! DISCLAIMER !

THIS SHORT GUIDE IS **NOT** A SUBSTITUTE FOR PROPER TRAINING!

IT IS A **REQUIREMENT** TO COMPLETE THE COURSES DESCRIBED OVER PAGE

OR **WARRANTY COVER** AND **SUPPORT** MAY BE REFUSED!

solaredge

REQUIRED EDGE ACADEMY COURSES

Essentials & Home Battery Courses

- Use or create a user account
- Login to EDGE Academy
- Installers, Operations & Sales
- **60 CPD points for both courses**
- **Trusted Installer status**

Prerequisite

Required

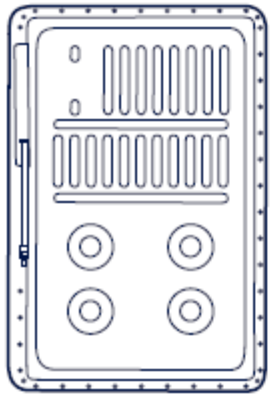
EDGE Academy Enrolment Guide
https://solared.ge/AcessEdgeAcademy

SolarEdge Home Battery- Technical Certification - AUS

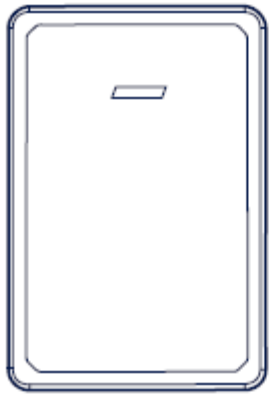
Installing the SolarEdge Home Battery

solaredge

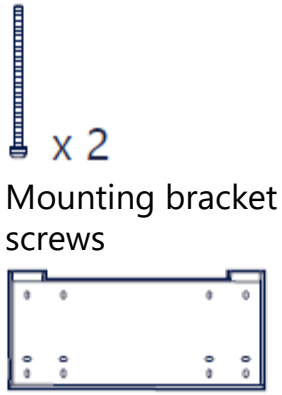
What's in the Package?



SolarEdge
Home Battery

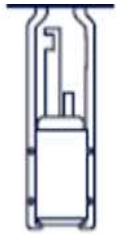


Decorative
cover

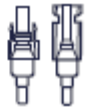


Mounting bracket screws

Mounting
bracket



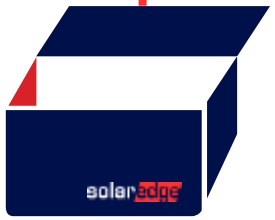
Fire
extinguisher



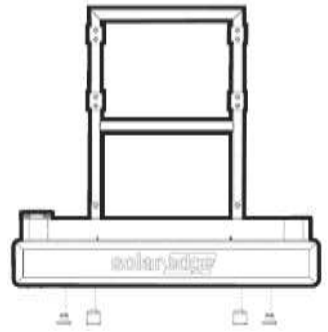
MC4
connectors

Cover
screws

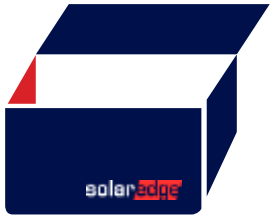
Conduit
holder



Installation
Guide

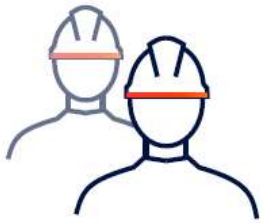


Battery
Floor Stand



⚠ Optional

Required Personnel and Tools



Min 2 qualified installers

MC4 crimper

Drill

x 4

Handles (available from SolarEdge)

min 2

Mounting screws - max M10

DC cable 600V insulated

Dolly with lift and ratchet straps

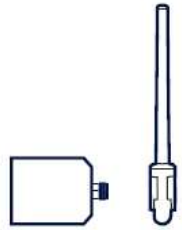
Torque wrench

Phillips screwdriver

Level

x 2

Branch connectors (optional, available from SolarEdge)
***Only needed when installing 2 batteries**



SolarEdge Energy Net plug-in (available from SolarEdge)

solaredge

Don’t forget to bring:

- **ENET card for wireless communication between the battery and inverter**
- **Re-useable Handle kit**
- **Twin 6mm bootlace ferrules**
- **Security/star shaped allen keys for the backup interface**

CONNECT THE AC EARLY!

Work SMART not hard

solaredge

Connect AC to the inverter early

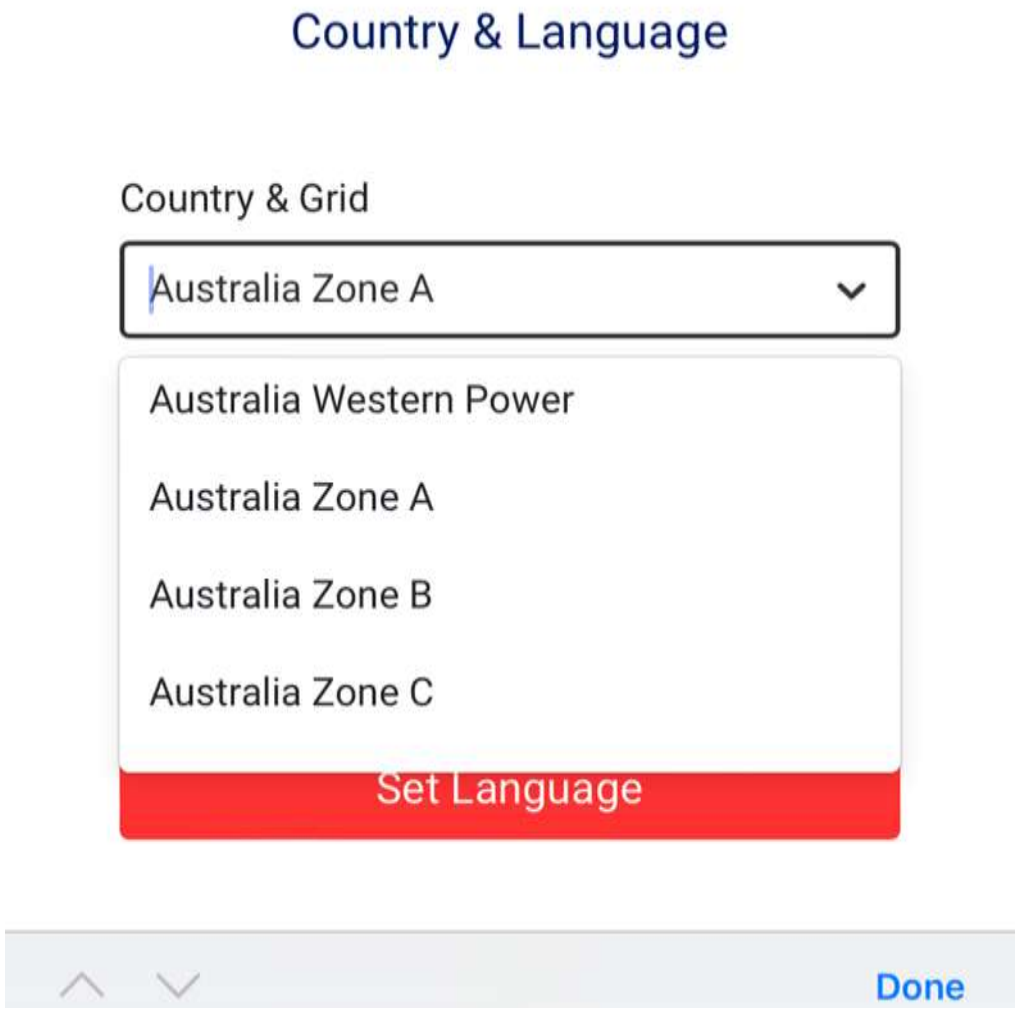
There are THREE restarts required to fully install the system

- **First Power up**
  - Update inverter firmware (10-15 minutes saved from end of day)
  - Connect to Wifi (allow support and your office to assist remotely if needed)
  - Set Grid settings and shut down, ready for DC connections and battery updates
- **Second Power up** pair optimisers
- **Third Power up** commission the battery

solaredge

New Grid settings ready to go

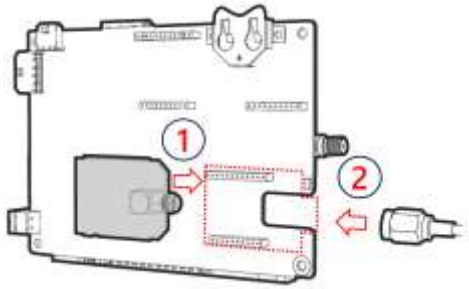
Be sure to select “Australia – Zone A” when commissioning on the east coast



solaredge

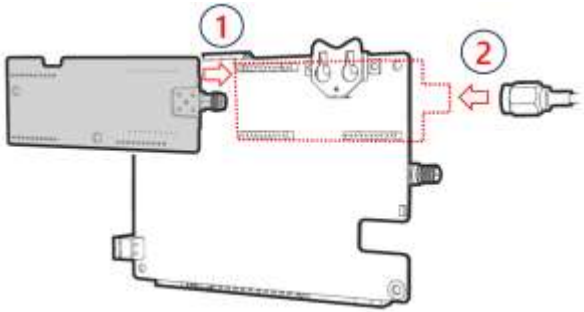
Install your ENET card early, one less update later

Home Network ready inverter
ENET-HBNP-01



- The smaller ENET card **only works with** our newest inverters:
  - **Energy Hub**
  - **Residential 3Ph (-AUB)**
- *(Using this card on these inverters leaves the cellular socket free for other integrations)*

