

Conductivity and Temperature Probe

Model CS547

Campbell Scientific's CS547 probe measures the electrical conductivity (EC) and temperature of water. EC is measured by three passivated 316 SS cylindrical electrodes isolated from DC with capacitors. Temperature is sensed with a thermistor. The CS547 can be measured by our CR500, CR510, CR10(X), 21X, CR23X, or CR7 dataloggers. The conductivity and temperature measurements require a differential and single-ended input, respectively. The probes are housed in a stainless steel case with rounded ends to ease installation and removal; stainless steel resists corrosion and adds weight to facilitate ground water applications.

The A547 contains the blocking capacitors and bridge completion resistors necessary for the conductivity measurement. One A547 is required for each CS547 when used directly with the datalogger; multiple CS547 probes can be used with one AM416 multiplexer and one A547.



Our redesigned conductivity and temperature probe will still fit down a 1" pipe, but offers easier connections to an AM416 multiplexer for our customers requiring a water profile.

Ordering Information

CS547 -L Orders a CS547; user specifies lead length after L. A split mesh cable grip is available as an option.

A547 CS547 Conductivity Interface; required to use the CS547.

CS547 Specifications

- Conductivity range: Approximately 0.005 to 7.0 mS cm⁻¹. Contact factory for extended ranges.
- Conductivity accuracy in KCl and sodium salt standard solutions @ 25°C:

±%	Range
5	0.44 to 7.0 mS cm ⁻¹
10	0.005 to 0.44 mS cm ⁻¹
- Depth rating: Maximum 1000 feet (305 m)
- Lead length: Up to 1000 feet (305 m)
- pH Range: 3.0 to 9.0
- Temperature measurement range: 0° to 50°C
- Temperature accuracy: Polynomial linearization error typically <0.1°C over 0° to 48°C. Thermistor interchangeability typically <0.2°C over 0° to 50°C.
- Probe length: 3.7 inches (94 mm)
- Diameter: 0.95 inches (24.13 mm)
- Weight: 1.5 lbs w/10 ft lead

A547 Specifications

- Dimensions: 2.5" x .875" x 1.750
- Weight: 6 oz.



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

Copyright © 2000
Campbell Scientific, Inc.
Printed March 2000