

Replacement of Communication Connector in the Synergy Unit of the Three Phase Inverter with Synergy Technology

This manual describes how to replace the Communication Connector in the Synergy Unit of the Three Phase Inverter with Synergy Technology.

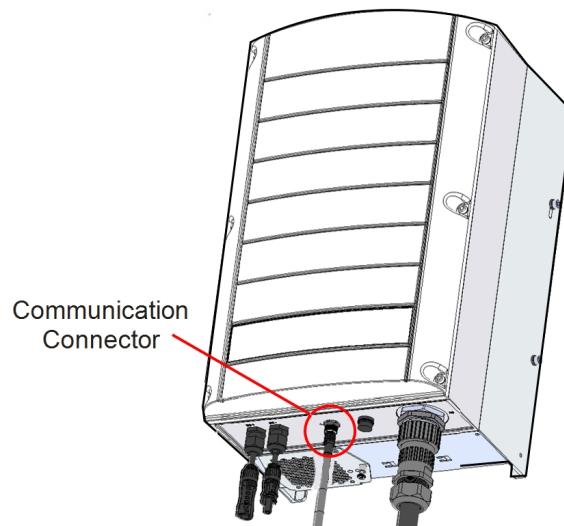


Figure 1: Communication Connector of the Synergy Unit

Kit Contents

- Communication harness

Required Tools

- Torque wrench with 5 mm hex bit
- Wire cutter
- 3 mm flat-blade screwdriver
- 18 mm (3/4 inch) open-end wrench
- 18 mm (3/4 inch) open-end torque wrench

Removing the Inverter Cover

1. Turn the ON/OFF/P Switch of the Synergy Manager to OFF (0). Wait for five minutes for the DC Voltage inside the inverter to drop to a safe level before proceeding to the next step.

WARNING!



The inverter cover must be opened only after switching the inverter ON/OFF/P switch located at the bottom of the inverter to OFF. This disables the DC Voltage inside the inverter. Wait five minutes before opening the cover. Otherwise, there is a risk of electric shock from energy stored in the capacitors.

AVERTISSEMENT!

Ne pas ouvrir le couvercle de l'onduleur avant d'avoir coupé l'interrupteur situé en dessous de l'onduleur. Cela supprime les tensions CC et CA de l'onduleur. Attendre cinq minutes avant d'ouvrir le couvercle. Sinon, il y a un risque de choc électrique provenant de l'énergie stockée dans le condensateur

2. Turn OFF the DC Disconnect Switch on the Synergy Manager. (This step is only applicable for Synergy Manager with ON/OFF/P Switch)
3. Disconnect the AC to the inverter by turning OFF the circuit breakers on the distribution panel.
4. Remove the Allen screws that secure the cover of the Synergy Unit and carefully pullout the cover.

CAUTION!

When removing the cover, make sure not to damage the internal components. SolarEdge will not be held responsible for any components damaged as a result of incautious cover removal.

ATTENTION!

Lors du retrait du couvercle, assurez-vous de ne pas endommager les composants internes. SolarEdge ne peut être tenue pour responsable des composants endommagés à la suite d'une imprudence dans le retrait du couvercle.

Removing the Communication Harness

→ To remove the communication harness:

1. Disconnect the Communication Cable from the Synergy Unit (See Figure 2).

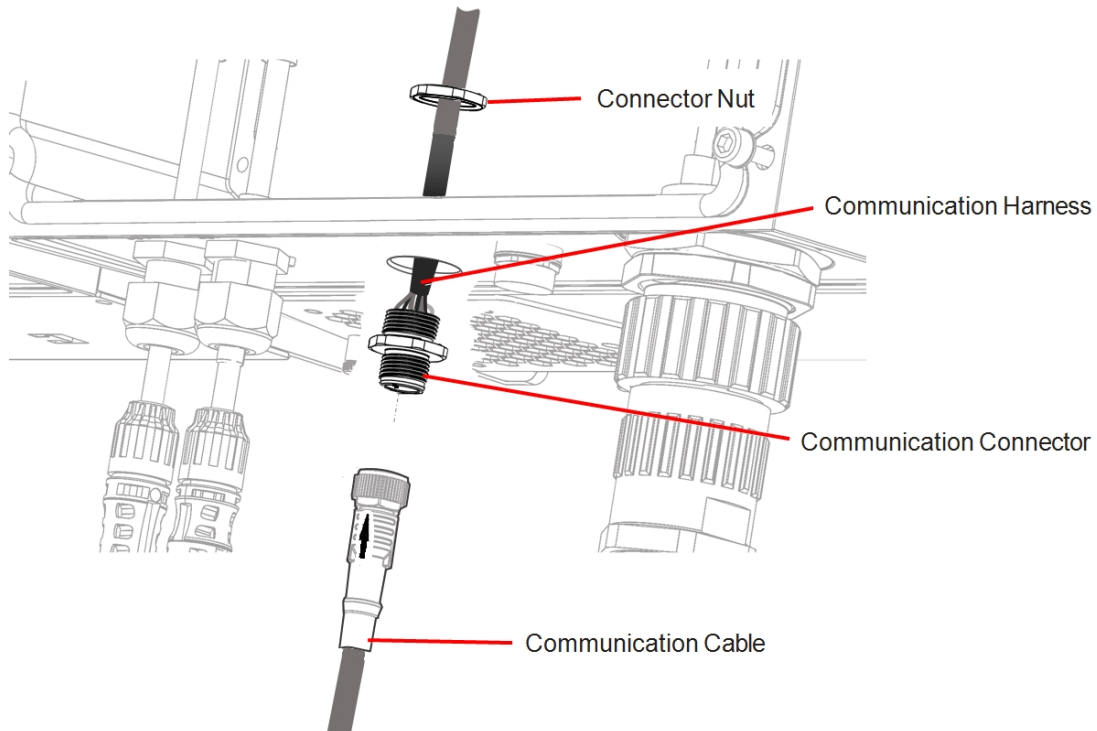


Figure 2: Removal of the Communication Harness

2. Disconnect the Communication Harness connectors from the Power Board.

NOTE

If the Communication Harness is connected to the Power Board by three connectors, cut the Cable Tie that secures the harness wires (See Figure 3).

