



## CS10 and CS15

AC Current Sensors



### Overview

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 sensors output a millivolt signal allowing them to be directly connected to our dataloggers.

### Benefits and Features

- › Ideal applications include motor or generator load conditions, efficiency studies, intermittent fault detection, and rough submetering
- › Sensor is external to the wire jacket and has no direct electrical connection to the system

### 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.

### Model Descriptions

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.

### Specifications

- › Measurement Range
  - CS10: 0.15 to 200 A
  - CS15: 0.15 to 125 A
- › Frequency: 50 and 60 Hz
- › Insulation Resistance: 100 M $\Omega$  @ 500 Vdc
- › High Potential: 2000 V
- › Rated Current
  - CS10: 200 A
  - CS15: 125 A
- › Accuracy with 10  $\Omega$  Maximum Burden (resistive): typically  $\pm 5\%$  of actual value with provided multiplier
- › Operating Temperature Range: -25° to +55°C
- › Case Material: Polypropylene resin
- › Construction: Epoxy encapsulated
- › Outer Diameter: 4.8 cm (1.89 in)
- › Inner Diameter: 1.9 cm (0.75 in)
- › Height: 1.7 cm (0.67 in)

