

SolarEdge CSS OD Aux Power board for EMS replacement - Support kit manual

This manual describes the procedure for replacing the Auxiliary power board in the Battery cabinet of the CSS OD.

Revision history

Version 1.0, November 2024: Initial release

Kit contents

HMI Auxiliary power board PN: FLD-CSS-OD-BC-HMIAX-01

Required tools

- Insulated tools
- Insulated gloves
- Insulated shoes

Shut down the system

There are two versions of the system: On-grid system and the Backup Interface (BUI) system. The procedure for shutting down the system differs depending on the installed system.

On-grid system

Turn off all AC circuit breakers supplying the battery cabinet and the air conditioner.

Shut down the Battery inverter

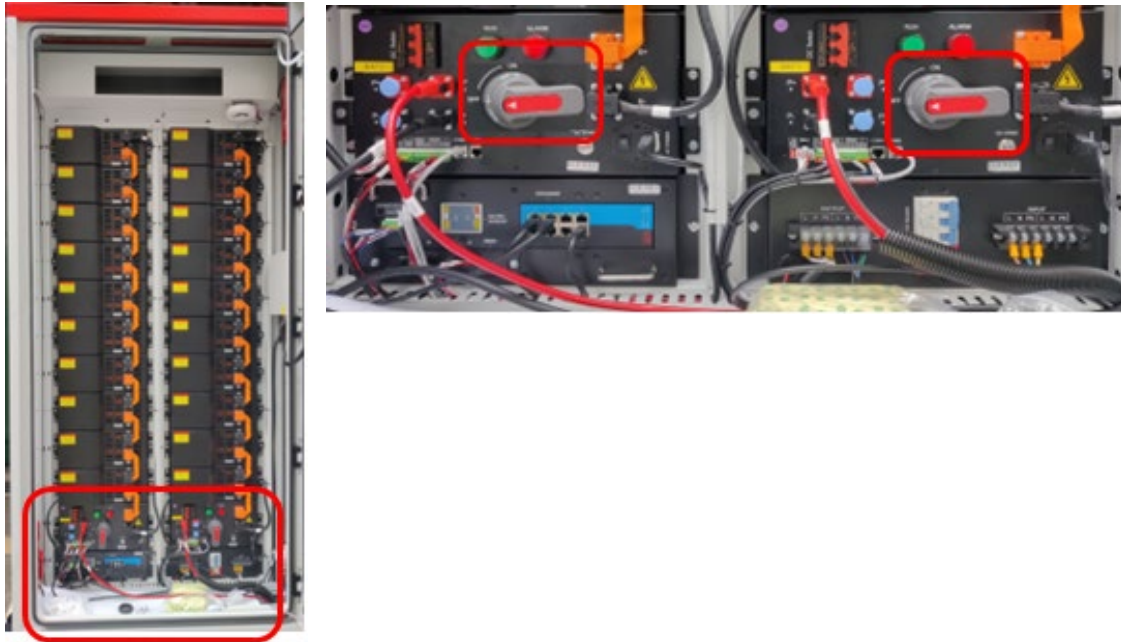
At the bottom of the battery inverter, turn OFF (counterclockwise) the two (2) black PCS DC switches.



Inverter switches

Shut down the Battery cabinet

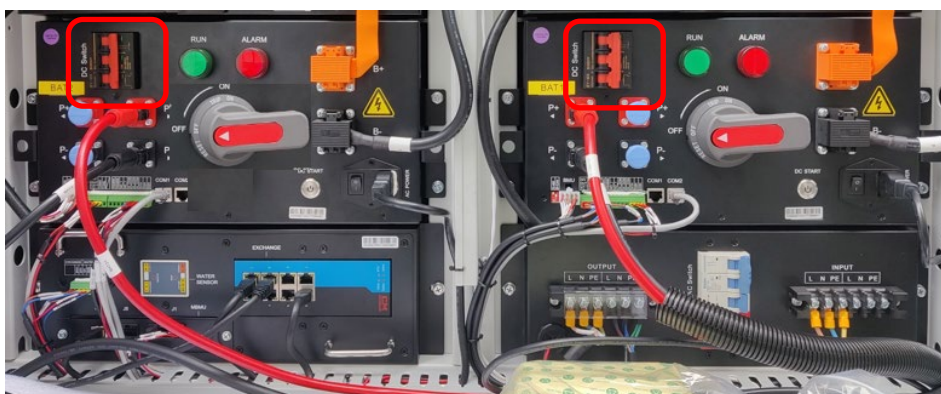
1. Open the battery cabinet door and keep it open using the support bar located inside the cabinet.
2. Turn off the two red and grey high voltage switches.