SetApp-enabled inverter
ENET-HBCL-01



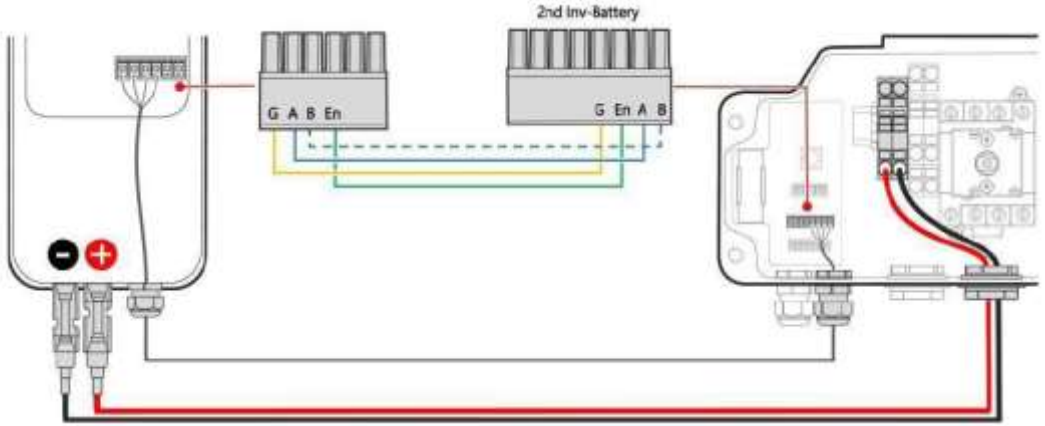
- The larger ENET card **works with most of our inverters** by plugging into the cellular socket.
- *(Cellular plug-in or ZigBee plug-in cannot be installed in parallel)*

solaredge

RS485 Communication if you don't have ENET

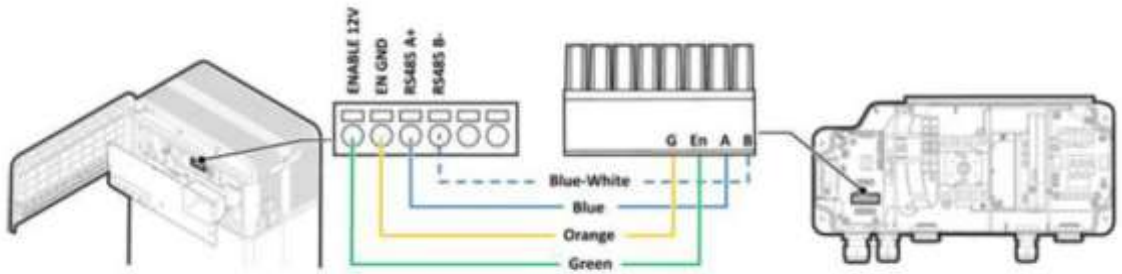
RS485 – SEDG Home Battery

- Secondary option
- Cable type = CAT6
- EN line connection isn't required for Genesis



RS485 – LG Prime

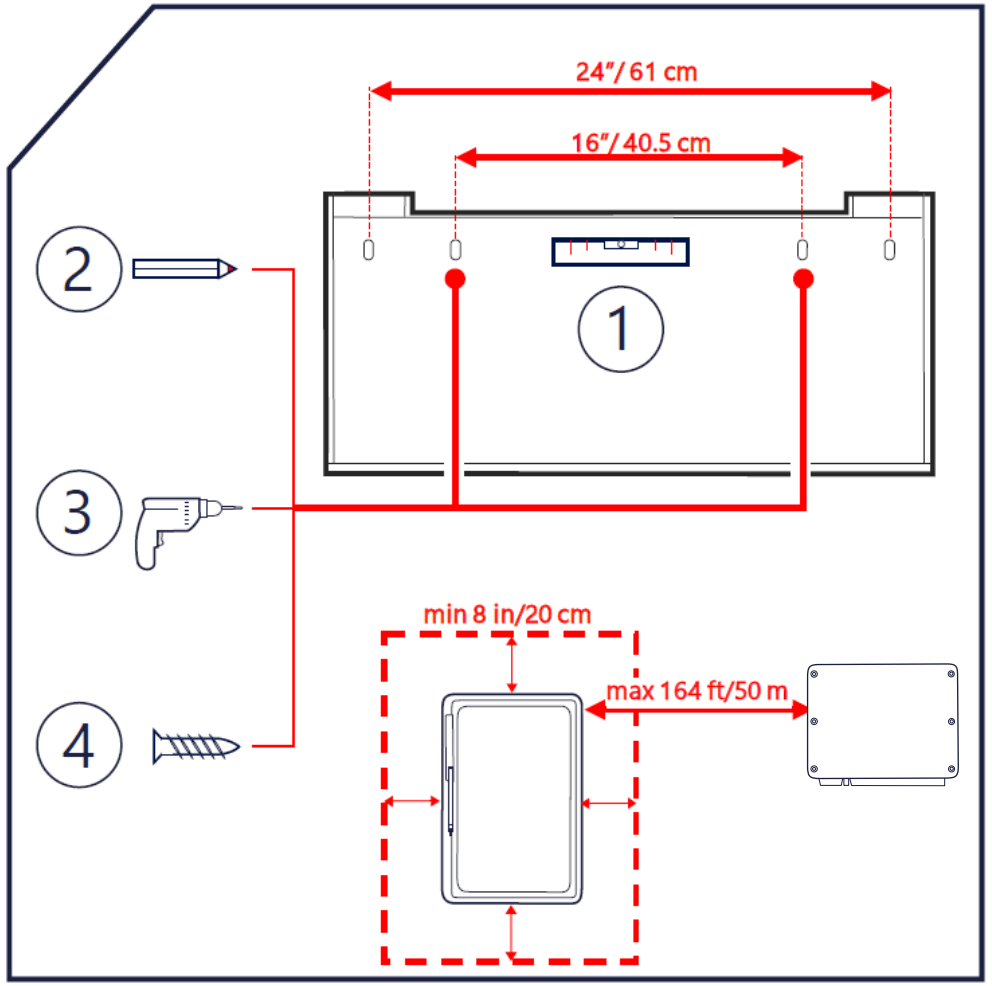
- Secondary option
- Cable type = CAT6
- RS485 bypasses DC Combiner



solaredge

Mounting & Connecting the SolarEdge Home Battery

Install the Mounting Bracket, check clearances



solaredge

Use the optional Floor Mount kit

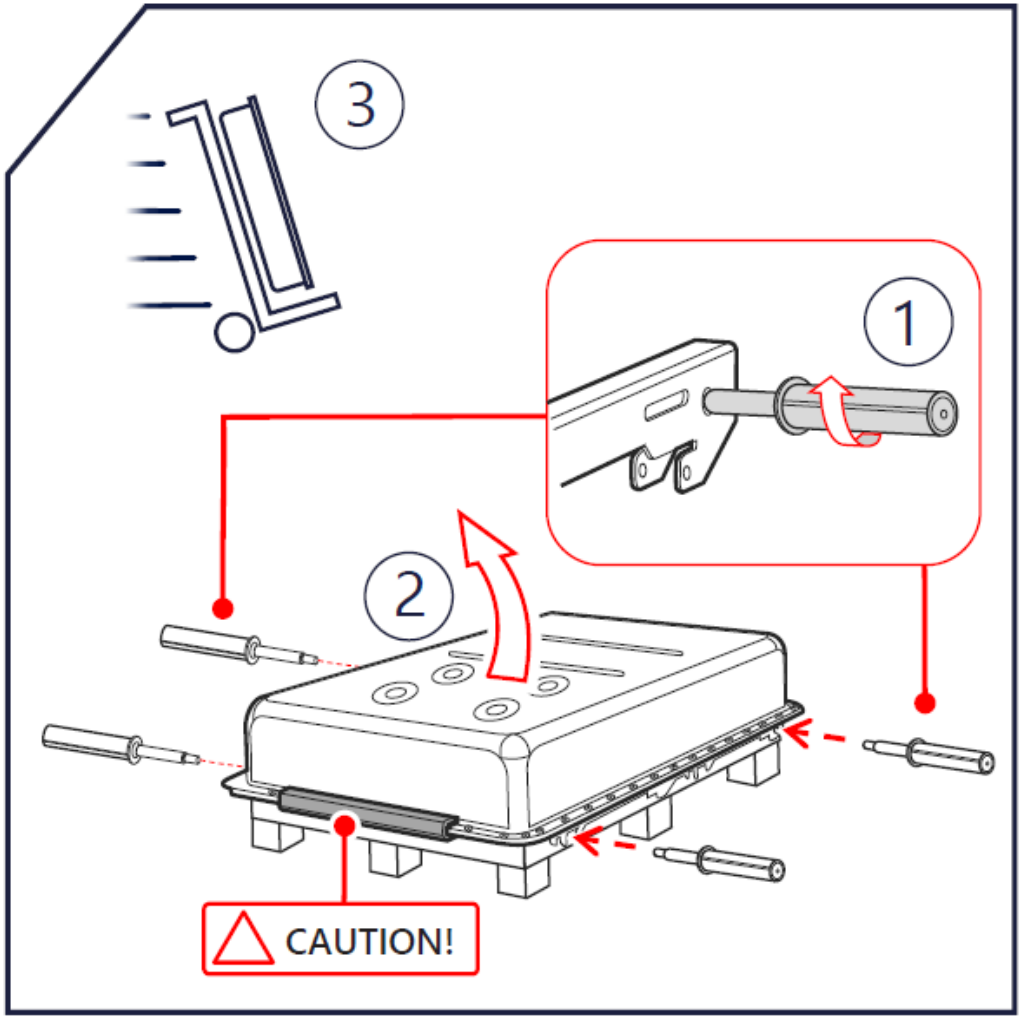
- The Battery includes a wall plate, and with its weight, please only use this on brick walls, **use the floor stand for clad or timber stud walls**
- Each stand supports a single battery and ordered separately
- Mechanical features:
  - 25mm cable entrance (either side)
  - Adjustable leg height
  - Wall (mandatory) or floor (optional)
  - Hidden wire management

Have a Handle kit handy

The SolarEdge battery handle kit contains 4 handles and is sold separately.

