



Rugged, Accurate, Versatile

Can be used in a variety of applications

Overview

The 108 is a rugged, accurate probe that measures temperature of air, soil, or water from -5° to $+95^{\circ}\text{C}$. It easily interfaces with most Campbell Scientific data loggers and can be used in a variety of applications.

The 108 consists of a thermistor encapsulated in an epoxy-filled aluminum housing. The housing protects the thermistor, allowing you to bury the probe in soil or submerge it in water.

Benefits and Features

- › Versatile product—measures air, soil, or water temperature
- › Easy to install or remove
- › Durable
- › Compatible with AM16/32-series multiplexers, allowing measurement of multiple sensors

Specifications

Sensor Description	BetaTherm 100K6A11A Thermistor
Tolerance	$\pm 0.2^{\circ}\text{C}$ (over 0° to 70°C range)
Temperature Measurement Range	-5° to $+95^{\circ}\text{C}$
Steinhart-Hart Equation Error	$\leq \pm 0.01^{\circ}\text{C}$ over measurement range (CRBasic data loggers only)
Polynomial Linearization Error	Typically $< \pm 0.5^{\circ}\text{C}$ over -5° to 90°C range (Edlog data loggers only)

Time Constant in Air	30 to 60 s (in a wind speed of 5 m s^{-1})
Maximum Submergence	15 m (50 ft)
Maximum Cable Length	305 m (1000 ft)
Probe Diameter	0.76 cm (0.3 in.)
Probe Length	10.4 cm (4.1 in.)
Weight	136 g (5 oz) with 3.05 m (10 ft) cable

For comprehensive details, visit: www.campbellsci.com/108