3. Turn off the two blue AC switch (move it to the right).



4. Turn OFF both red DC switches by moving them to the right.



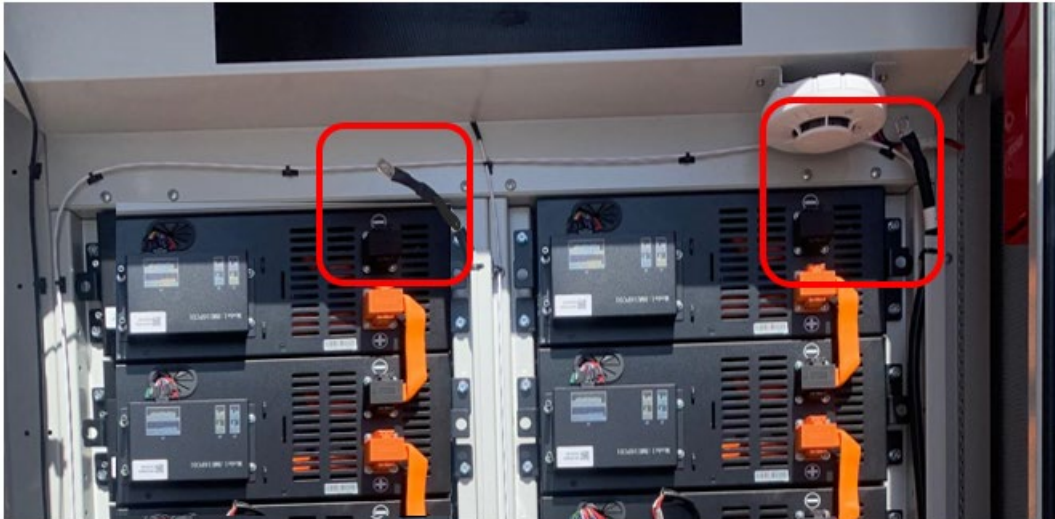
When the circuit breaker switches are turned OFF, the High Voltage Box indicator light is OFF.



5. Ensure that the inverter indicator lights are OFF.



6. Disconnect the black cables from the top of the battery strings on both sides of the battery cabinet, as shown below.



7. Disconnect the black cables from the bottom of the battery strings on both sides of the battery cabinet.

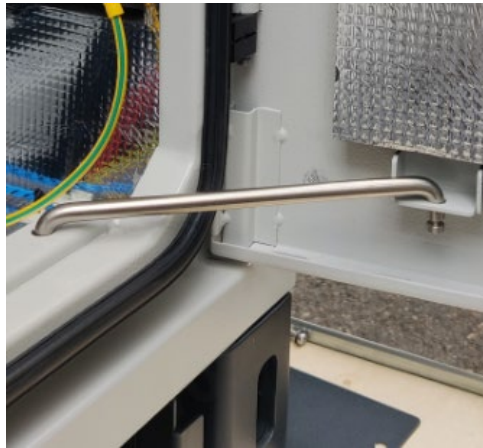
**WARNING!**

Be aware that each individual battery is still “live” at 52V.

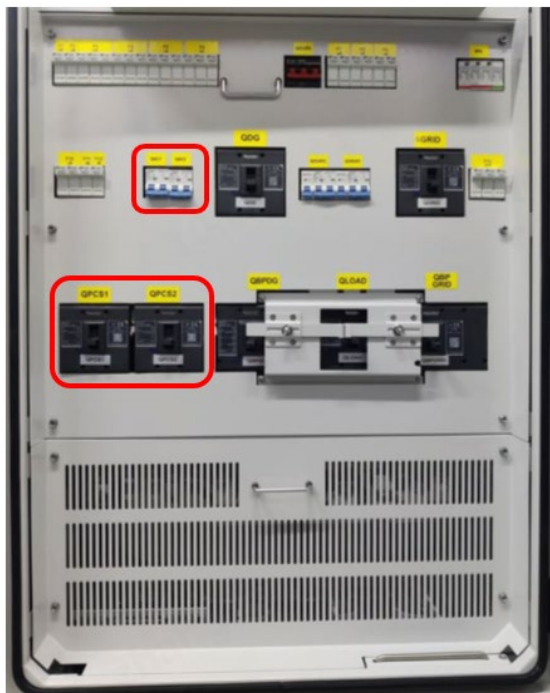
BUI system

Shut down the BUI

1. Turn off the grid AC circuit breakers supplying the BUI.
2. Open the Backup Interface (BUI) door and keep it open using the support bar located inside as shown in the picture below.



