



# Measure the ac Current along an Electrical Wire

## Overview

The CS11 detects and measures the ac current along an electrical wire using the magnetic field that is generated by

that current. The sensor outputs a millivolt signal allowing it to be directly connected to our data loggers.

## 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

## Detailed Description

The CS11 uses CR Magnetic's CR8459 Current Transformer to detect the ac current along an electrical wire using the magnetic field that is generated by that current. The CS11 is external to the wire jacket and has no direct electrical connection to the system.

The CS11 is recommended for measurements that do not require high accuracy, such as motor or generator load condition monitoring, efficiency studies, intermittent fault detection, and rough submetering.

## Specifications

Measurement Range	0.15 to 200 A (0.15 to 125 A for CR200X)
Frequency	50 and 60 Hz
Insulation Resistance	100 MΩ (@ 500 Vdc)
High Potential	2000 V
Rated Current	200 A, 125 A (CR200X)

Accuracy	Typically ±1% of actual value with provided multiplier (with 10 Ω maximum burden [resistive])
Multiplier	$i^{Mult}=200 \text{ A}/1000 \text{ mV}=0.2$
Operating Temperature Range	-25° to +55°C
Storage Temperature Range	-25° to +70°C

Case Material	Polypropylene resin
Construction	Epoxy encapsulated
Inner Diameter	1.9 cm (0.75 in.)

Outer Diameter	4.8 cm (1.89 in.)
Height	1.7 cm (0.67 in.)

For comprehensive details, visit: [www.campbellsci.com/cs11](http://www.campbellsci.com/cs11) 



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