Be sure to have one to make your installs easier and safer

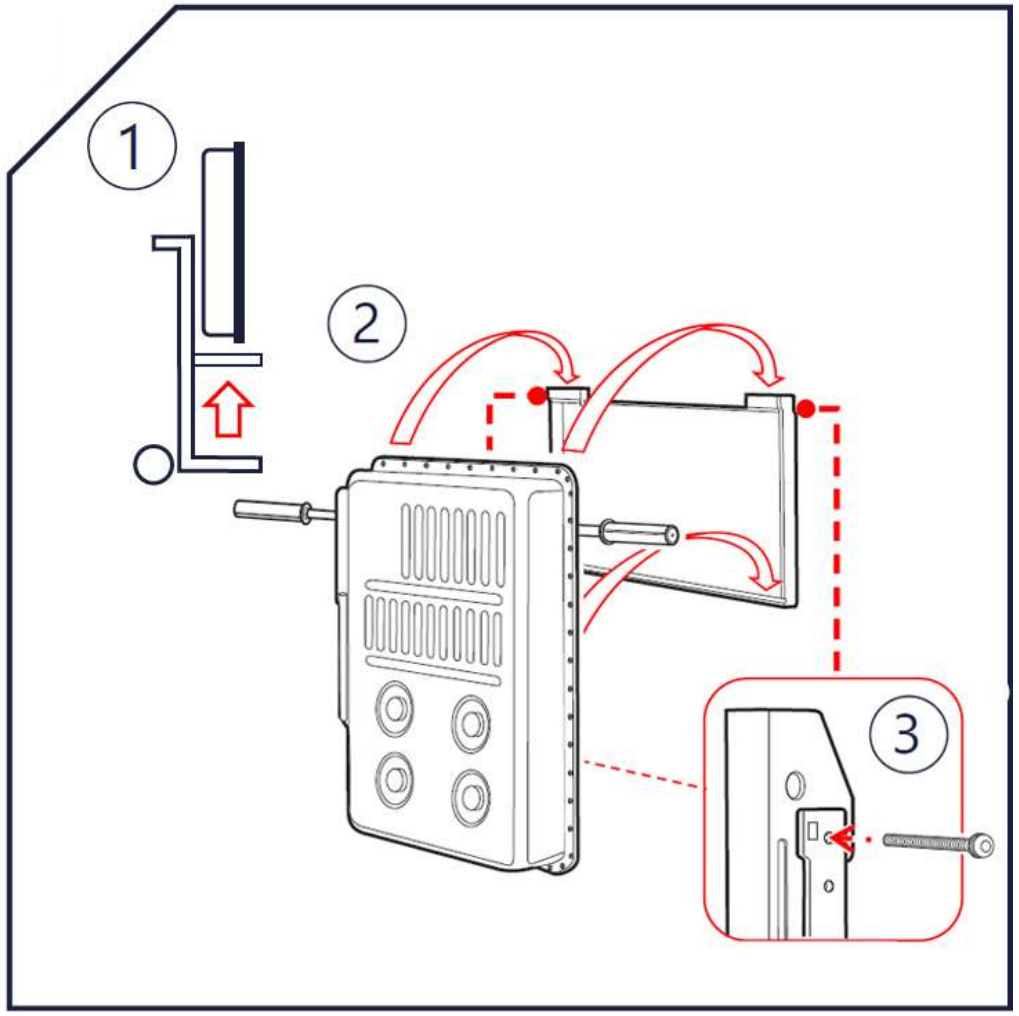
Transport Battery to Installation Location

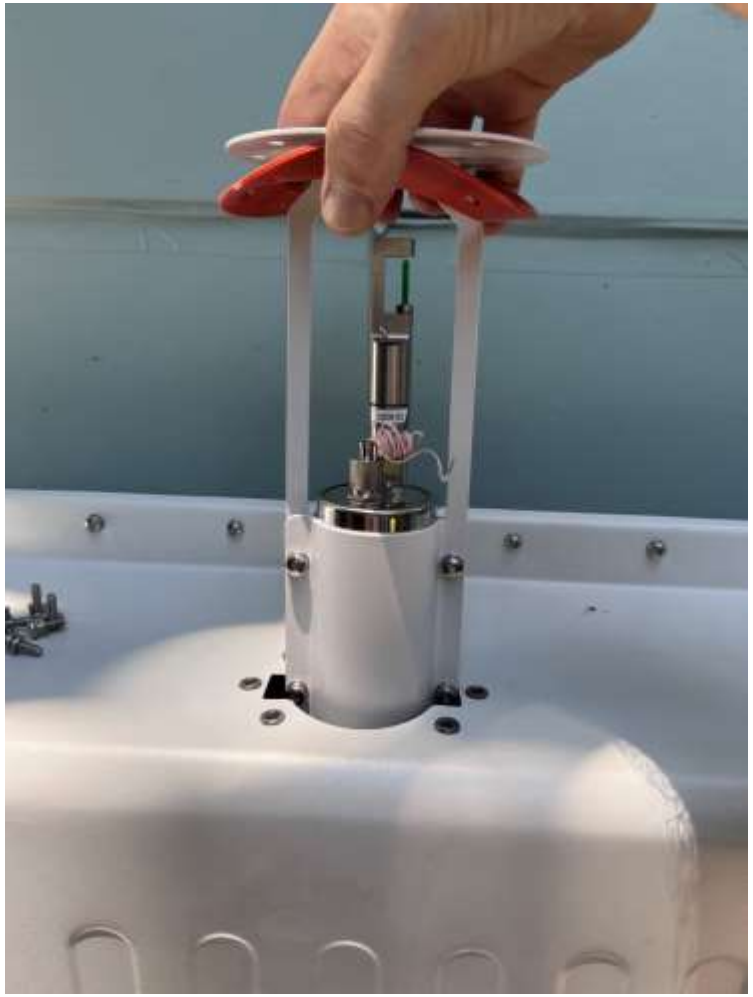


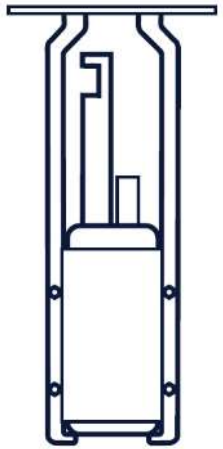
Caution!

Stand the battery on the rubber protector only!

Hang Battery on the Mounting Bracket



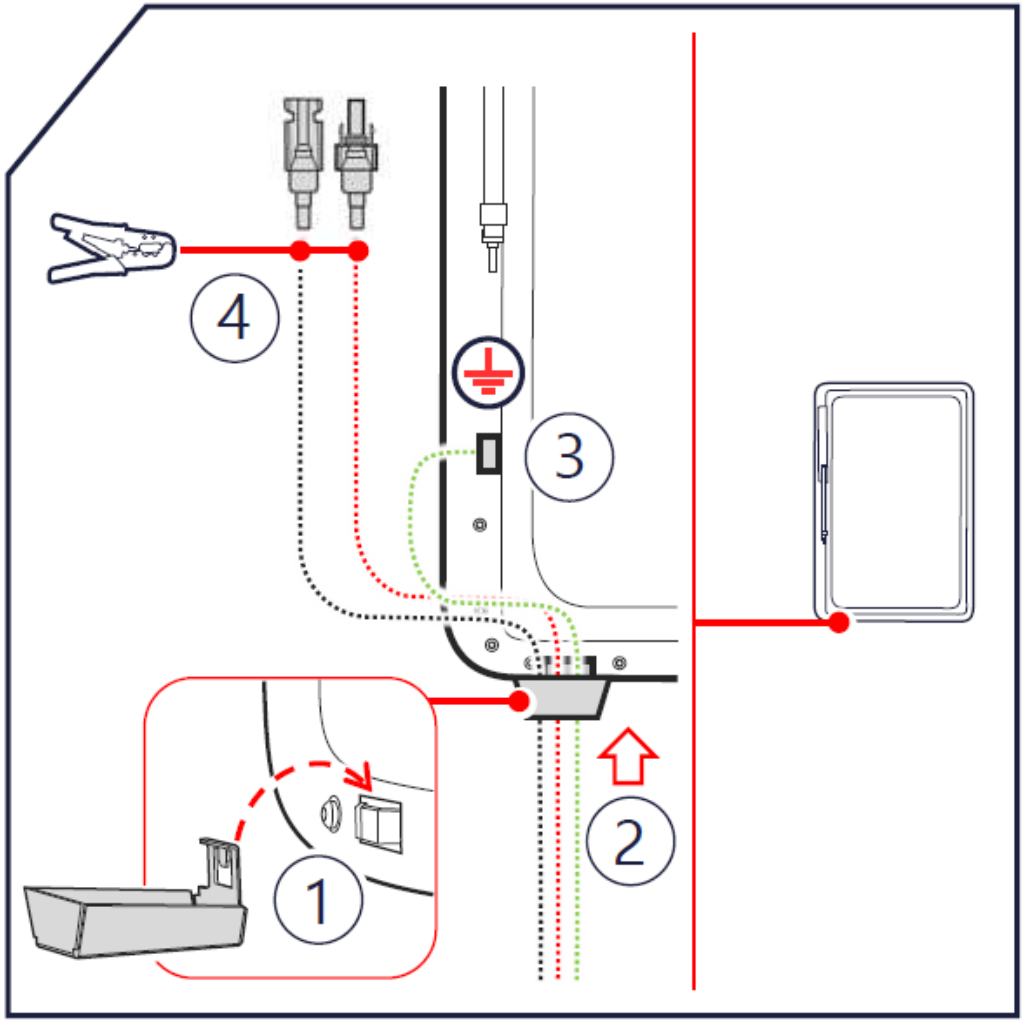




Fire
Extinguisher
No cabling required

solaredge

Prepare DC Cables

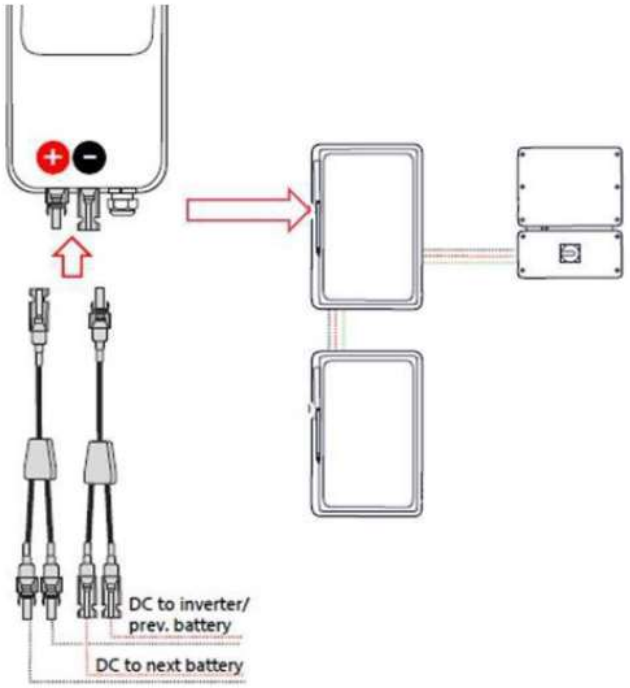


solaredge

Home Battery DC Connections

1 or 2*SEDG Home Batteries

- Single input DC terminal - combination req'd
- Combine PV Arrays external to inverter
- Branch connectors for 2 * Home Batteries



