


Self-Describing Split-Core AC Current Transformer (SD-CT-x) (AC Amperage to DC Voltage Transducer)



For use with HOBO® MX1104 and MX1105 data loggers



Specifications

Current Range	SD-CT-020: 2–20 AMPS AC SD-CT-050: 5–50 AMPS AC SD-CT-100: 10–100 AMPS AC SD-CT-200: 20–200 AMPS AC SD-CT-600: 60–600 AMPS AC
Accuracy	±2.1% of full scale (includes logger accuracy)
Response Time (from 10% to 90% of Amplitude)	SD-CT-020: approx. 440 milliseconds SD-CT-050: approx. 200 milliseconds SD-CT-100: approx. 100 milliseconds SD-CT-200: approx. 450 milliseconds SD-CT-600: approx. 490 milliseconds
Input Current	AC current, sine wave, single phase 50 Hz or 60 Hz, load power factor 0.5 to 1.0 lead or lag
Output	0-2.5 V DC
Voltage Rating	600 V AC
Temperature Rating	SD-CT-020, SD-CT-050, SD-CT-100: -15° to 60°C (5° to 140°F) SD-CT-200, SD-CT-600: -15° to 40°C (5° to 104°F)
Construction	Molded plastic housing for indoor use per UL508
Cable	1.8 m (6 ft.)
Window Size	SD-CT-020, SD-CT-050, SD-CT-100: 28 x 20 mm (1.1 x 0.8 in.) SD-CT-200: 39 x 32 mm (1.54 x 1.26 in.) SD-CT-600: 74 x 62 mm (2.92 x 2.46 in.)
Dimensions	SD-CT-020, SD-CT-050, SD-CT-100: 79 x 71 x 36 mm (3.1 x 2.8 x 1.4 in.) SD-CT-200: 100 x 120 x 29 mm (3.92 x 4.72 x 1.14 in.) SD-CT-600: 135 x 150 x 28 mm (5.3 in. x 5.91 in. x 1.12 in.)
	The CE Marking identifies this product as complying with all relevant directives in the European Union (EU)

Notice

- This product is not intended for life or safety applications.
- Do not install this product in hazardous or classified locations.
- The installer is responsible for conformance to all applicable codes.
- Mount this product inside a suitable fire and electrical enclosure.



DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Failure to follow these instructions will result in death or serious injury.



- Follow safe electrical work practices.
- See NFPA 70E in the USA, or applicable local codes.
- This equipment must only be installed and serviced by qualified electrical personnel.
- Read, understand and follow the instructions before installing this product.
- Turn off all power supplying equipment before working on or inside the equipment.
- Use a properly rated voltage sensing device to confirm power is off.
- DO NOT DEPEND ON THIS PRODUCT FOR VOLTAGE INDICATION

Specification Note: For CE compliance, conductor shall be insulated according to IEC 61010-1:2001, Installation Category III or equivalent. The product design provides for basic insulation only.

Using the SD-CT-x Sensor with the HOBO MX Analog/Temp/RH/Light (MX1104) or HOBO MX 4-Channel Analog (MX1105) Data Loggers

1. Insert the plug into an analog sensor port on the logger. Turn the sensor plug one-quarter clockwise until it stops.
2. In HOBOMobile, connect to the logger and tap Configure. The sensor type will be selected automatically. Set any other logger settings and tap Start. See the HOBOMobile User's Guide at <https://www.onsetcomp.com/manuals/17841-hobomobile-users-guide> for details on configuring the logger.

Installation

- The I-bar can be hinged open to install the SD-CT-x sensor around an individual wire carrying a single phase. Rotate the I-bar open (on the SD-CT-200 and SD-CT-600 units, press in the I-bar tabs to open). Place the wire in the CT window and then snap the I-bar closed.
- The I-bar on the SD-CT-200 and SD-CT-600 units is fully removable for easy installation. Make sure the I-bar is replaced in the proper orientation to ensure correct readings. The contacts on the unit and I-bar are marked with matching notations.
- The SD-CT-020, SD-CT-050, and SD-CT-100 units are provided with a snap-on mounting plate that can be removed from the CT and mounted separately. Mount the plate under the wire you want to monitor and, once the cable is installed into the CT, snap the CT/wire assembly onto the mounting plate.
- Remove the CT from the plate by opening the CT and sliding it off the plate or gently rocking the CT slightly and pulling up at the same time.