

REV: 03/2023

SolarEdge Energy Hub Inverter with Battery Backup

How to Power Cycle when the system shuts down due to a power draw overload in battery backup mode

If the inverter is overloaded, when in battery backup mode it will initiate a system shutdown. This is why it is very important to turn off major loads even if the system successfully switches to battery backup mode.

When the system is either in or switching to battery backup mode, if the system detects an overdraw of instantaneous power (kW) the system will continue to try to initiate backup mode up to 5 times within a couple of minutes. If it is unsuccessful due to the current loads, the inverter will go into a **Lock State** which will need a hard reset in order to resume normal operation.

System owners **must turn off major loads** before using the following steps.

You should **only follow these steps** when the system has shut down due to a grid power outage

- > AND the inverter did not successfully switch to battery back up
- > AND you have waited five minutes for the inverter to switch to battery backup
- AND you have turned off the breakers associated with significant loads (air source heat pumps, electric hot water heaters, electric dryers, electric oven, motors, car chargers, electric baseboard heating, etc.)

Once you have turned off significant loads You must follow the steps **in the exact order** listed below:

Check off these squares as you complete each step in the process

□ **1.** Turn off the inverter toggle switch on the left-hand side of the inverter by pushing the switch to the right, labeled the "O" position

□ 2. Wait five minutes

- □ **3.** Turn off the DC disconnect on the inverter, the big dial on the front of the lower section of the inverter by rotating the dial on front counterclockwise to "off"
- □ 4. Open outer plastic cover of the battery disconnect by sliding the two tabs to the right, located on the left side of each battery
- **5.** Open inner plastic cover of the battery disconnect by sliding tabs to the right.

- □ 6. Push the battery(s) toggle switch to the right, the "O" position
- □ 7. Turn off battery(s) DC breaker by pushing the breakers down. All breakers on one battery will move at the same time)
- **8.** Turn off the Inverter AC disconnect (via the indoor or outdoor AC disconnect)
- □ 9. Pull down on the Main Breaker Switch in the lower left hand corner of the SolarEdge Backup Interface.

□ 10. Wait 30 seconds

- □ **11.** Turn on Inverter AC Disconnect
- □ **12.** Turn on battery(s) DC breaker by pushing the breakers up (all breakers on one battery will move at the same time)

□ 13. Wait 60 Seconds

- □ **14.** Turn on the battery(s) toggle switch by pushing it to the left, placing it in the center or "l" position
- □ **15.** Close inner and outer plastic covers. The tabs slide to the left.
- □ **16.** Turn on the DC disconnect on the inverter by twisting the dial clockwise to the ON or vertical position
- □ **17.** Turn on the toggle switch of the inverter by pulling the toggle switch to the left, place it in the middle or "I" position
- □ **18. Wait five minutes** to see you have power to your critical loads.
- □ 19. If the inverter is powering your critical loads use the MySolaredge app to view consumption and reserve power left in the battery. Manage your usage accordingly considering future weather predictions and potential snow coverage on the modules.
- □ **20.** Push up on the Main Breaker Switch in the lower left hand corner of the SolarEdge Backup Interface.

These systems are designed to back up critical loads like basic lighting, refrigeration, and internet as the monitoring system works via internet connectivity. Think glorified camping. Use non-electron-based forms of heat while the grid is down. Oil/gas furnaces and wood pellet stoves do use electricity, but significantly less than air source heat pumps (mini-splits) or baseboard electric heating systems.

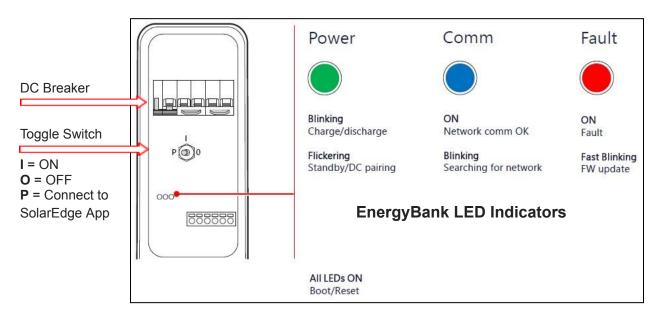
The loads that **your** system can sustain when the grid is down will depend on a number of factors including the temperature/time of day/weather patterns when the outage

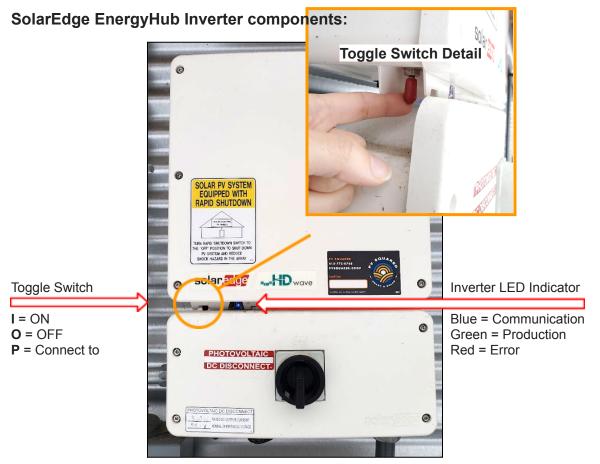
occurs. Generally speaking, your energy storage system is unlikely to provide backup power to:

- electric-based heating/cooling systems (HVAC)
- electric vehicle charging
- electric stove/oven
- hot tubs/pool pumps (depending on type)
- some well pumps (depending on size/capacity)

Simulating a power outage is a good practice to get to know your system, and be better prepared for when the grid is down.

SolarEdge EnergyBank Access Panel components:





Inverter Dial	(DC Power	on/off)
---------------	-----------	---------

Vertical = ON Horizontal = OFF