

# CS10 and CS15

## AC Current Sensors

Campbell Scientific's CS10 and CS15 detect and measure the ac current along an electrical wire using the magnetic field that is generated by that current. The sensor is external to the wire jacket and has no direct electrical connection to the system. The sensors output a millivolt signal allowing them to be directly connected to our dataloggers.

The CS10 is compatible with our CR800, CR850, CR1000, CR3000, CR510, CR10(X), and CR23X dataloggers. It uses CR Magnetic's CR8459 Current Transformer to measure the approximate current over a range of 0.15 A to 200 A.

The CS15 was developed specifically for our CR200X-series and CR200-series dataloggers. It is a modified version of the CS10 that measures the approximate current over a range of 0.15 A to 125 A.

Both the CS10 and CS15 are recommended for measurements that do not require high accuracy. Ideal applications include motor or generator load conditions, efficiency studies, intermittent fault detection, and rough submetering.



## Ordering Information

### AC Current Sensors

- CS10-L** CR Magnetics Current Transformer with a user-specified cable length; enter the cable length (in feet) after the -L. Recommended cable length is 5 ft (1.6 m). Must choose a cable termination option (see below).
- CS15-L** CR Magnetics Current Transformer for CR200(X)-Series Dataloggers. Enter the cable length (in feet) after the -L. Recommended cable length is 5 ft (1.6 m). Must choose a cable termination option (see below).

### Cable Termination Options (choose one)

- PT** Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.
- PW** Cable terminates in connector for attachment to a prewired enclosure.

## Specifications

### Measurement Range

- CS10:** 0.15 to 200 A  
**CS15:** 0.15 to 125 A

**Frequency:** 50 Hz and 60 Hz

**Insulation Resistance:** 100 M ohm @ 500 Vdc

**High Potential:** 2000 V

### Rated Current

- CS10:** 200 A  
**CS15:** 125 A

**Operating Temperature:** -25° to +55°C

**Case Material:** Polypropylene resin

**Construction:** Epoxy encapsulated

**Accuracy w/10 ohm burden max. (resistive):** typically  $\pm 5\%$  of actual value with provided multiplier

