

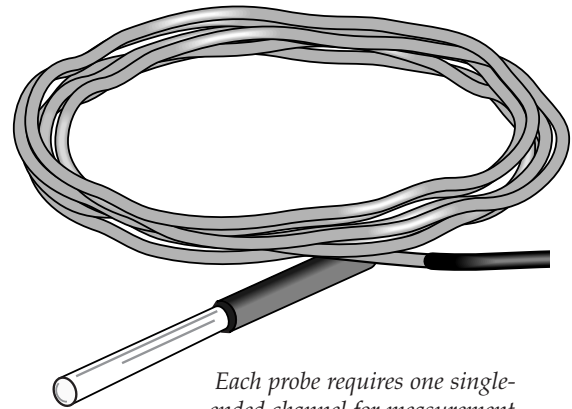
Temperature Probe for CR200-Series Loggers

Model 109

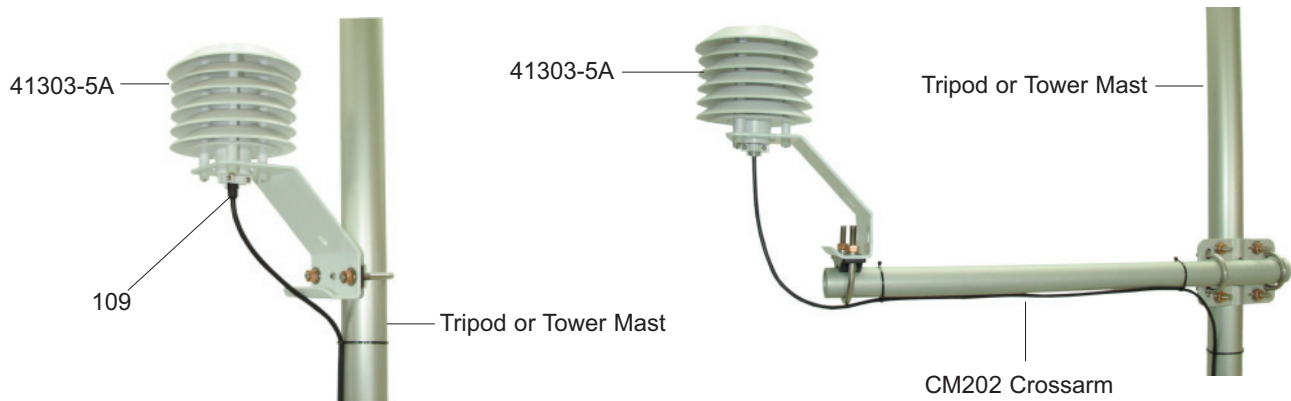
The 109 is a rugged, accurate probe that measures air, soil, and water temperature for a variety of applications. It consists of a thermistor encapsulated in an epoxy-filled aluminum housing. The housing protects the thermistor allowing the 109 to be buried or submerged. The 109 measures from -50° to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

Sensor Mounts

When exposed to sunlight, the 109 probe must be housed in a 41303-5A radiation shield. To attach the 41303-5A to a CM202, CM204, or CM206 crossarm, place the 41303-5A's u-bolt in the bottom holes. To attach the radiation shield directly to a tripod mast, tower mast, or tower leg, place the u-bolt in the side holes.



Each probe requires one single-ended channel for measurement.



Ordering Information

109-L Temperature Probe with user-specified lead length; enter the lead length (in feet) after L. For example, a 109-L9 specifies a 9' lead length.

41303-5A 6-Plate Gill Radiation Shield that houses the 109

Recommended Lead Lengths

2 m Height		Atop a tripod or tower via a 2 ft crossarm such as the CM202							
Mast/Leg	CM202	CM6	CM10	CM110	CM115	CM120	UT10	UT20	UT30
9'	11'	11'	14'	14'	19'	24'	14'	24'	37'

Note: Add two feet to the cable length if you are mounting the enclosure on the leg base of a light-weight tripod.

Specifications

Weight:	0.3 lbs
Length:	3.125"
Diameter:	< 0.375"
Sensor:	BetaTherm 10K3A11B Thermistor
Temperature measurement range:	-50° to +70°C
Steinhart-Hart equation error:	Maximum error is 0.03°C at -50°C
Interchangeability error:	Typically <±0.2°C over 0° to 70°C range; increasing to ±0.5°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°C

