

WIRELESS AC CURRENT SENSOR INSTRUCTIONS

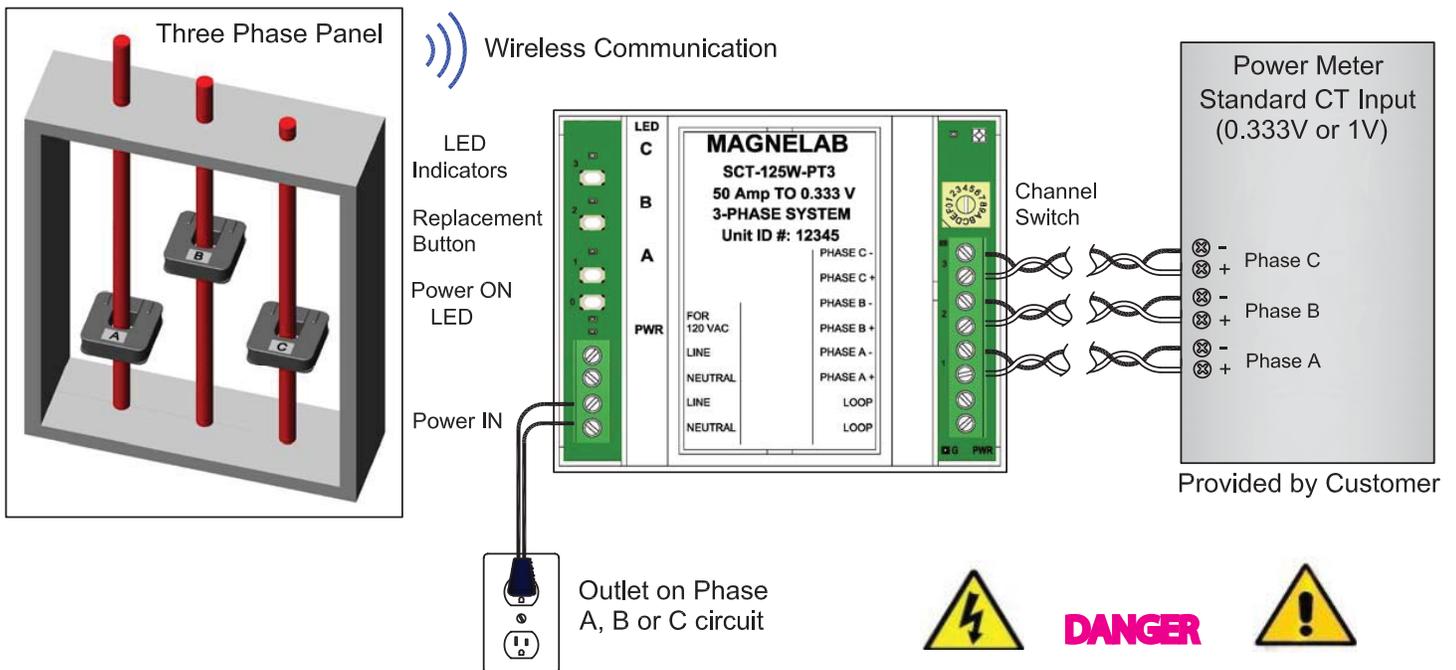
SCT-125W and -200W

The Magnelab SCT-125W and SCT-200W are radio CT system designed to work with any energy meter that accepts 0.333 V RMS or 1.0 V RMS transducers. Each CT contains an RF link powered by the measured current and will link to the controller at any current above 5A. The system consists of three matched CTs and a Controller (PT Unit) with three outputs for A,B & C phase. CT installation consists of simply snapping the CTs around each conductor. The controller is powered by 120VAC or 240VAC with the outputs wired to the energy meter CT inputs.



Caution:

1. This equipment must only be installed and serviced by qualified electrical personnel
2. Follow safe electrical work practices. See NFPA 70E or applicable electrical codes
3. Read & understand the instructions before installing this product
4. Turn off all power supplying equipment before working on or inside the equipment
5. Use a properly rated voltage sensing device to confirm power is off



HAZARD OF ELECTRIC SHOCK,
EXPLOSION OR ARC FLASH

INSTALLATION INSTRUCTIONS

1. Mount Controller (PT Unit) near measurement instrumentation within 10 meters of where the CTs are to be installed. Plug power cord into standard 120V power. The power LED will light.
2. Install CTs around conductors to be monitored. Observe correct direction and make sure the CT end piece is firmly seated.
3. Connect the Phase A, Phase B, Phase C outputs from the controller to the measurement instrumentation, observing the correct polarities.
4. With the 3 primary conductor phases energized (Powered on), the three controller PHASE LEDs will light. (Minimum 5A current required to energize each phase.)
5. When the controller is powered on and receiving signals, the three PHASE LEDs will be on.
NOTE: If any or all of the phase LEDs are unlit and you can confirm the current in the conductors is > 5A, the issue could be interference. Rotate the CHANNEL switch to the next position and wait at least 30 seconds to verify operation (3 LEDs lit). Continue changing channels until you see all phases light up continuously.

