

# 1. System Installation

## 1-1. M Hybrid Inverter & M Cabinet Installation

### 1. Installation Location and Clearance

Before installation, verify that the location allows for the clearances specified in Figure 1.1 to avoid any potential operational or safety issues

**NOTE:** For outdoor installations, refer to the product manual for full details on selecting a location.

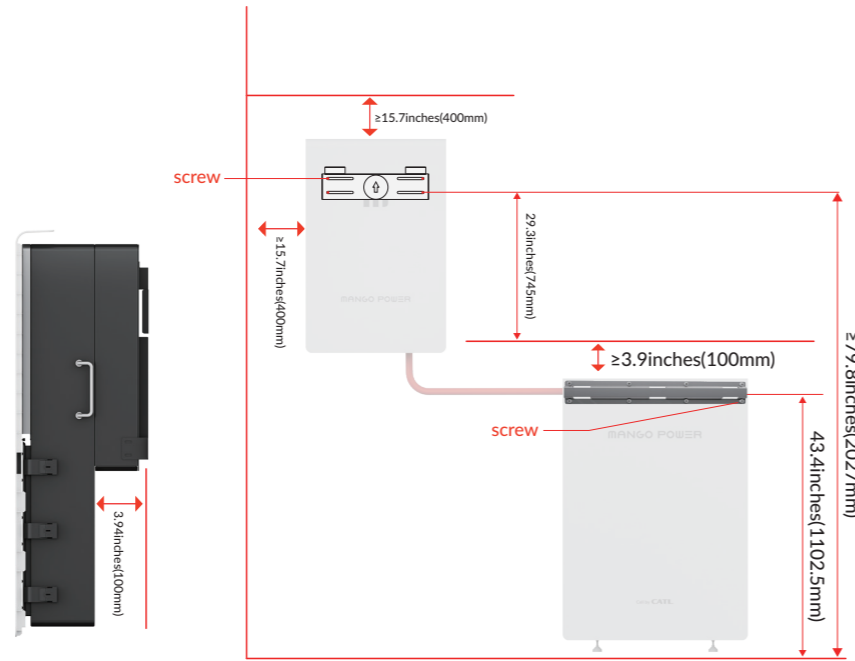


Figure 1.1 - Installation Location and Clearance

### 2. Installing the M Hybrid Inverter Bracket

1. Measure 6" 3" from the ground mark the bottom of the bracket.
2. Verify that the arrow on the inverter is oriented upwards.
3. Place the bracket against the mark and ensure it is level.
4. Mark the positions where the holes will be drilled for the bracket.

