RS485 Surge Protection Kit for Single Phase HD-Wave Inverter - Installation Guide

This document describes how to install the RS485 Surge Protection Kit in the SolarEdge single phase HD-Wave inverter.

Kit Contents

- Surge protection board
- Standoff

Installation Procedure

1 Turn the inverter ON/OFF switch to OFF. The LCD 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 Open the cover's six Allen screws and carefully remove the cover.

4 Do one of the following:

- For a new RS485 connection installation, disconnect the 6-pin connector from the surge protection board, and connect the RS485 wires to the G, A, and B terminals to the 6-pin connector (see Figure 1).
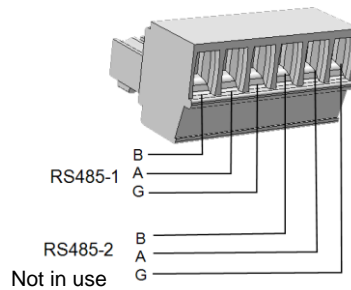
Figure 1: RS485 6-Pin Connector

- If RS485 connection is already installed in the inverter, disconnect the 6-pin connector from the RS485 socket on the inverter communication board (see Figure 2), leaving the RS485 wires intact.
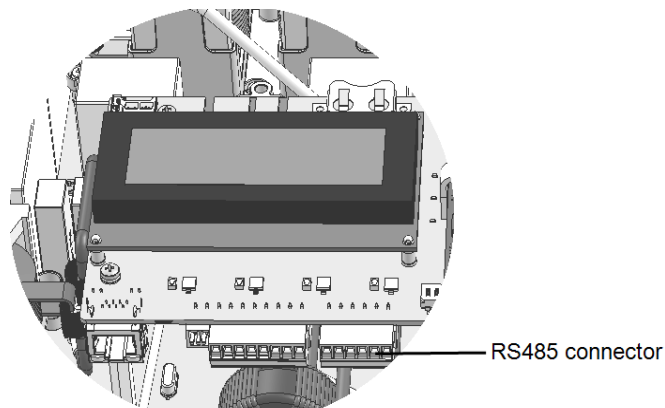
Figure 2: RS485 Connection in the inverter

5 Replace the middle bolt that connects the power board to the chassis with the standoff supplied with the kit (see Figure 3).

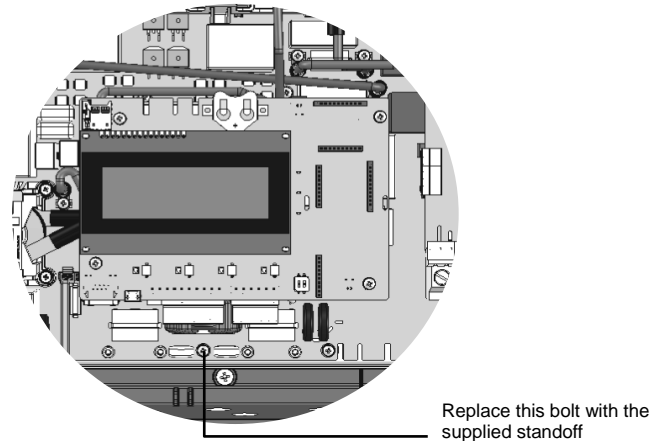Replace this bolt with the supplied standoff

Figure 3: Bolt that connects the power board to the chassis

6 Insert the surge protection board's connectors into the communication board socket, applying light pressure (see Figure 4). Make sure the connectors are firmly inserted.

7 Align the surge protection board on the standoff and fasten board using the removed bolt.
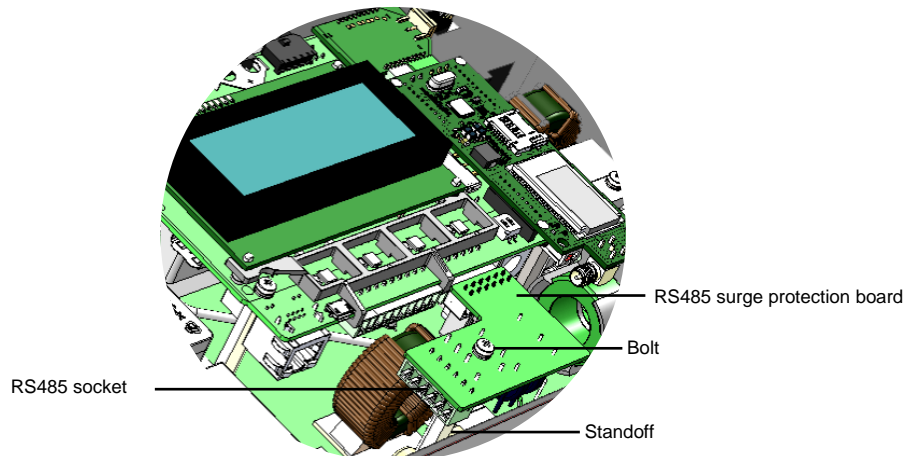

RS485 surge protection board

Bolt

RS485 socket

Standoff

Figure 4: RS485 surge protection board installed

8 Connect the 6-pin connector with the wires to the RS485 socket on the surge protection board.

9 Close the inverter cover.

10 Turn ON the AC to the inverter.

11 Turn the inverter ON/OFF switch to ON.