



Support Kit - IRA Compliant Communication Connector Replacement - Three Phase Synergy Inverters

PN: FLD-3PH-SU-COMM-M12

Version 1.0

June 2025

MAN-01-01274-1.0

Revision History

Version	Date	Description
Version 1.0	June 2025	Initial release

About

This Support Kit describes how to replace the Communication Connector PN: FLD-3PH-SU-COMM-M12 in the Synergy Unit of the Three Phase Inverter with Synergy Technology.

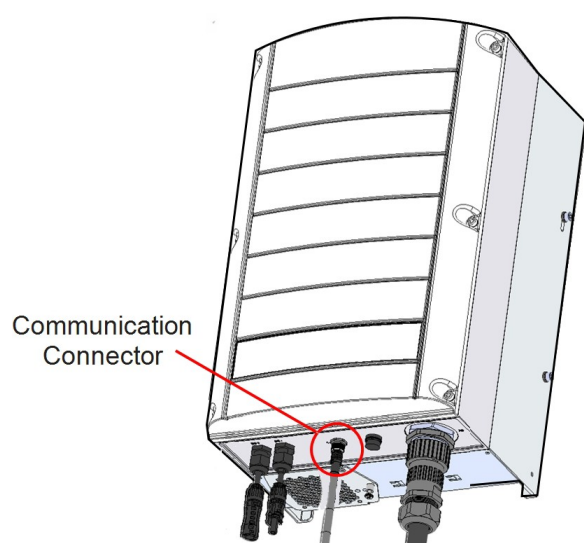


Figure 1 Communication Connector of the Synergy Unit

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 0/1/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 1/0/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 0/1/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 pull out 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.
- 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](#)).

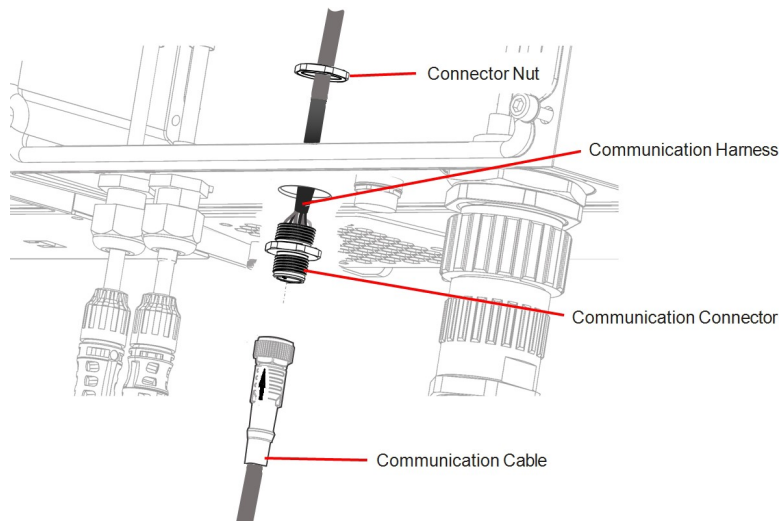


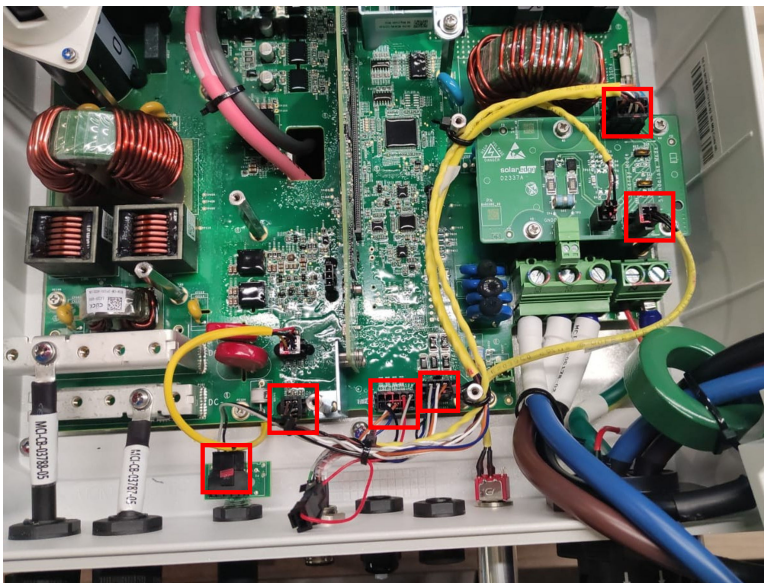
Figure 2: Removal of the Communication Harness

2. Disconnect the six connectors from the communication Harness.



NOTE

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



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 the 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 into the Power Board.



NOTE

If the Communication Harness has three connectors [Figure 3](#), perform the following steps:

1. Reconnect the six connectors.
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

Verify that the guide of the Communication Connector is oriented as shown in [Figure 4](#)

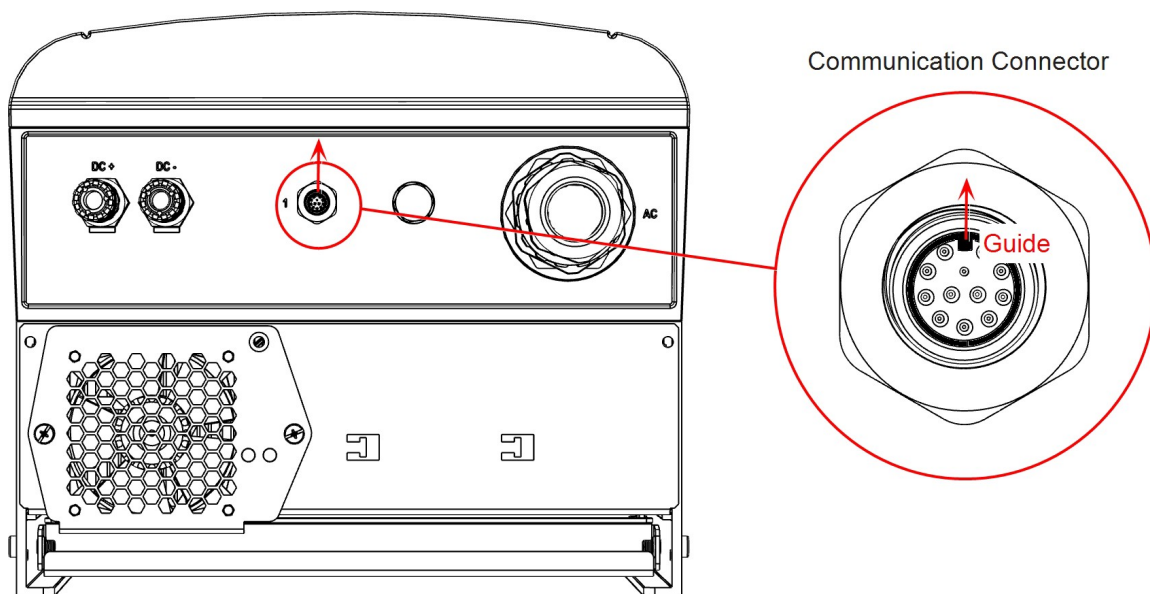


Figure 4: Communication Connector - Guide Orientation

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).