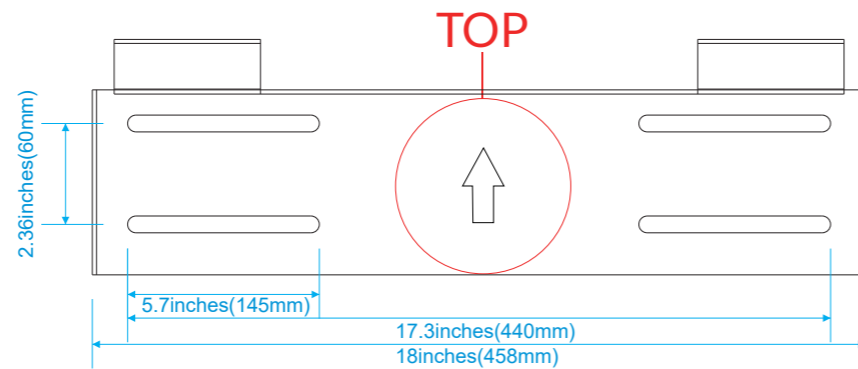


Figure 1.2 - Bracket Orientation

### 3. Securing the M Hybrid Inverter Bracket

1. Ensure bracket is level and in the correct orientation, before securing all fasteners.

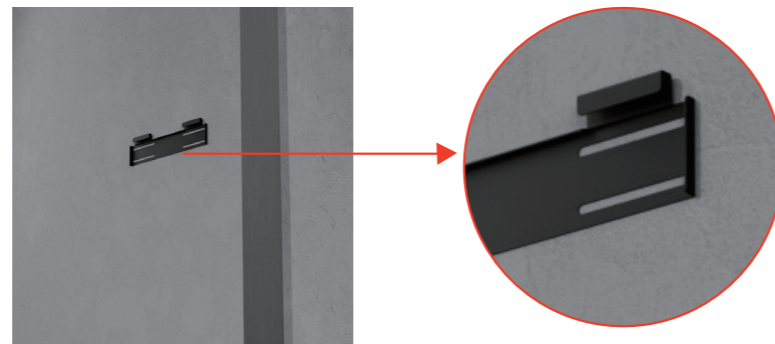


Figure 1.3 - M Hybrid Inverter Installed

### 4. Mounting the M Inverter

1. Lift the inverter above the bracket and lower into position. Ensure the inverter is placed onto both of the bracket support arms.
2. Loosely fasten L brackets onto both the left and right sides of the inverter using the M6 (4) bolts
3. Securely fasten them to the wall the brackets to the wall.
4. Tighten the M6 (4) bolts to secure the brackets on the inverter



5. Remove the appropriate knockouts.

**NOTE:** Electrical conduit is not included and should be contractor supplied.

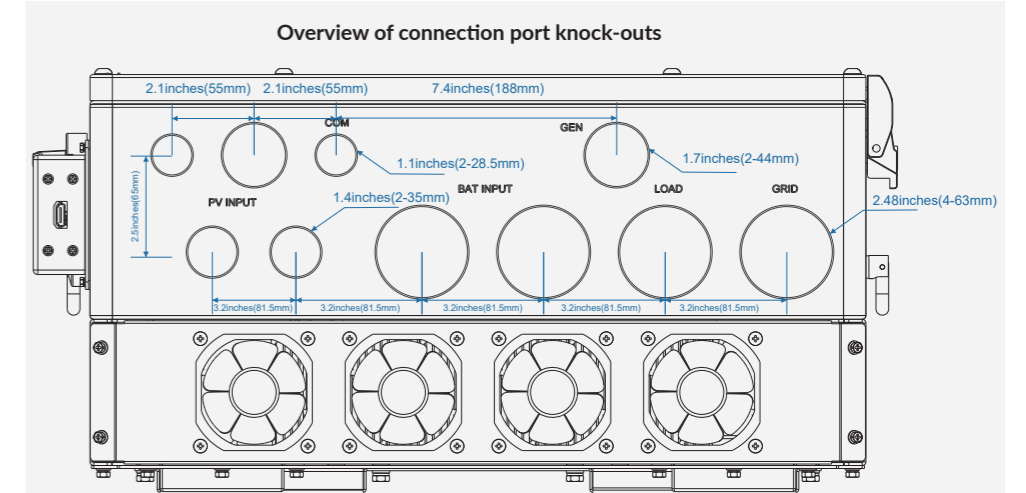
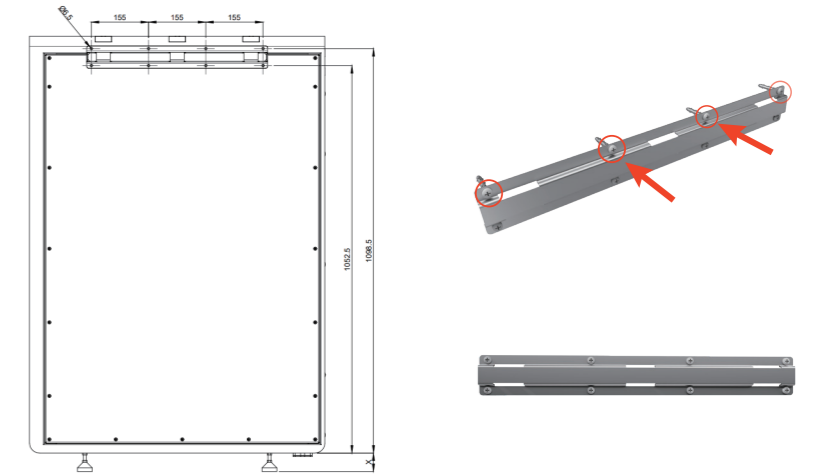