Combine PV & Battery DC Input

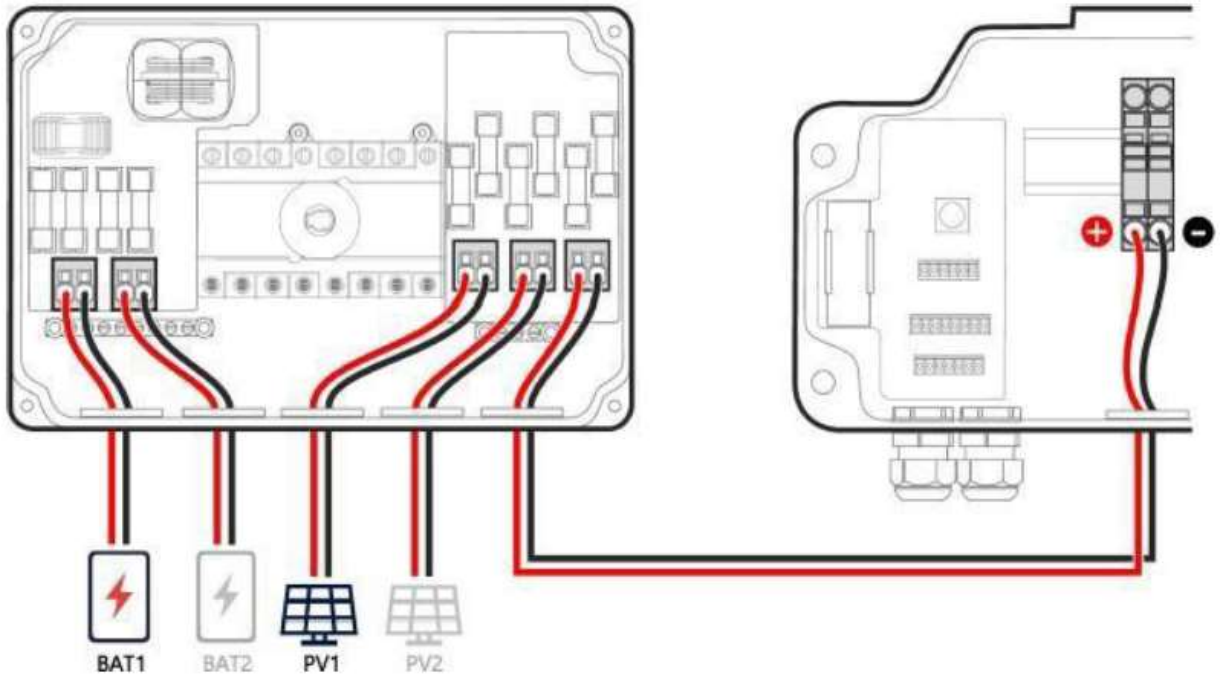
- Use a 2-1 Bootlace Ferrule
- Ensure sufficient length for adequate purchase withing DC connector

solaredge

Home Battery DC Connections

DC Combiner

- Required for all LG Prime installations
- Required for 3*SEDG Home Batteries
- Branch connector for 2nd & 3rd Home Batteries

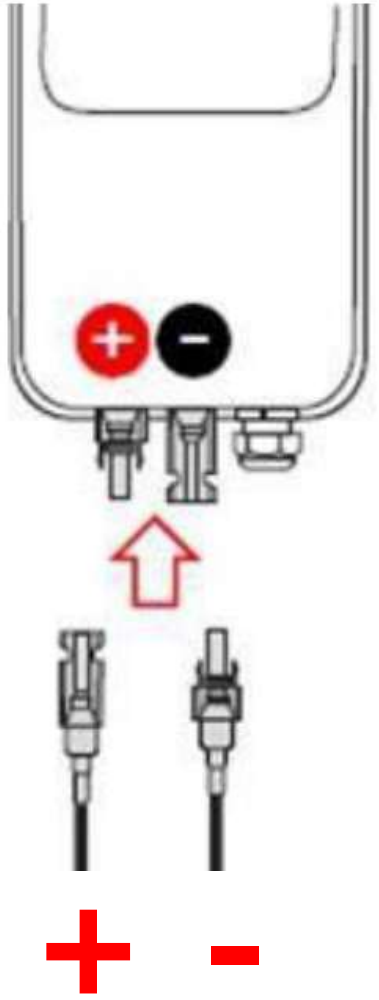


CRITICAL: CHECK POLARITY!

!! CONNECTING THE BATTERY WITH REVERSED POLARITY

CAN IRREPAIRABLY DAMAGE IT

AND IS NOT COVERED UNDER WARRANTY !!



The **POSITIVE** terminal on the battery connects to the **POSITIVE** terminal on the inverter

solaredge

CRITICAL: CHECK POLARITY!

ALWAYS run this test:

1. Connect your rooftop strings and battery DC cables at the inverter
2. Test the battery ends of the cable
3. **Positive SafeDC voltage will show on the cables -** the cable that your positive probe is on **must be connected to the positive terminal on the battery.**
4. Connect the supplied *female mc4* onto your positive DC cable and the *male MC4* onto the negative DC cable

solaredge

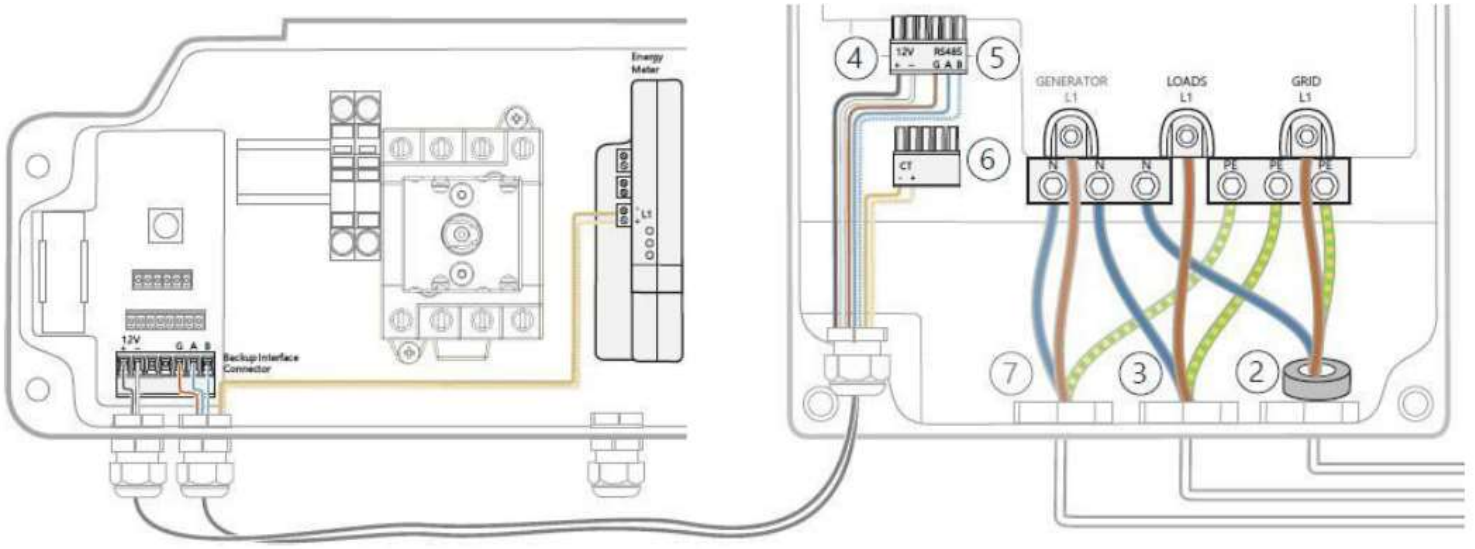
Optional Energy Hub Backup interface

solaredge

Back-Up Interface Communication

Communication Connections

- Connection to Energy Hub inverter required
- Before connection ensure inverter & battery are OFF
- Use a single CAT-6 cable with a min of x4 twisted pairs



