Production Meter CT Installation Instructions

To monitor the customer's energy production with the PVS5x revenue-grade onboard meter, you must follow these instructions to install the optional SunPower, revenue-grade, solid-core current transformer (CT) for production metering. **See the *PVS5x Installation Guide (#522351)* for the complete PVS5x installation instructions.**

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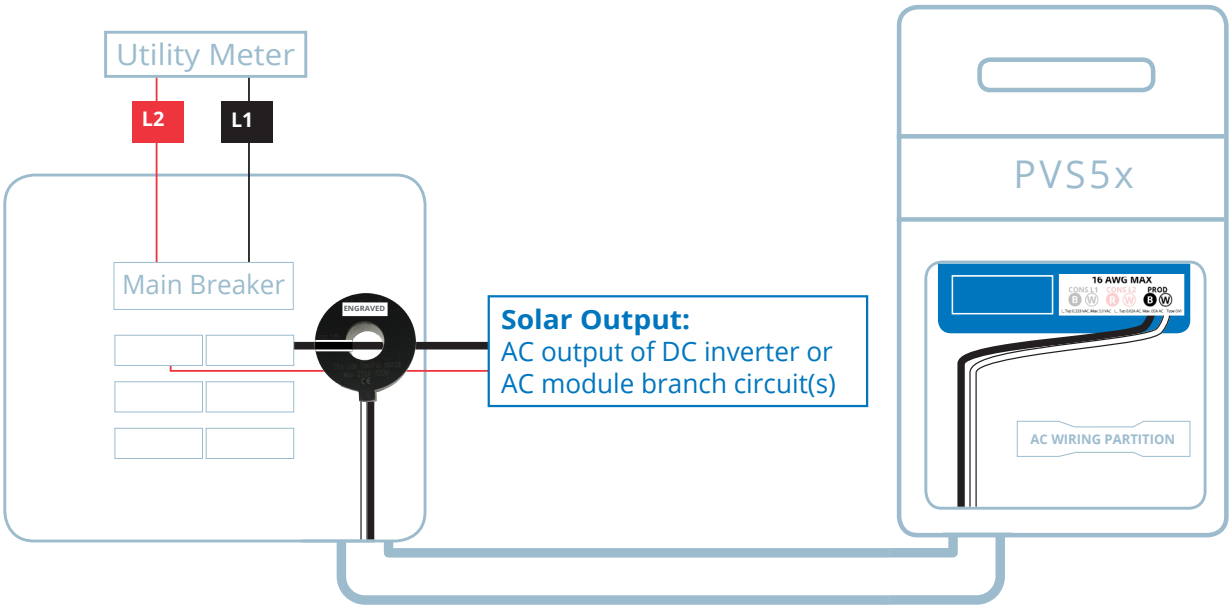

***Warning!* Hazardous voltages!** Accessing the system involves possible contact with potentially lethal voltages and currents. No attempt to access, install, adjust, repair, or test the system should be made by anyone who is not qualified to work on such equipment.

1. Power off AC modules or DC inverters.
2. Place the solid-core production CT over the combined or grouped individual **AC L1** outputs with the engraved markings on the CT *facing the grid and facing away from the inverter or combiner*.
   Important! Do not overfill CT. Do not install parallel production CTs.
3. Route CT wires through conduit to the PVS5x.
   - **Running CT wires:** You may run CT and AC wiring in the same conduit. Do not run CT wiring and internet communication cables in the same conduit.
   - **Extending CT leads:** Use Class 1 (300V rated minimum, 16 AWG maximum) twisted-pair instrument cable and appropriate connectors; SunPower recommends the use of silicone-filled insulation displacement connectors (IDC) or telecom crimps; do not use power cables (for example, THWN or Romex) to extend the CT leads.
4. Land the CT leads in corresponding J16 **PROD** terminals of the PVS5x wiring compartment (refer to the diagram above). Tighten to 0.5–0.6 N-m (4.4–5.3 in-lb).
   Important! Do not overtighten terminals.

Equipment Specifications
- SunPower part number: 516990
- Rated Amps: 100 A
- Maximum Amps: 250 A (maximum amps are the maximum continuous currents the CTs can sustain without overheating)

Environmental Specifications
- Operating Temperature: –40°C to +85°C (–40°F to 185°F)
- Operating Humidity: Non-condensing, 0 to 100% relative humidity (RH)
- Operating Altitude: Up to 3000m
- Pollution: POLLUTION DEGREE 2
- Indoor Use: Suitable for indoor use
- Outdoor Use: Suitable for outdoor use when mounted in a NEMA 3R or 4 (IP 66) rated enclosure, provided the ambient temperature will not exceed 55°C (131°F).

Safety Instructions
- Only qualified personnel or licensed electricians should install the current transformer (CT). The line voltages of 120 Vac to 600 Vac can be lethal!
- Install in accordance with ANSI/NFPA 70, National Electrical Code (NEC). Follow all local electrical codes.
- Electrical codes prohibit installation of CTs in equipment where they exceed 75% of the wiring space of any cross-sectional area.
- Do not install CTs where they block ventilation openings.
- Do not install CTs in the area of breaker arc venting.
- The CT lead wires are considered Class 1 wiring (as defined by the NEC) and must be installed accordingly. They are not suitable for Class 2 wiring methods and should not be connected to Class 2 equipment.
- Verify that the line currents will not exceed the Maximum Amps under normal operation.
- Do not install the CT where it may be exposed to temperatures below −40°C or above 85°C (−40°F to 185°F), excessive moisture, dust, salt spray, or other contamination.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.