Figure 1.4 - M Hybrid Inverter Connector Knockouts

### 5. Installing the M Cabinet Bracket

**Warning:** The supplied brackets are not intended to support the weight of the M Cabinet, the M Cabinet must be floor .

1. Measure 3" 3" from the ground mark the bottom of the bracket.
2. Place the bracket against the mark and ensure it is level.
3. Mark the positions where the holes will be drilled for the bracket.



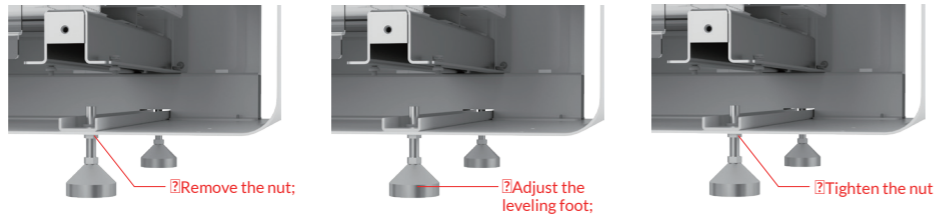
### 6. Securing the M Cabinet

1. Secure the clips to the top of the M Cabinet using the provided M8 (6) bolts.
2. Line up the M Cabinet Clips with the three designated slots on the mounting bracket.
3. Raise the Cabinet and then gently guide the clips down into the slots.
4. Place the protective caps into position as shown in Figure 1.5



Figure 1.5 - M Cabinet Protection Caps

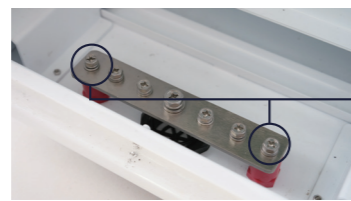
7. Ensure all feet are adjusted to properly level the cabinet



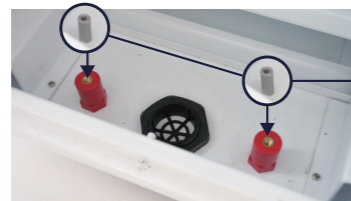
8. Grounding the Cabinet



Step 1: Locate the grounding section at the bottom.



Step 2: Remove the bolts on both ends, then remove the plate.



Step 3: Replace the two insulated posts with the metal equivalents, provided separately, attaching the ground cables to the bar.



Step 4: Place the plate back and tighten the bolts on both ends.

9. Remove cabinet door and place fasteners in a secure location. Slide batteries into position as illustrated in Figure 1.6.

