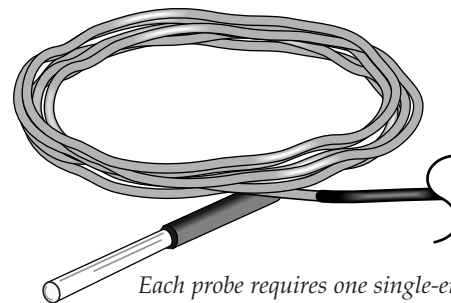


Temperature Probe for CR200-Series Dataloggers

Model 109

The 109 is a rugged, accurate probe that measures air, soil, and water temperature for a variety of applications. It consists of a thermistor encapsulated in an epoxy-filled aluminum housing. The housing protects the thermistor allowing the 109 to be buried or submerged. The 109 measures from -50° to $+70^{\circ}\text{C}$.



Each probe requires one single-ended channel for measurement.

Sensor Mounts

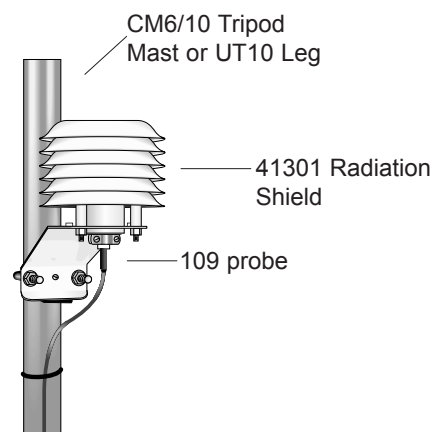
When exposed to sunlight, the 109 must be housed in a radiation shield. Typically a model 41301 6-plate radiation shield mounted to either a CM6/CM10 tripod or UT10 tower is used.

Ordering Information

109-L User-specified lead length; enter the lead length (in feet) after L. Specify a 6' lead length (109-L6) for a 2-meter mounting height.

Specifications

Weight:	0.3 lbs
Length:	3.125"
Diameter:	< 0.375"
Sensor:	BetaTherm 10K3A11B Thermistor
Temperature measurement range:	-50° to $+70^{\circ}\text{C}$
Polynomial linearization accuracy:	Maximum error is 0.03°C at -50°C
Interchangeability error:	Typically $\pm 0.2^{\circ}\text{C}$ over 0° to 70°C range; increasing to $\pm 0.5^{\circ}\text{C}$ at -50°C
Time constant in air:	Between 30 and 60 seconds in a wind speed of 5 m sec^{-1}
Temperature survival range:	-50° to $+100^{\circ}\text{C}$



CAMPBELL SCIENTIFIC, INC.

815 W. 1800 N. • Logan, Utah 84321-1784 • (435) 753-2342 • FAX (435) 750-9540
Offices also located in: Australia • Brazil • Canada • England • France • South Africa • Spain

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Printed December 2002