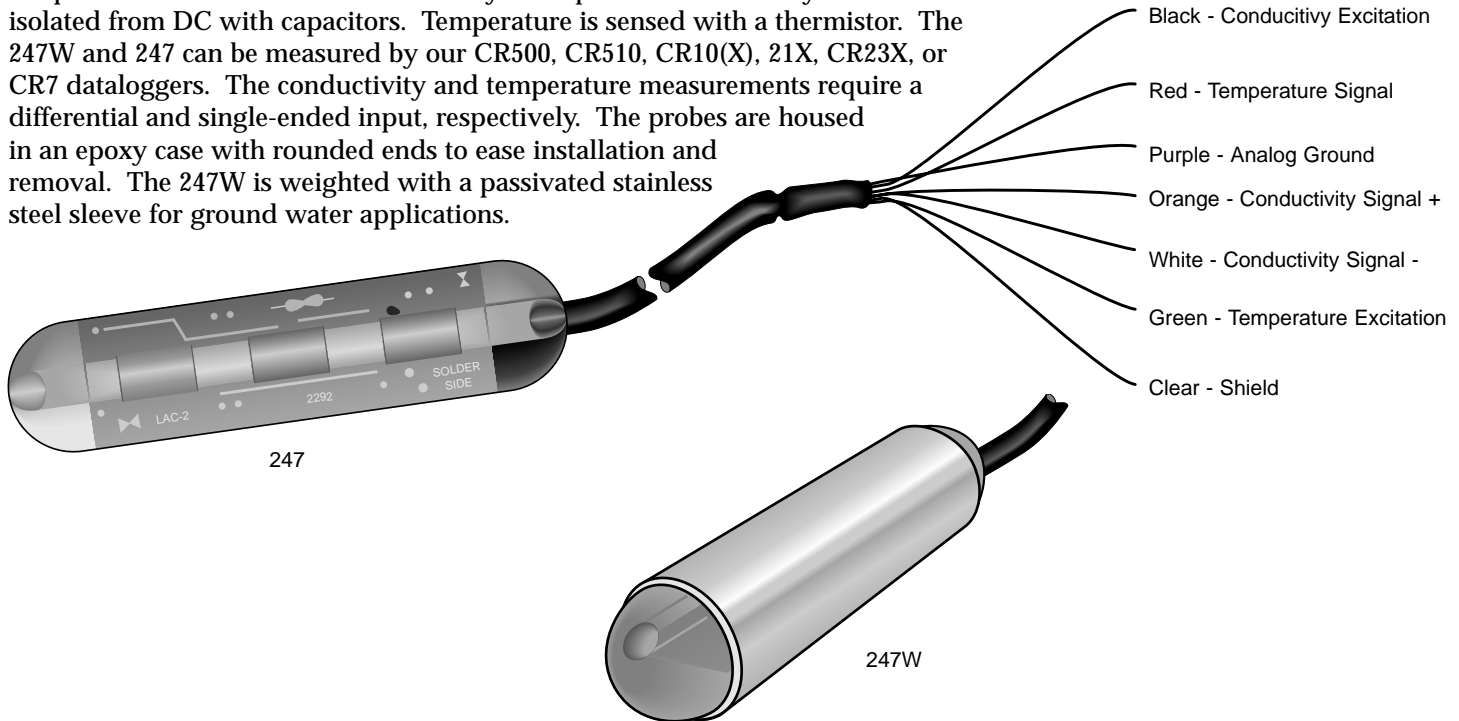


# Conductivity and Temperature Probe

## Models 247W and 247

Campbell Scientific's 247W and 247 probes measure 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 247W and 247 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 an epoxy case with rounded ends to ease installation and removal. The 247W is weighted with a passivated stainless steel sleeve for ground water applications.



## Ordering Information

247W or 247 -L Orders a 247W or 247 without a split mesh cable grip; user specifies lead length after L.

247W or 247 -L-1 Orders a 247W or 247 with a split mesh cable grip; user specifies lead length after L.

For example, a 247-L75-1 orders a 247 with a split mesh cable grip and a 75 foot lead length.

## Specifications

- Conductivity range: Approximately 0.005 to 7.0 mS cm<sup>-1</sup>
- Conductivity accuracy in KCl and sodium salt standard solutions @ 25°C:

$\pm\%$	Range
5	0.44 to 7.0 mS cm <sup>-1</sup>
10	0.005 to 0.44 mS cm <sup>-1</sup>
- 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°C 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: 3.125 inches (7.938 cm)
- 247-L diameter: 0.75 inches (1.91 cm)



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