Application Note: SolarEdge Energy Bank Connection and Configuration

Here you can find information on how to connect the SolarEdge Energy Bank ("the battery") to a SolarEdge inverter and configure it using SetApp after the commissioning.

Connecting DC and Communication Cables

For setting up communication between the battery and the inverter, SolarEdge strongly recommends using SolarEdge Energy Net. If for some reason SolarEdge Energy Net cannot be used, you can set up communication using an RS485 port, as explained in this section.

Use the following cable types:

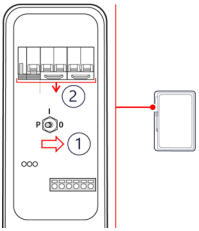
- **DC** - 6 mm^2 (6–10 mm^2), 600V insulated.
- **Communication** - 0.25 mm^2 (0.25–1.5 mm^2), 600V insulated or CAT6

WARNING!

Read carefully all handling and safety instructions in the installation guides that come with the battery and the inverter.

WARNING!

Before connecting the battery to the inverter, power off the battery.



SolarEdge Energy Bank

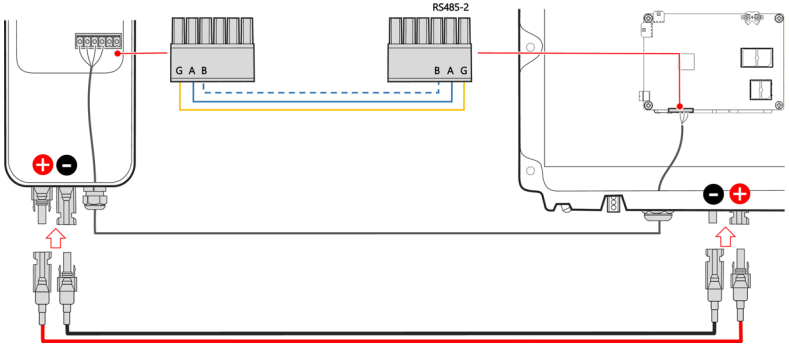
1. Toggle off the battery ON/OFF/P switch.
2. Turn off the battery circuit breaker.

Single Phase Inverter with HD-Wave Technology (for Europe)

→ To connect communication:

1. Connect the communication cable to the battery's RS485 connector as shown below.
2. Open the communication gland at the bottom of the inverter.
3. Feed the other end of the communication cable through one of the gland openings.
4. Remove the RS485 connector from the communication board.

5. Connect the communication cable to the RS485-2 port, as shown below.
6. Close the communication gland with a torque of 5.5 N*m.



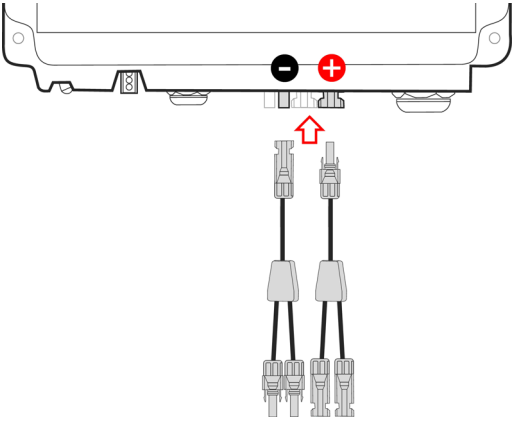
→ To connect DC cables:

1. Connect the DC cables to the battery, as explained in the installation guide that comes with the battery.
2. Connect the other ends of the DC cables to DC inputs at the bottom of the inverter.

WARNING!

Make sure to connect the cables at correct polarity. Connecting the cables at reverse polarity may result in damage to the inverter or battery.

If both pairs of DC inputs are already occupied by PV strings, use branch connectors (not provided, available from SolarEdge).



3. Proceed with the battery installation, as explained in the battery installation guide.

Running a Battery Self-test

You can run a battery self-test only after finishing the battery installation and configuration (refer to the battery installation guide).

The purpose of the battery self-test is to check the battery's charge and discharge functionality.

→ To run a battery self-test:

1. Make sure the battery's circuit breaker switch is ON.
2. Switch the inverter ON/OFF/P switch to ON.

4. Wait for all tests to complete and check the results in the summary table.
   If any of the tests have failed, see the table below for possible solutions:

Test Results	Solution
Charge failed	Check that the power and communication cables between the battery and inverter are properly connected.
Discharge failed	Check that the power and communication cables between the battery and inverter are properly connected.
Communication	Check that the communication cables between the battery and inverter are properly connected.
Inverter switch is off	Switch the inverter ON/OFF/P switch to ON.

→ To show the last test results:

- Select **Commissioning** > **Maintenance** > **Diagnostics** > **Self-Test** > **Battery Self-Test** > **Show Last Results**.