

# Magnelab AC Current Transformer (CT) Connection Instructions for use with HOBO<sup>®</sup> Energy Logger Pro<sup>™</sup>

## Applies to these Magnelab CTs:

| Onset Part No. | Rated Current | Output                                   | Magnelab Part No. |
|----------------|---------------|--|-------------------|
| T-MAG-SCT-005  | 5 Amps        | 0-333mV AC representing 0 to 5 Amps AC   | SCT-0750-005      |
| T-MAG-SCT-020  | 20 Amps       | 0-333mV AC representing 0 to 20 Amps AC  | SCT-0750-020      |
| T-MAG-SCT-050  | 50 Amps       | 0-333mV AC representing 0 to 50 Amps AC  | SCT-0750-050      |
| T-MAG-SCT-100  | 100 Amps      | 0-333mV AC representing 0 to 100 Amps AC | SCT-1250-100      |
| T-MAG-SCT-200  | 200 Amps      | 0-333mV AC representing 0 to 200 Amps AC | SCT-1250-200      |
| T-MAG-SCT-600  | 600 Amps      | 0-333mV AC representing 0 to 600 Amps AC | SCT-2000-600      |

## ⚠ **DANGER!**—HIGH VOLTAGE HAZARD ⚡

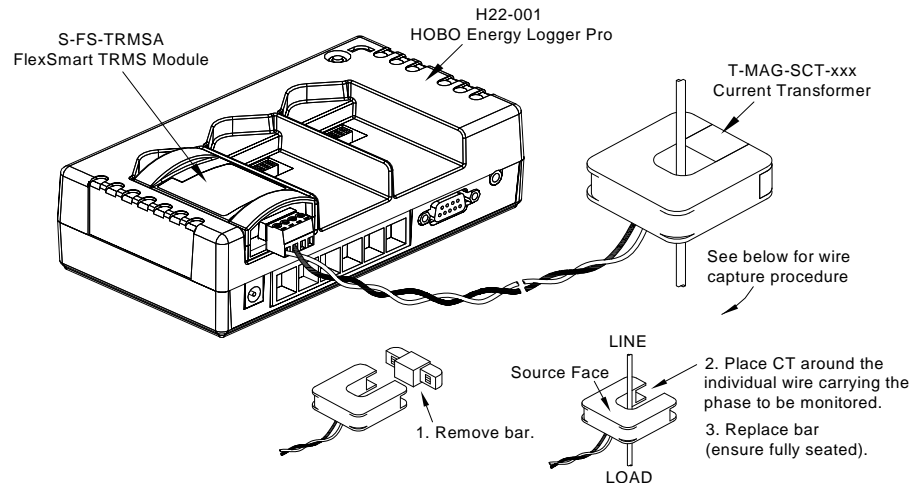
Installing CTs in an energized electrical enclosure or on any energized conductor can result in severe injury or death. These CTs are for installation by qualified personnel only. To avoid electrical shock, do not perform any installation or servicing of these CTs unless you are qualified to do so. Disconnect and lock-out all power sources during installation and servicing.

This document provides instructions on connecting the Magnelab CTs listed above to the FlexSmart<sup>™</sup> TRMS Module used with the HOBO Energy Logger Pro, and also lists configuration values used by HOBOWare<sup>®</sup> Pro software to configure the logger for each CT.

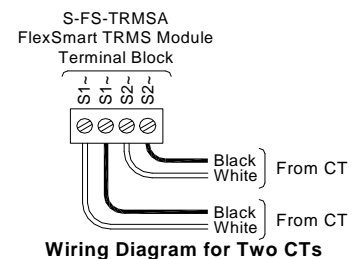
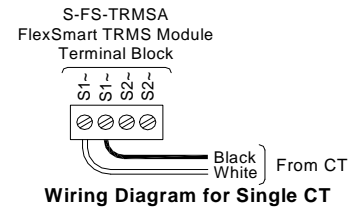
### Required:

- Selected Magnelab CT
- FlexSmart TRMS Module, Onset Part No: S-FS-TRMSA
- HOBO Energy Logger Pro, Onset Part No: H22-001
- HOBOWare Pro Software, version 2.2.1 or higher

### Connecting the CT to the FlexSmart TRMS Module:



**Magnelab AC Current Transformer**  
(Onset Part No. T-MAG-SCT-020 shown)



### Configuring the HOBO Energy Logger Pro for the CT, using HOBOWare Pro Software:

**Note:** HOBOWare Pro software provides configuration files for the CTs. The table below lists the recommended configuration values for each CT that these files contain. For information on loading configuration files, refer to the software documentation.

| Onset Part No: | Channel Name | Raw Value 1 (mV) | Raw Value 2 (mV) | Scaled Value 1 | Scaled Value 2 | Scaled Units |
|----------------|--------------|------------------|------------------|----------------|----------------|--------------|
| T-MAG-SCT-005  | Current      | 0                | 333              | 0              | 5              | A            |
| T-MAG-SCT-020  | Current      | 0                | 333              | 0              | 20             | A            |
| T-MAG-SCT-050  | Current      | 0                | 333              | 0              | 50             | A            |
| T-MAG-SCT-100  | Current      | 0                | 333              | 0              | 100            | A            |
| T-MAG-SCT-200  | Current      | 0                | 333              | 0              | 200            | A            |
| T-MAG-SCT-600  | Current      | 0                | 333              | 0              | 600            | A            |

## Service and Support

HOBO products are easy to use and reliable. In the unlikely event that you have a problem with this instrument, contact the company where you bought the logger: Onset or an Onset Authorized Dealer. Before calling, you can evaluate and often solve the problem if you write down the events that led to the problem (are you doing anything differently?) and if you visit the Technical Support section of the Onset web site at [www.onsetcomp.com/support.html](http://www.onsetcomp.com/support.html). When contacting Onset, ask for technical support and be prepared to provide the product number and serial number for the logger and software version in question. Also completely describe the problem or question. The more information you provide, the faster and more accurately we will be able to respond.

Onset Computer Corporation  
470 MacArthur Blvd., Bourne, MA 02532  
Mailing: PO Box 3450, Pocasset, MA 02559-3450  
Phone: 1-800-LOGGERS (1-800-564-4377) or 508-759-9500  
Fax: 508-759-9100  
E-mail: [loggerhelp@onsetcomp.com](mailto:loggerhelp@onsetcomp.com)  
Internet: [www.onsetcomp.com](http://www.onsetcomp.com)

## Warranty

Onset Computer Corporation (Onset) is acting as a distributor of the sensor(s) or transducer(s) described in this document. Onset hereby transfers to the original end-user purchaser the warranty provided by the product manufacturer (**three years** from the date of original purchase). During the warranty period Onset will, at its option, either repair or replace products that prove to be defective in material or workmanship. This warranty shall terminate and be of no further effect at the time the product is (1) damaged by extraneous cause such as fire, water, lightning, etc. or not maintained in accordance with the accompanying documentation; (2) modified; (3) improperly installed; (4) repaired by someone other than Onset; or (5) used in a manner or purpose for which the product was not intended.

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## Returns

Please direct all warranty claims and repair requests to place of purchase.

Before returning a failed unit directly to Onset, you must obtain a Return Merchandise Authorization (RMA) number from Onset. You must provide proof that you purchased the Onset product(s) directly from Onset (purchase order number or Onset invoice number). Onset will issue an RMA number that is valid for 30 days. You must ship the product(s), properly packaged against further damage, to Onset (at your expense) with the RMA number marked clearly on the outside of the package. Onset is not responsible for any package that is returned without a valid RMA number or for the loss of the package by any shipping company. Loggers must be clean before they are sent back to Onset or they may be returned to you.

## Repair Policy

Products that are returned after the warranty period or are damaged by the customer as specified in the warranty provisions can be returned to Onset with a valid RMA number for evaluation.

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Manual Part No: MAN-MAGNELAB-CT

Doc No: 10270-E

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