3. Turn off the circuit breaker switches labeled QAC1, QAC2, QPCS1, QPCS2.



4. Close the BUI door and turn the door handle 90° clockwise.
5. Lock the door using the key provided.

Shut down the Battery inverter

Refer to the steps in Shut down the Battery inverter.

Shut down the Battery cabinet

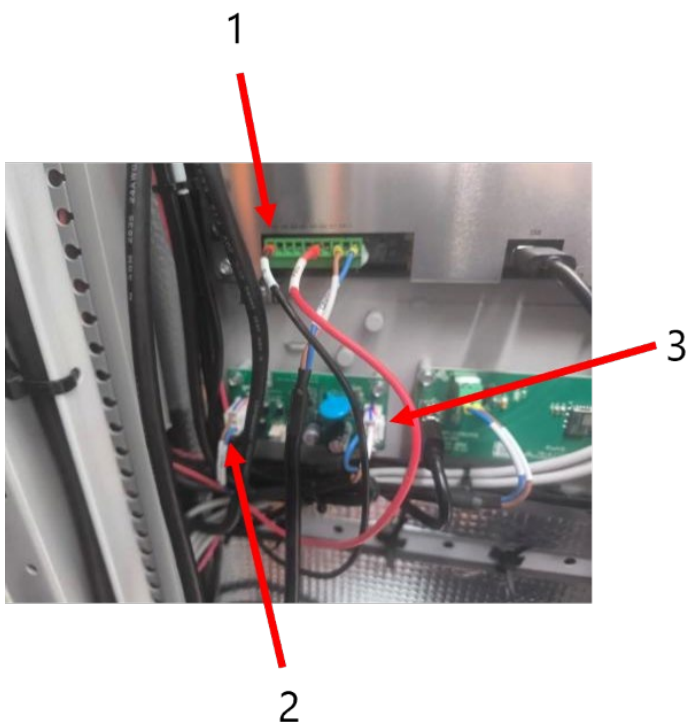
Refer to the steps in Shut down the Battery cabinet.

Replace the LCD Auxiliary power board

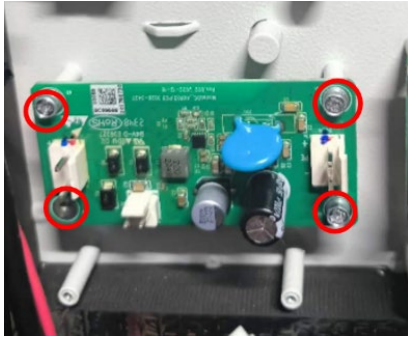
1. Using a Philips screwdriver, at the rear of the Battery cabinet door, loosen the three screws on the rear cover of the LCD screen.



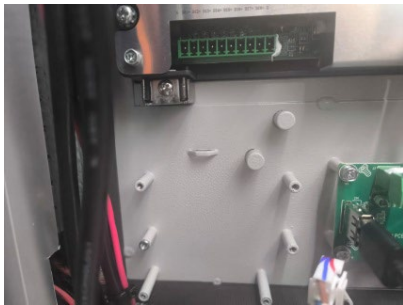
2. Remove the rear cover.
3. Disconnect connectors 1, 2, and 3.



4. Using a Philips screwdriver, loosen the four screws on the auxiliary power board.



5. Remove the old auxiliary power board from the standoffs.



6. Align and place the new auxiliary power board on the standoffs.



7. Insert and tighten the screws using a Phillips screwdriver.
8. Reconnect connectors 1, 2, and 3.
9. Place the rear cover back in position.
10. Insert and tighten the screws using a Phillips screwdriver.