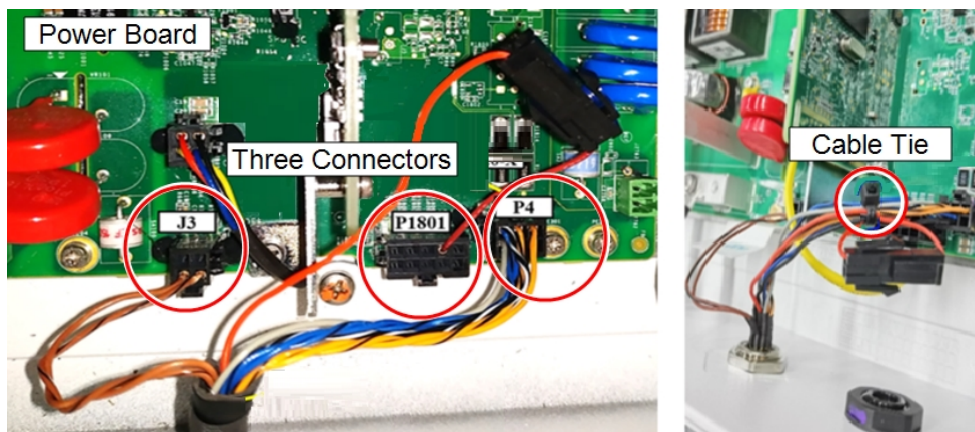


Figure 3: Communication Harness with Three Connectors

3. Release the Connector Nut that fastens the Communication Connector to the housing of the Synergy Unit and remove the Communication Harness.

**NOTE**

Remove the harness from Synergy Unit by separately passing the harness connector(s) through the Connector Nut.

Installing the Replacement Communication Harness

→ To install the replacement communication harness:

1. Pass the connectors of the replacement Communication Harness through the Connector Nut and plug the connectors to the Power Board.

NOTE

If the Communication Harness has three connectors *Figure 3*, perform the following steps:

1. Plug connector J3.
 2. Plug connector P4.
 3. Plug connector P1801 and verify that it is fully inserted and secured.
2. Insert the replacement Communication Connector into the hole in the Synergy Unit and fasten the Connector Nut to a torque of 1.5 N*m / 13.3 lb*in (See *Figure 2*).

IMPORTANT NOTE

Verify that the guide of the Communication Connector is oriented as shown in *Figure 4*

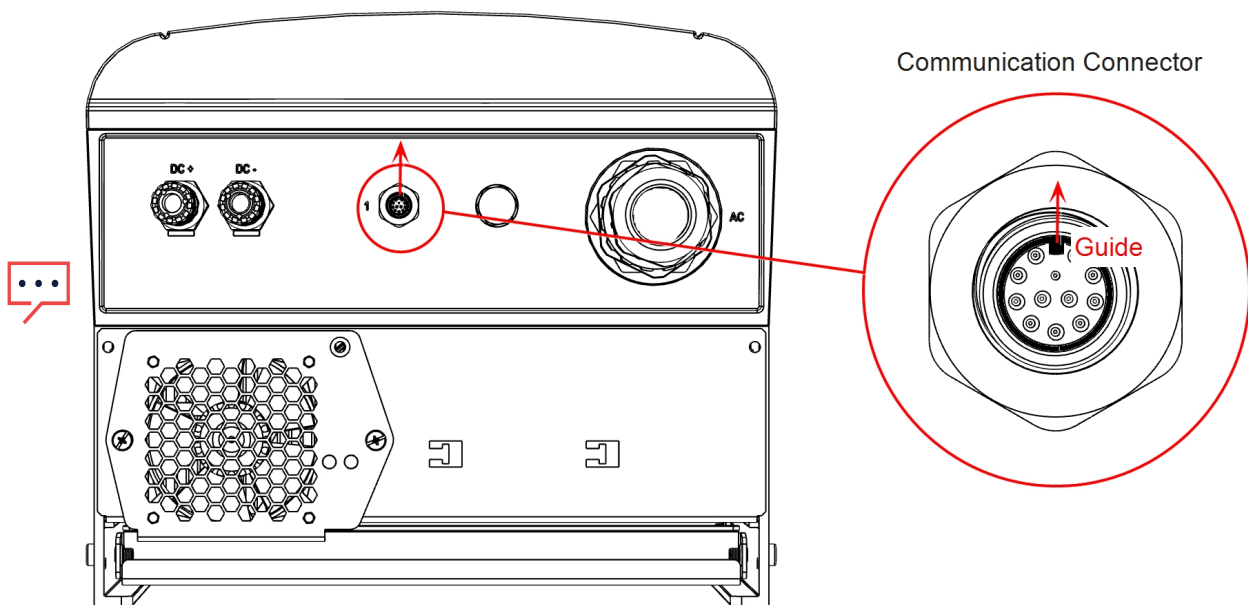


Figure 4: Communication Connector - Guide Orientation

3. Connect the Communication Cable to the Synergy Unit. Note that the arrow on the plug of the Communication Cable is aligned with the guide inside the Communication Connector (See *Figure 2*).
4. Close the inverter cover and fasten the six Allen screws to a torque of 3.5 N*m (30 lb*in).