LIMITED WARRANTY

Magnelab Inc warrants this product it manufactures against defects in materials and workmanship for a period limited to five years from the date of shipment, provided the product has been stored, handled, installed and used under proper conditions. The company's liability under this limited warranty shall extend only to the repair or replacement of a defective product, at the company's option. The company disclaims all liability for any affirmation, promise or representation with respect to the product.

The customer agrees to hold Magnelab harmless from, defend, and indemnify Magnelab against damages, claims and expenses arising out of subsequent sales of Magnelab products or products containing products manufactured by Magnelab and based on personal injuries, deaths, property damages, lost profits and other matters which Buyer, its employees, or sub-contractors are or may be to any extent liable, including without limitations penalties imposed by the Consumer Product Safety Act (P.L. 92-573) and liability imposed upon any person pursuant to the Magnuson-Moss Warranty Act (P.L. 93-637), as now in effect or amended hereafter.

No warranties expressed or implied are created with respect to Magnelab products except those expressly contained herein. The customer acknowledges the disclaimers and limitations contained

CT REPLACEMENT INSTRUCTIONS

If any of the CTs need to be replaced, they need to be paired with the controller (PT Unit). The following are instructions for pairing a replacement CT.

1. Wrap a AWG #23 (or similar) insulated wire through the replacement CT 5 times.
2. Connect the ends of the wire to the terminals marked LOOP on the output barrier strip on the Controller. Polarity does not matter. (Pins 1 and 2 on the output barrier strip.)
3. Remove the barrier strip cover on the left hand side of the controller. This will expose three momentary contact switches associated with the PHASE LOCK lights. Apply power to the controller.
4. Press PHASE button 1, 2, or 3 associated with the CT to be replaced. The associated LED will begin to slowly flash. Note: If the pairing happens quickly, the LED will lite continuously.
5. If pairing is successful, the LED will go solid and stay lit. You may observe it go dark for one second and then go back to solid as it completes pairing. A solid LED indicates that the Controller is receiving data from the CT. If the LED doesn't go solid after the first button press and the LED goes dark after flashing for 30 s, try pressing the button again.
6. If pairing is successful, unplug the Controller to power it down and disconnect CT from 5 turn wire loop.
7. If you are replacing more than one CT, perform steps 3 through 6 for other CTs.

SYSTEM SPECIFICATIONS

COMMUNICATION: 802.15.4, 2.4 GHz technology

ACCURACY: Better than $\pm 1\%$ error for amplitude and 1° error for phase.

RANGE: 10 meters

DISPLAY: Green LED for each of three channels

CONTROLLER POWER: 120 VAC or 240 VAC

OUTPUT: A,B, & C phase, 1/3volt or 1volt (optional at time of ordering)

MINIMUM TURN-ON: 5 A measured current

Temperature: -30°C to $+60^\circ\text{C}$

STANDARD: FCC Pt 15, subpart C, Class A (industrial and broadcasting systems)

DIMENSIONS CHART	SCT-125W	SCT-200W
A	3.25	4.75
B	3.35	5.00
C	1.00	1.20
D	1.25	2.00
E	1.25	2.00

PART NUMBER AND RATING			
SCT-125W-070	70 Amp	SCT-200W-100	100 Amp
SCT-125W-100	100 Amp	SCT-200W-200	200 Amp
SCT-125W-150	150 Amp	SCT-200W-400	400 Amp
SCT-125W-200	200 Amp	SCT-200W-600	600 Amp
SCT-125W-250	250 Amp	SCT-200W-800	800 Amp
SCT-125W-300	300 Amp	SCT-200W-1000	1000 Amp
SCT-125W-400	400 Amp	SCT-200W-1200	1200 Amp
SCT-125W-800	800 Amp	SCT-200W-1500	1500 Amp

