

# RS485 Surge Protection Kit Installation Guide

This document describes how to install the RS485 Surge Protection Kit in a SolarEdge inverter.

## Kit Contents

- Surge protection board

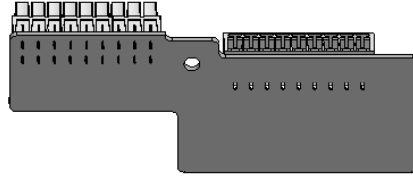


Figure 1: Surge Protection Board

## Installation Procedure

- 1 Turn the inverter ON/OFF switch to OFF. The inverter display should indicate that the string voltage is in the safety voltage range ( $< 50V$ ).
- 2 Disconnect the AC to the inverter by turning OFF the circuit breakers on the distribution panel.
- 3 Do one of the following:
  - For a new RS485 connection installation, disconnect the 9-pin connector from the surge protection board, and connect the RS485 wires to the G, A, and B terminals of the 9-pin connector, as shown in Figure 2.

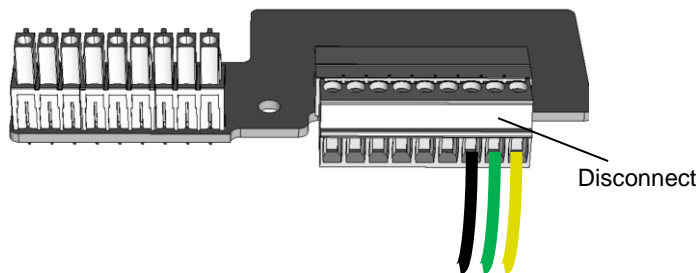


Figure 2: 9-Pin Connector for a New Inverter Installation

- If RS485 connection is already installed in the inverter, disconnect the 9-pin connector from the inverter's communication board (leaving the RS485 wires intact), as shown in Figure 3.

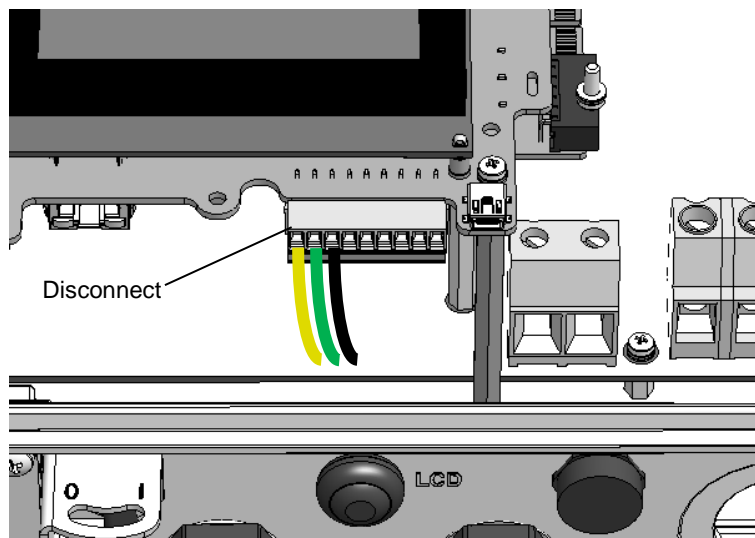


Figure 3: Disconnecting the 9-Pin Connector from an Existing Inverter

- 4 Remove the inverter grounding screw, as seen below in Figure 4. Position the ring terminal of the surge protection board in its place, and replace and tighten the screw.

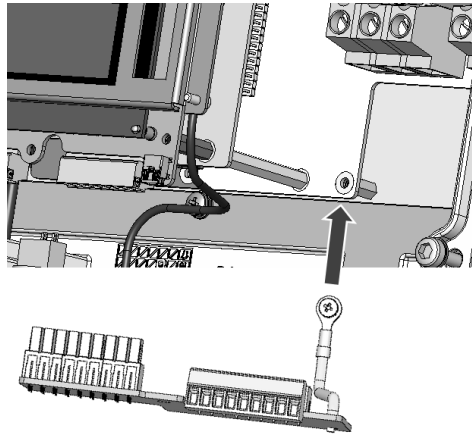


Figure 4: Affixing the Terminal Ring with a Ground Screw

- 5 Insert the 9-pin connector with the RS485 wires into the communication input socket of the surge protection board, as shown in Figure 5.

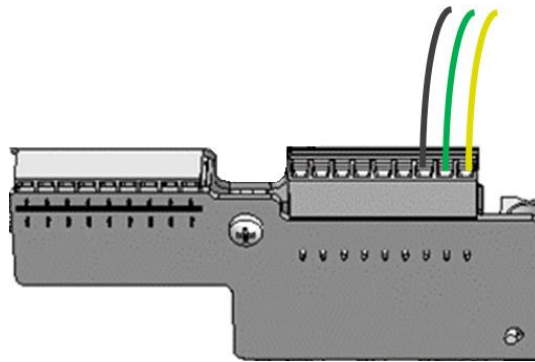


Figure 5: Inserting the 9-Pin Connector into the Surge Protection Board

- 6 Insert the surge protection board's connectors into the communication board socket, applying light pressure. Make sure the connectors are firmly inserted.

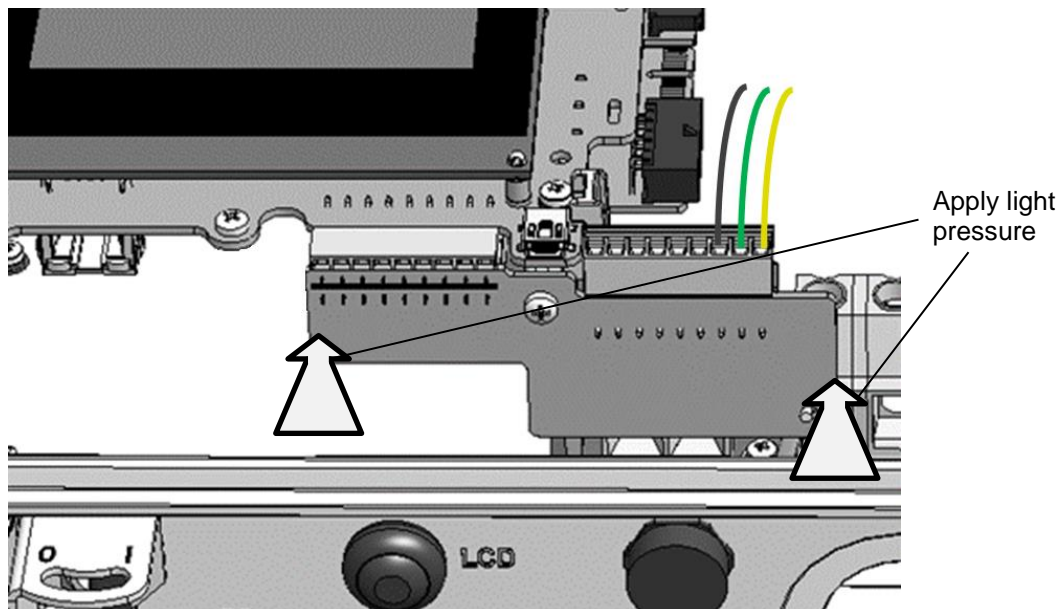


Figure 6: Attaching the Surge Protection Board to the Inverter Communication Board

- 7 Close the inverter cover.
- 8 Turn ON the AC to the inverter.
- 9 Turn the inverter ON/OFF switch to ON.