CT Connections

- Ensure the following polarity for the CT connections

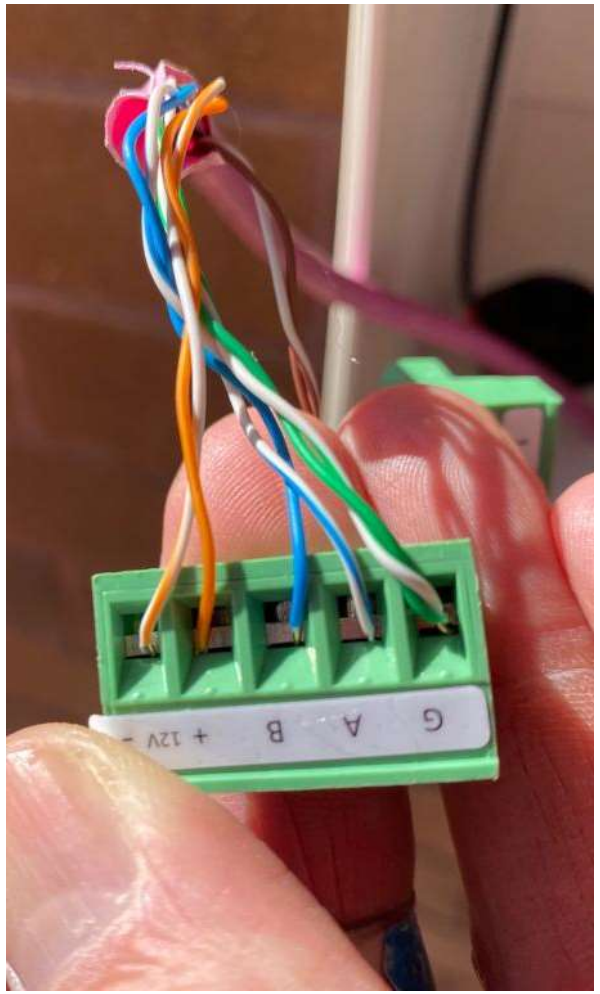
- L1 – Positive
- CT – Negative

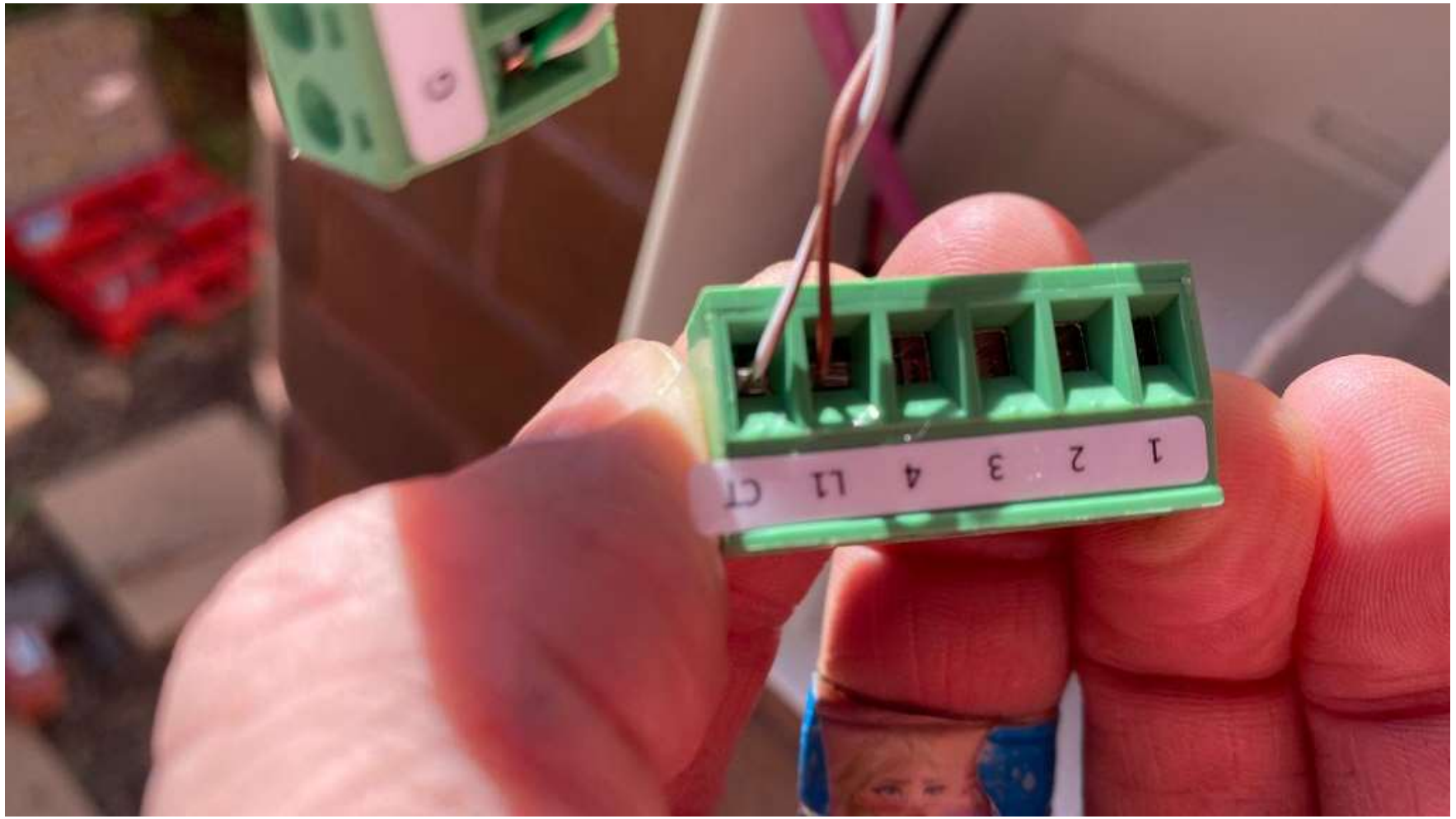
Connection inside DCD Inbuilt Meter

- ● – Positive
- ○ – Negative

solaredge

Connecting the Backup Interface





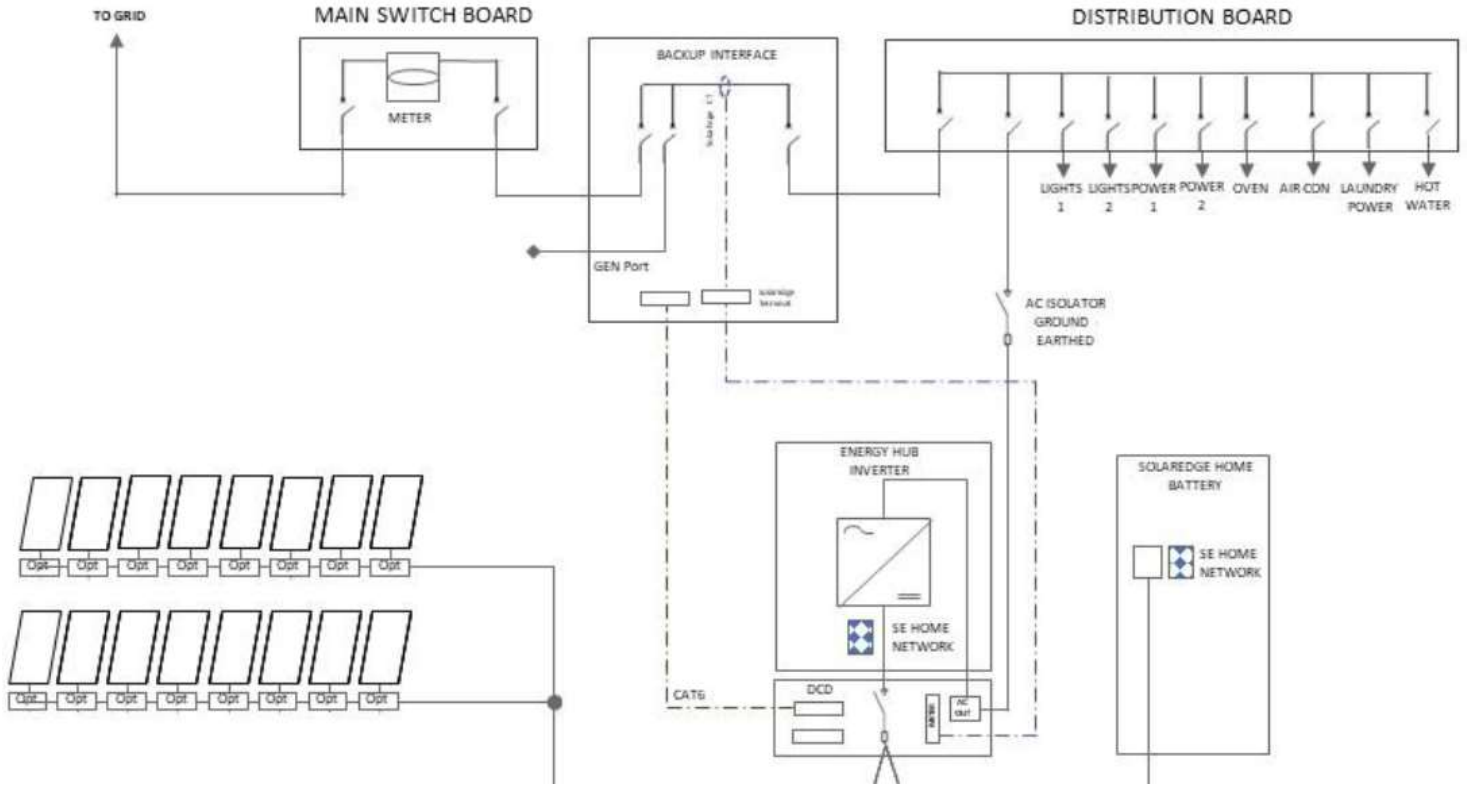
solaredge

Connecting the Backup Interface

CT Configurations

Full Home Backup

- Energy Hub meter = 70A
- Backup Interface = 100A
- Utilise Backup Interface CT
- Update CT rating in SetApp

