes that measure air, soil, and water temperature in a variety of applications. These probes consist of a thermistor encapsulated in an epoxy-filled aluminum housing. The housing protects the thermistor allowing the probes to be buried or submerged. The 107 measures from -35° to +50°C, the 108 from -5° to +95°C.

Sensor Mounts

When exposed to sunlight, the 107 and 108 probes must be housed in a radiation shield. If the probe is mounted to a CM6/CM10 tripod or a UT10 tower, use a model 41301 6-plate radiation shield. A 41002 12-plate radiation shield and 41322 adapter may also be used when mounted to a tripod or UT10 tower. If the probe is mounted to a UT30 tower, use a UT6P radiation shield and a UT018 Mounting Bracket and Crossarm Mount.

Ordering Information

107-L User-specified lead length; enter the lead length (in feet) after L. Specify a 6’ lead length (107-L6) for a 2-meter mounting height; specify a 9’ lead (107-L9) for 2-meter mounting height with UT018 crossarm.

108-L User-specified lead length; enter the lead length (in feet) after L. Specify a 6’ lead length (108-L6) for a 2-meter mounting height; specify a 9’ lead (108-9) for 2-meter mounting height with UT018 crossarm.

107 and 108 Specifications

- **Weight:** 0.3 lbs
- **Length:** 3.125”
- **Diameter:** < 0.375”
- **Sensor:** BetaTherm 100K6A1 Thermistor
**107 Specifications**

Temperature measurement range: -35° to +50°C

Polynomial linearization accuracy: Typically <±0.5°C over -38° to +50°C range, <±0.1°C over -24° to +48°C range

Interchangeability error: Typically <±0.2°C over 0° to 50°C range increasing to ±0.4°C at -40°C

Time constant in air: Between 30 and 60 seconds in a wind speed of 5 m sec⁻¹

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**108 Specifications**

Temperature measurement range: -5° to +95°C

Polynomial linearization accuracy: Typically <±0.5°C at the -5° to +90°C range

Interchangeability error: Typically <±0.2°C over 0° to 70°C range increasing to ±0.3°C at 95°C

Time constant in air: Between 30 and 60 seconds in a wind speed of 5 m sec⁻¹

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Note: The 107B and 108B probes have become obsolete because the 107 and 108 probes can now measure soil and water temperature.