Power on the system

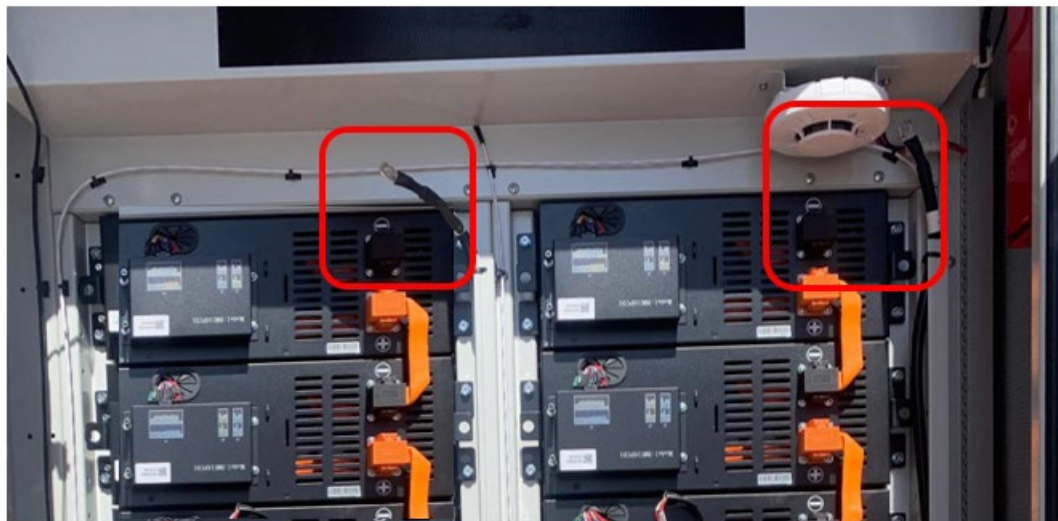
On-grid system

Power on the Battery cabinet

1. Reconnect the black cables at the bottom of the battery strings on both sides of the battery cabinet.



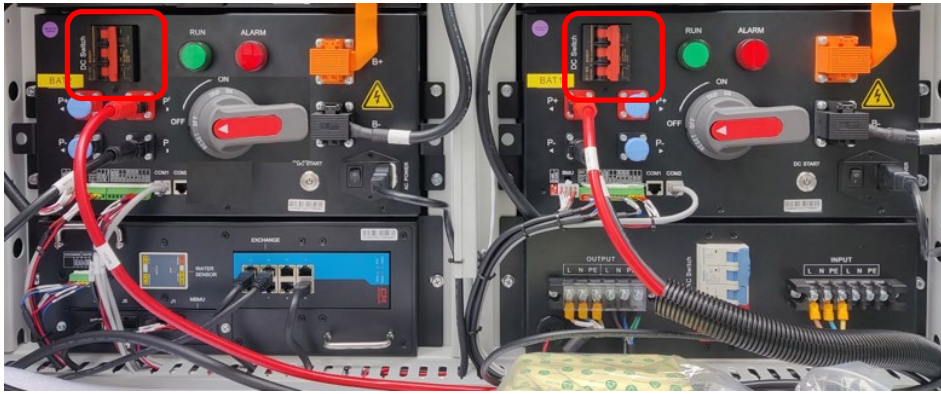
2. Reconnect the black cables at the top of the battery strings on both sides of the battery cabinet, as shown below.



WARNING!

Be aware that each individual battery is still "live" at 52V.

3. Turn ON the two red circuit breakers.



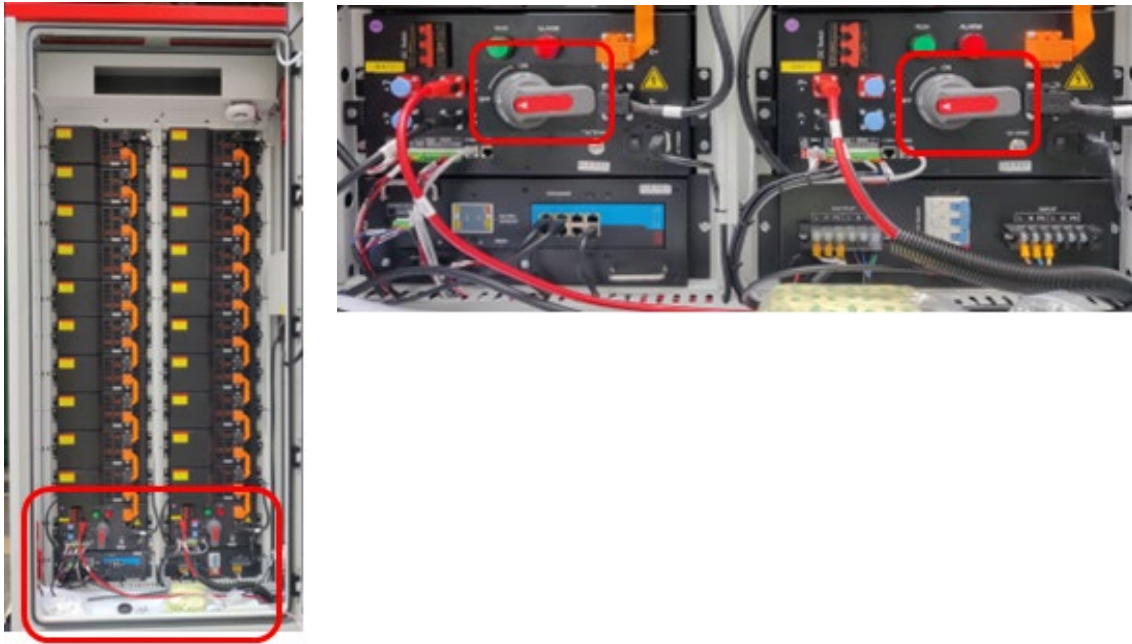
4. When these circuit breakers are turned ON, the High Voltage Box indicator lights are ON.