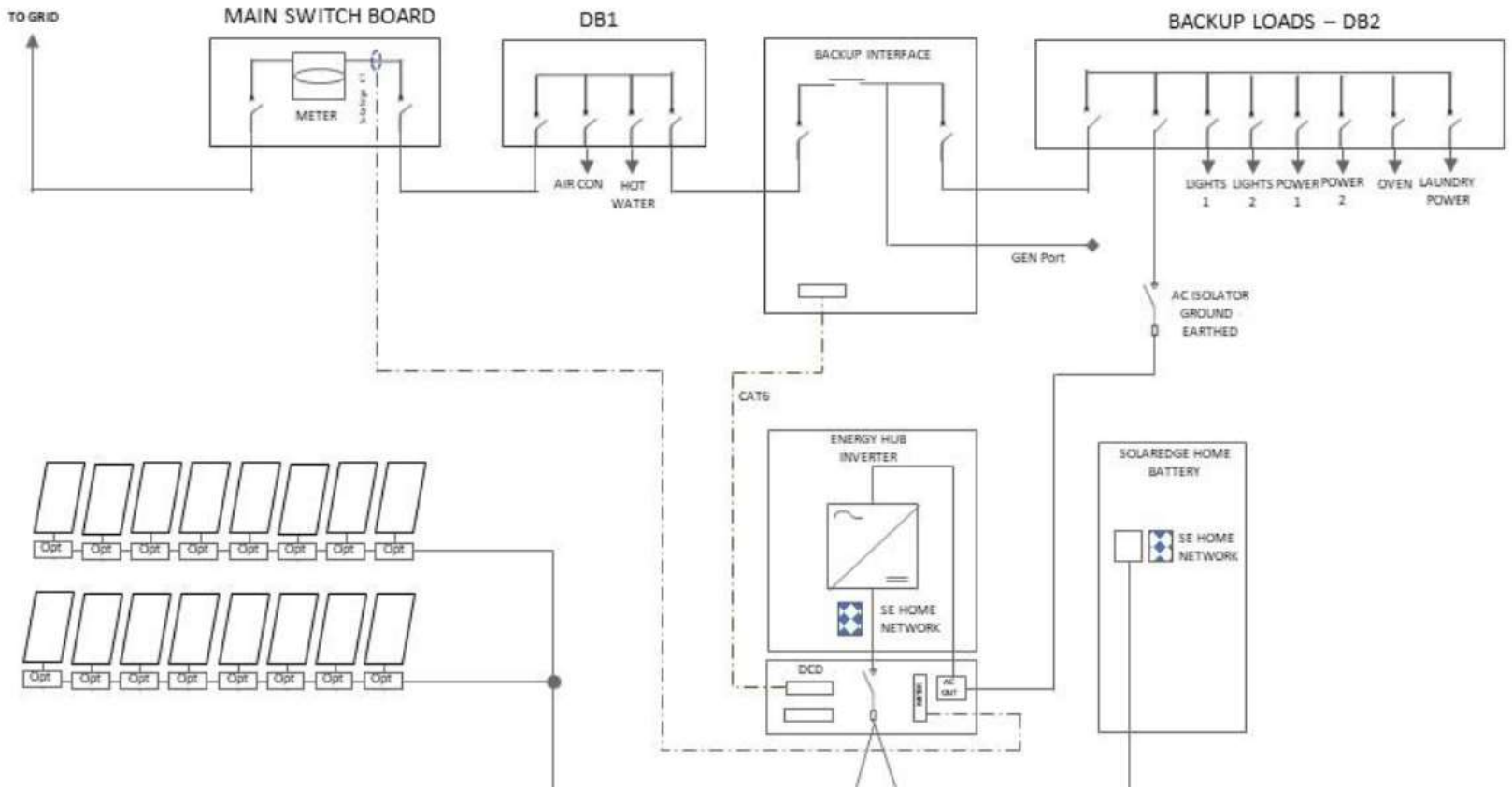


- Select Commissioning > Site Communication > RS485-1 > Modbus Meter > CT Rating > 100A

CT Configurations

Partial Home Back-up

- Utilise Energy Hub 70A CT
- Install at main switchboard

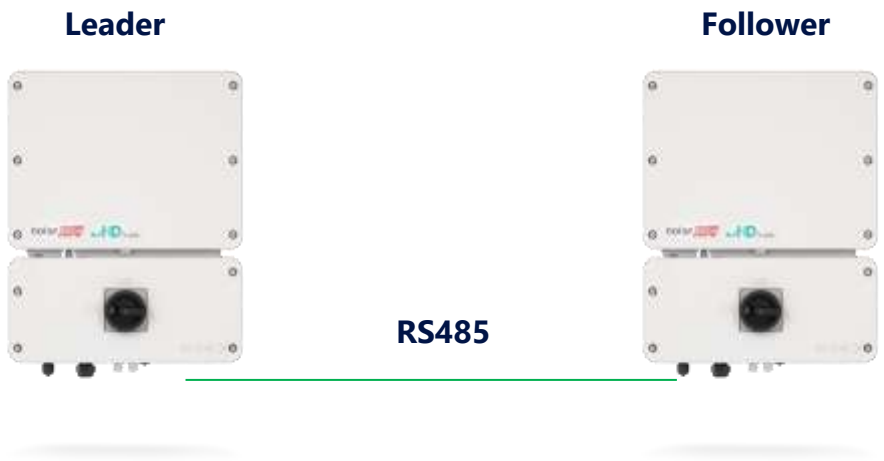


solaredge

Meter Connections

Leader – Follower Configurations

- Meter connection with Leader inverter
- RS485 connection to Followers
- Energy Meter within Follower must be disabled prior to turning on inverter (disconnect RS485 plug)



System Start-up & Shutdown Procedures

System Start-up

→ **To start up the system:**

1. Turn ON the SolarEdge Home Battery MCB.
2. Move the SolarEdge Home Battery toggle to the ON position.
3. Switch to the ON position, the DC Isolator on the DC Combiner (If installed).
4. Switch to the ON position, the DC Isolator on the inverter DCD.
5. Move the SolarEdge inverter toggle to the ON position.
6. Switch to the ON position, the AC to the inverter at the adjacent AC isolator (if installed) and inside the main switch board.

solaredge

System Shutdown

→ **To shut down the system:**

1. Move the SolarEdge inverter toggle to the OFF position and wait until the green LED is blinking, indicating that the DC voltage is safe (<50V), or wait five minutes before continuing to the next step.
2. Switch to the OFF position, the AC to the inverter at the adjacent AC isolator (if installed) and inside the main switch board.
3. Switch to the OFF position the DC Isolator on the inverter DCD.
4. Switch to the OFF position the DC Isolator on the DC Combiner (If installed).
5. Move the SolarEdge Home Battery toggle to the OFF position.
6. Turn OFF the SolarEdge Home Battery MCB.

solaredge

Emergency Shutdown

→ **To shut down the system in case of emergency:**

1. Switch to the OFF position, the AC to the inverter at the adjacent AC isolator (if installed) and inside the main switch board.
2. Switch to the OFF position the DC Isolator on the inverter DCD.
3. Switch to the OFF position the DC Isolator on the DC Combiner (If installed).
4. Turn OFF the SolarEdge Home Battery MCB.

solaredge

Commissioning the SolarEdge Home Battery

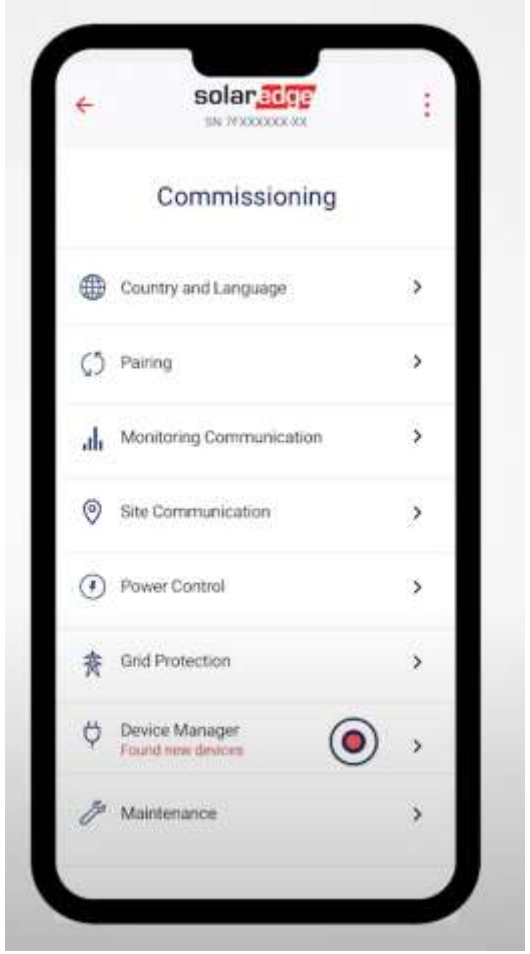
Setapp Commissioning Steps

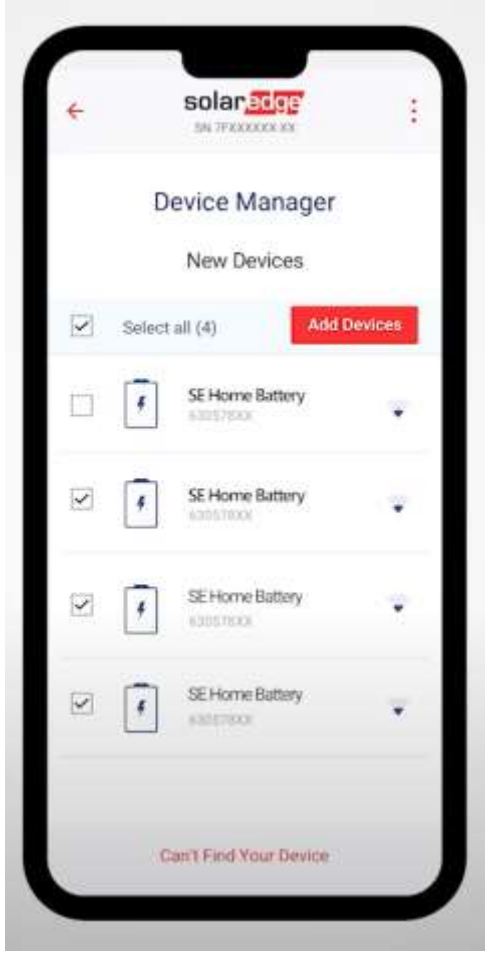
- **First power up:** Inverter firmware update/wifi connection/grid settings
- **Second power up:** Pair optimisers *with the battery turned off*
- **On third inverter power up, make sure battery is turned on first**, as per previous slide and begin the commissioning steps as follows:
  - Add Device
  - Configure and update firmware
  - If using ENET, Associate the battery (skip if using RS485)
  - Run Battery self test
  - Enable Maximise Self Consumption (MSC)
  - Setup backup (optional)

solaredge

Setapp Commissioning Steps

First step: Assuming RS485 connections are correct or ENET is installed, the battery will be available under Device Manager and you can "**Add Device**"





