SolarEdge P-5 Series Power Optimizers Grounding Using a Grounding Terminal

Power optimizers that are available for North America (part numbers: Pxxx-2N and Pxxx-5N) must be grounded.

When the power optimizer is mounted on a grounded structure, equipment grounding is done using the washers supplied with the optimizers (refer to the SolarEdge Installation Guide).

When the power optimizer is mounted on an un-grounded structure, such as a wooden structure, grounding terminals (kit part number: SE-GNDLUGS-100, 100 terminals in one kit) are used to create equipment grounding.

To establish equipment grounding:

1. When installing the power optimizer, attach a grounding terminal to each power optimizer (see Figure 1).

2. Connect an equipment-grounding conductor to the grounding terminal. The grounding terminal accepts a wire size of 6-14 AWG and must be sized for equipment per NEC 250.122.

3. Tighten the screw connecting the power optimizer to the rack with a torque of 9.5 N*m / 7 lb*ft.

Figure 1: Grounding a power optimizer using the grounding terminal kit