5. Turn on the blue AC switch (move it to the left).



6. Turn on the two red and grey high voltage switches.



7. Remove the support bar keeping the door open and close the battery cabinet door.

Power on the Battery inverter

1. At the bottom of the battery inverter, turn ON the two (2) black PCS DC switches.





Inverter switches

2. Ensure that the inverter indicator lights are ON.



3. Power on all AC circuit breakers supplying the battery cabinet and the air conditioner.

BUI system

Power on the Battery cabinet

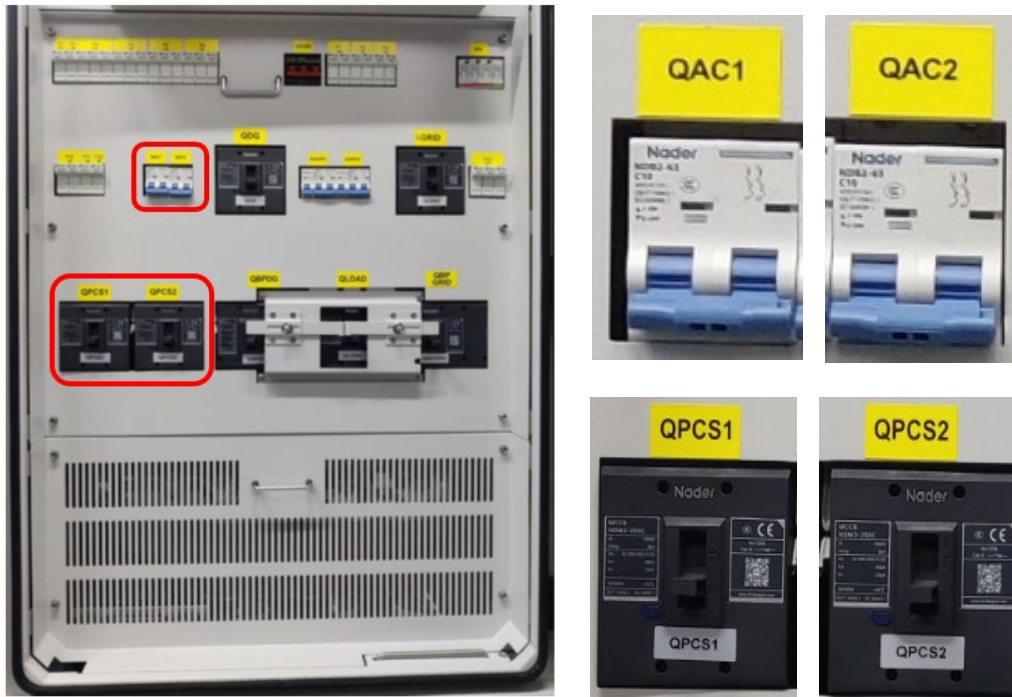
Refer to the steps in Power on the Battery cabinet.

Power on the Battery inverter

Refer to the steps in Power on the Battery inverter.

Power on the BUI

1. Unlock the door using the key provided.
2. Open the Backup Interface (BUI) door and turn the door handle 90° counterclockwise.
3. Turn on the circuit breaker switches labeled QAC1, QAC2, QPCS1, QPCS2.



4. Remove the support bar keeping the door open and close the BUI door and as shown in the picture below.



5. Turn on the grid AC circuit breakers supplying the BUI.