Setapp Commissioning Steps

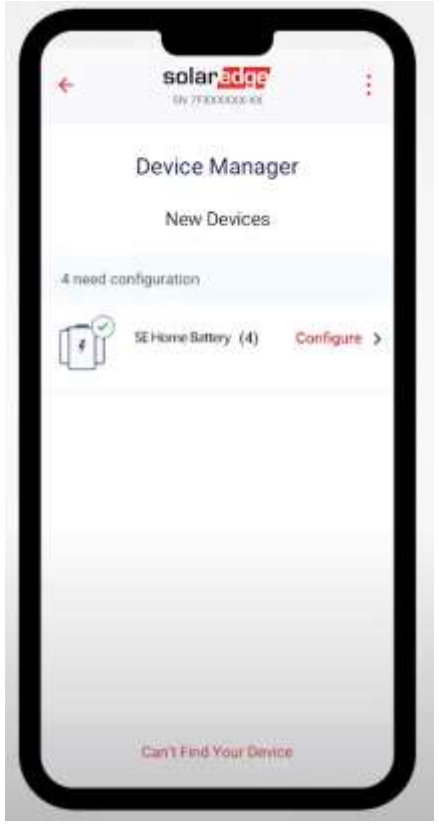
- You'll then be prompted to "**Configure**" the device – this will trigger you to **update the battery firmware**

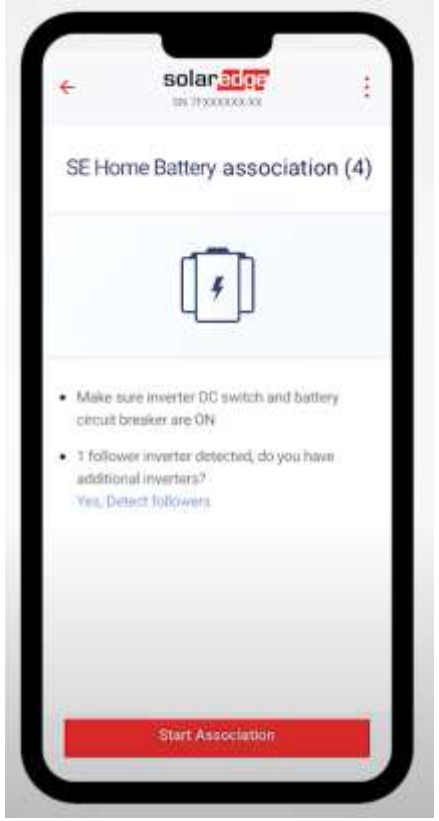
- This is fast over ENET (approx. 10 mins), but much slower over RS485 (approx. 40 mins)

Setapp Commissioning Steps

If you are communicating over **ENET**, next step is **"Associate Battery"** over the DC connections

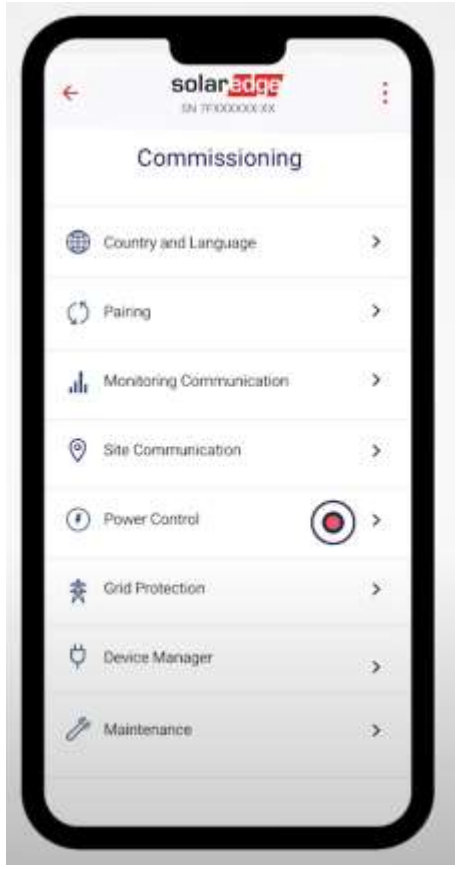
(DO NOT DO THIS if you are connected with RS485)

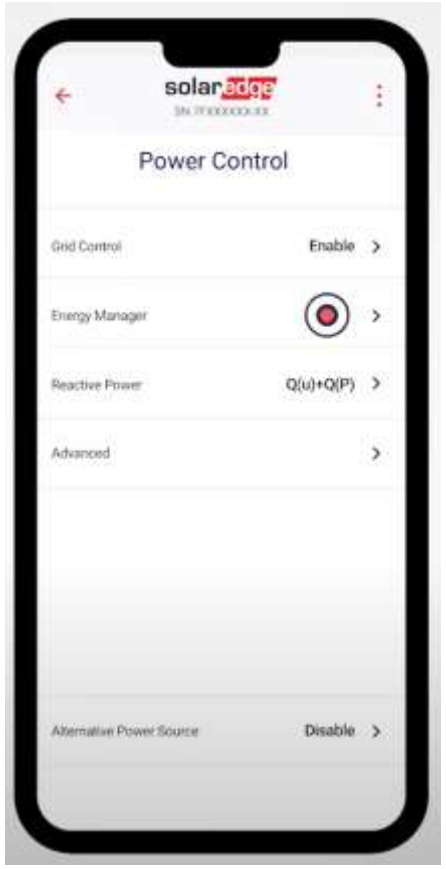


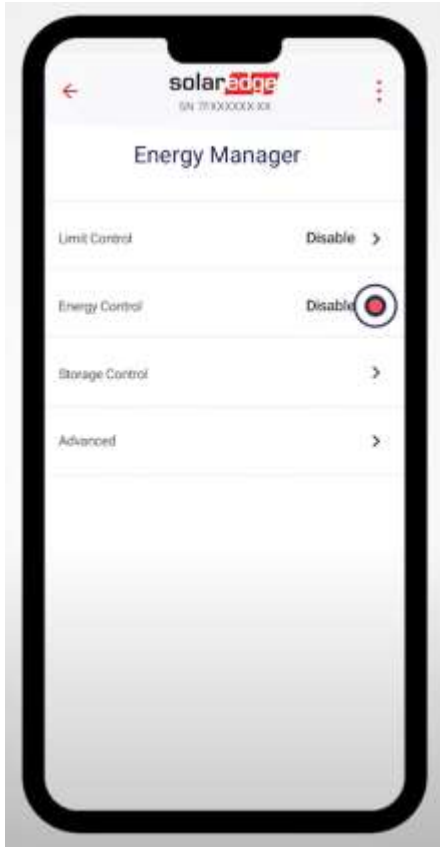


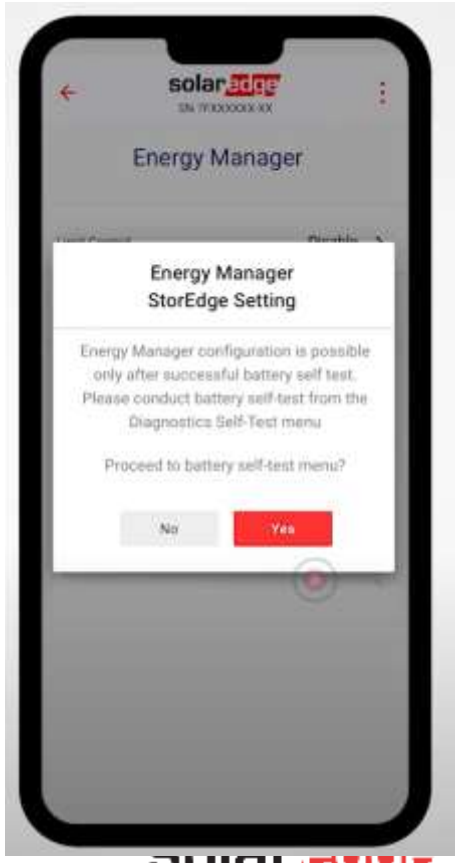
Setapp Commissioning Steps

Now run the "**Battery Self-Test**" (approx. 4 minutes)



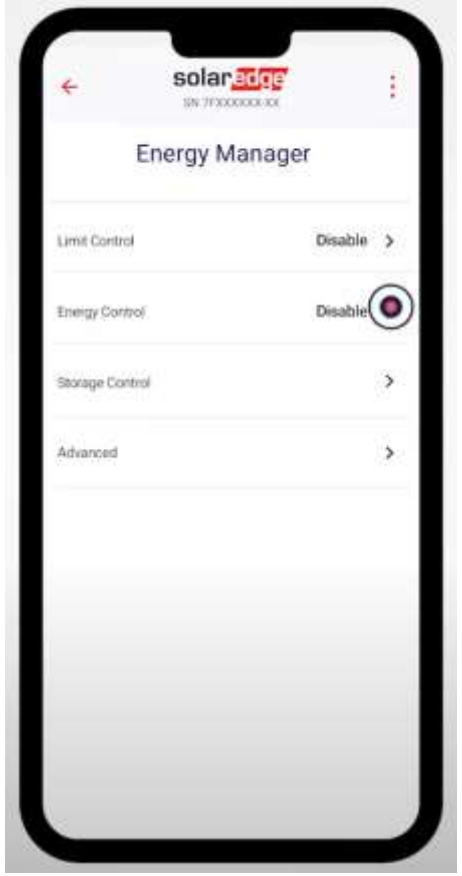


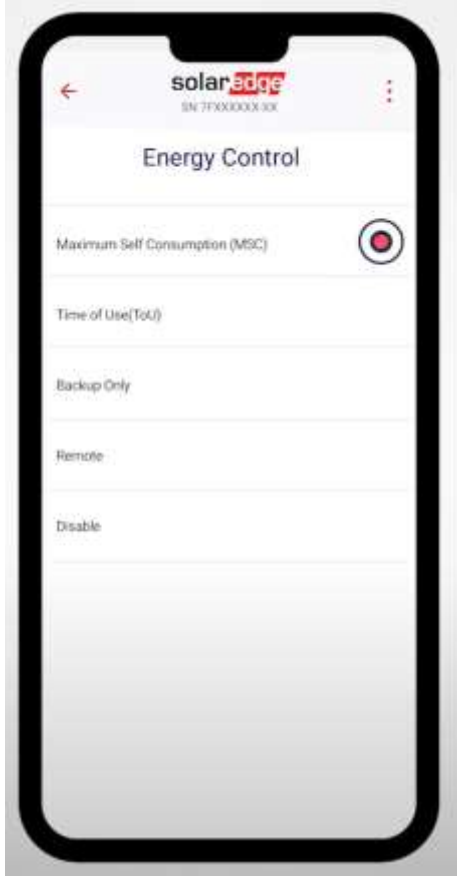


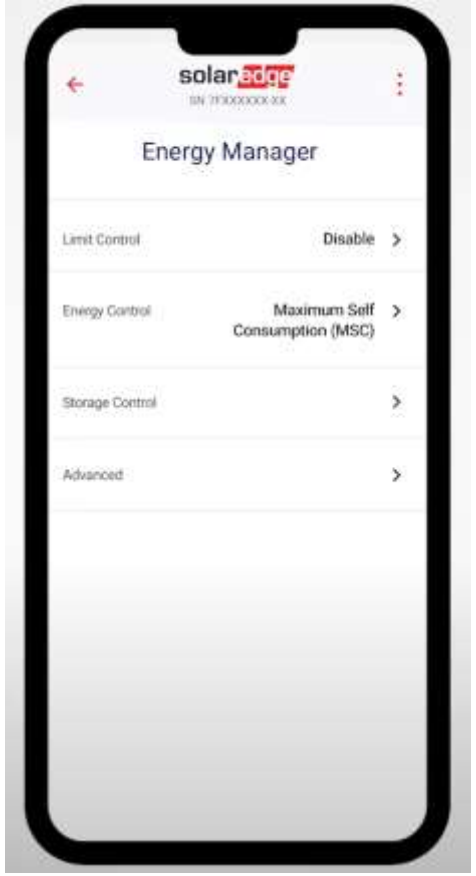


Setapp Commissioning Steps

Finally, “tell the battery what to do” by enabling “**Maximise Self Consumption**”

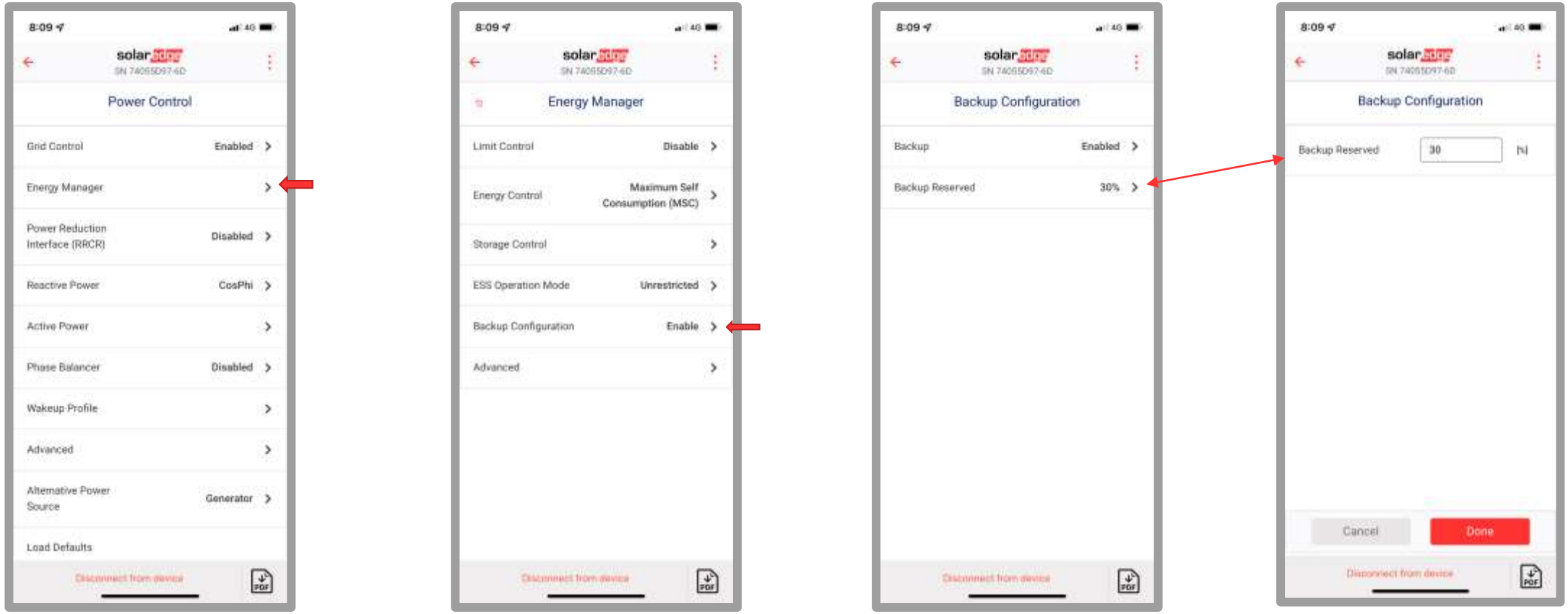




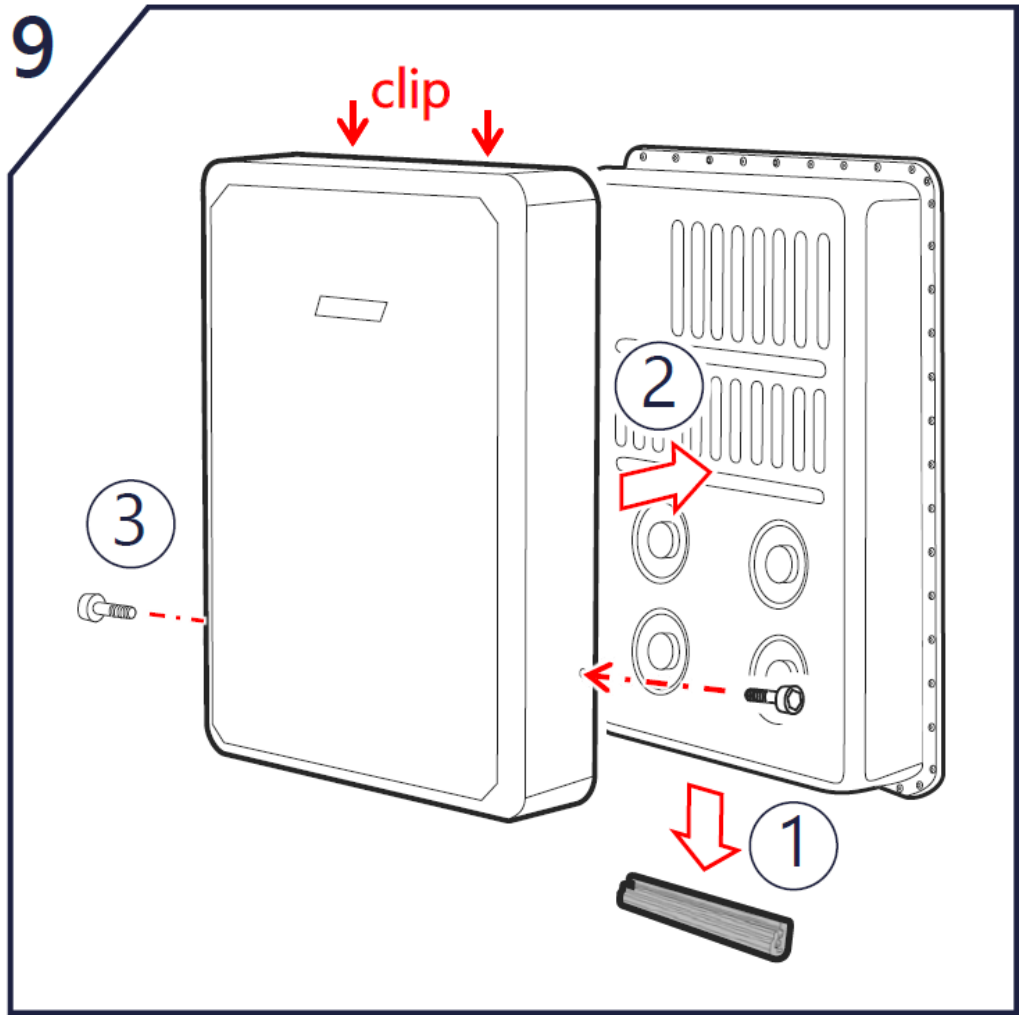


Setapp Commissioning Steps

If you have the optional Energy Hub Backup interface installed, enable **Backup function** and set the desired backup reserve, 30% is suggested



Finally, Mount Battery Cover, all done!



Installation “How To?” Videos

Title	Topic	YouTube Link
SolarEdge YouTube Playlist	Videos 1-13 cover Energy Hub & Home Battery Installation	Playlist
Home Battery Tutorial 1/4	Mounting the SolarEdge Home Battery (wall-mounted)	https://youtu.be/iPDU_1dNIg8
Home Battery Tutorial 2/4	Wiring the SolarEdge Home Battery	https://youtu.be/1cJzP4ScMxk
Home Battery Tutorial 3/4	Commissioning the SolarEdge Home Battery	https://youtu.be/UXl2UqgeQ4w
Home Battery Tutorial 4/4	Uninstalling the SolarEdge Home Battery	https://youtu.be/DN32IH_rUdg
Back-up Interface Tutorial	Installation & wiring of the Back-up Interface	https://youtu.be/NbjGTDjCT1w
DC Combiner Box Tutorial	Installation & wiring of the DC Combiner Box	https://youtu.be/HuCEMyRxM7M
Full Installation Tutorial	Full Home Battery System installation & commissioning	https://youtu.be/h-4AtGGqZxU

solaredge