NOTE: Up to 4 M Batteries can be installed per M Battery Cabinet



Figure 1.6 - M Battery Orientation

10. Secure the battery to the cabinet, using the slotted bracket at the top of each pack

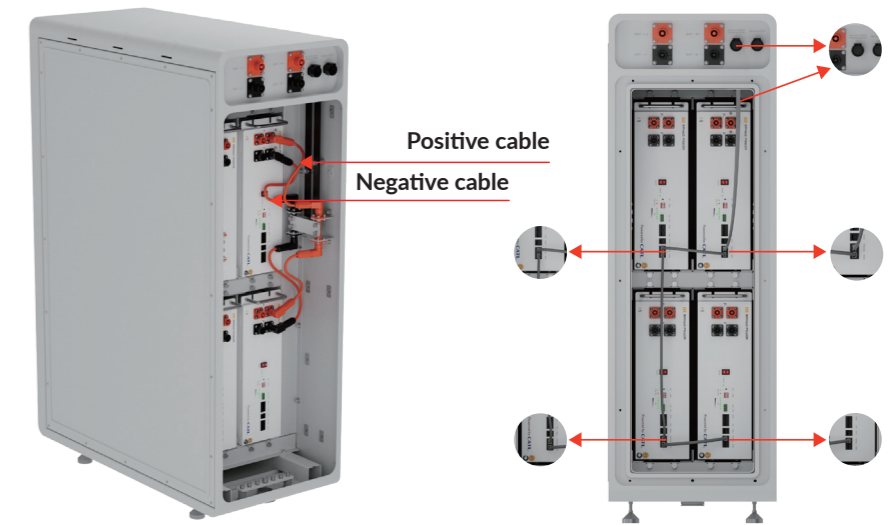


## 1-2. System Wiring

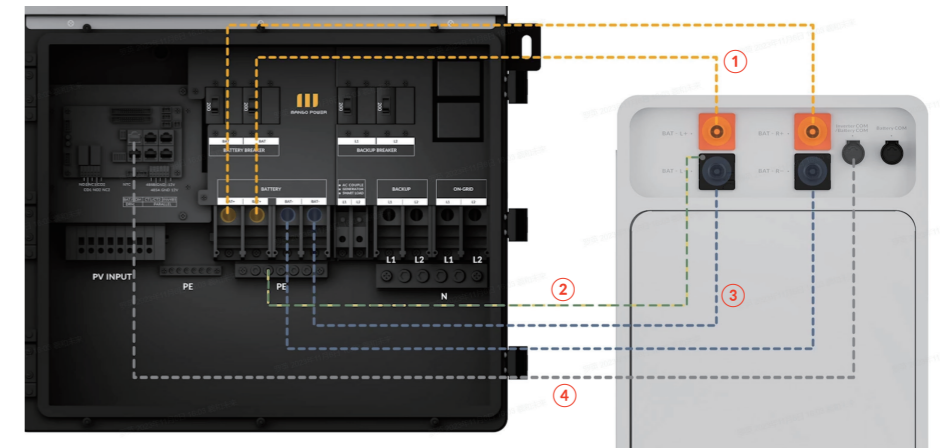
**WARNING:** Ensure the switch of M Battery is in OFF position before connecting

1. Remove the dust caps
2. Attach the outer terminals of the M Battery to the positive and negative of the M Cabinet using the cables supplied.
3. Ensure the cables are fully seated and locked securely in place.

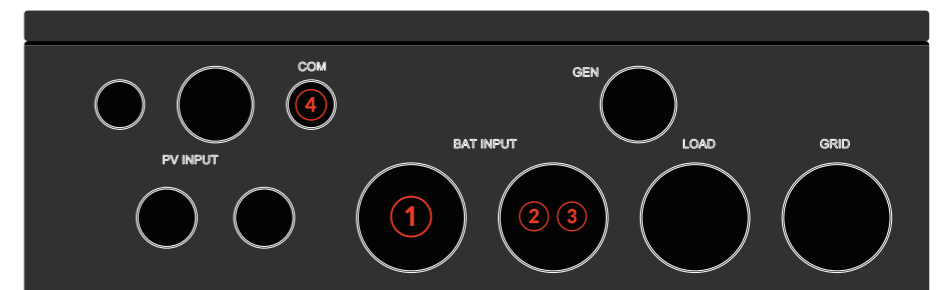
**NOTE:** If may be necessary to rotate the terminal connectors to align the cable, if necessary



2. Ensure the M Cabinet cables are properly routed through the correct knockout, on the M Hybrid Inverter



Wiring hole:  
 Yellow line — Left BAT INPUT;  
 Blue line — Right BAT INPUT;  
 The yellow-green line — Right BAT INPUT;  
 Gray line — COM



3. Mark the location for the M Smart Screen and install the mounting bracket. Secure the cable connection to the M Hybrid Inverter using the M2 (4) bolts



## 2. Installation diagram of each mode

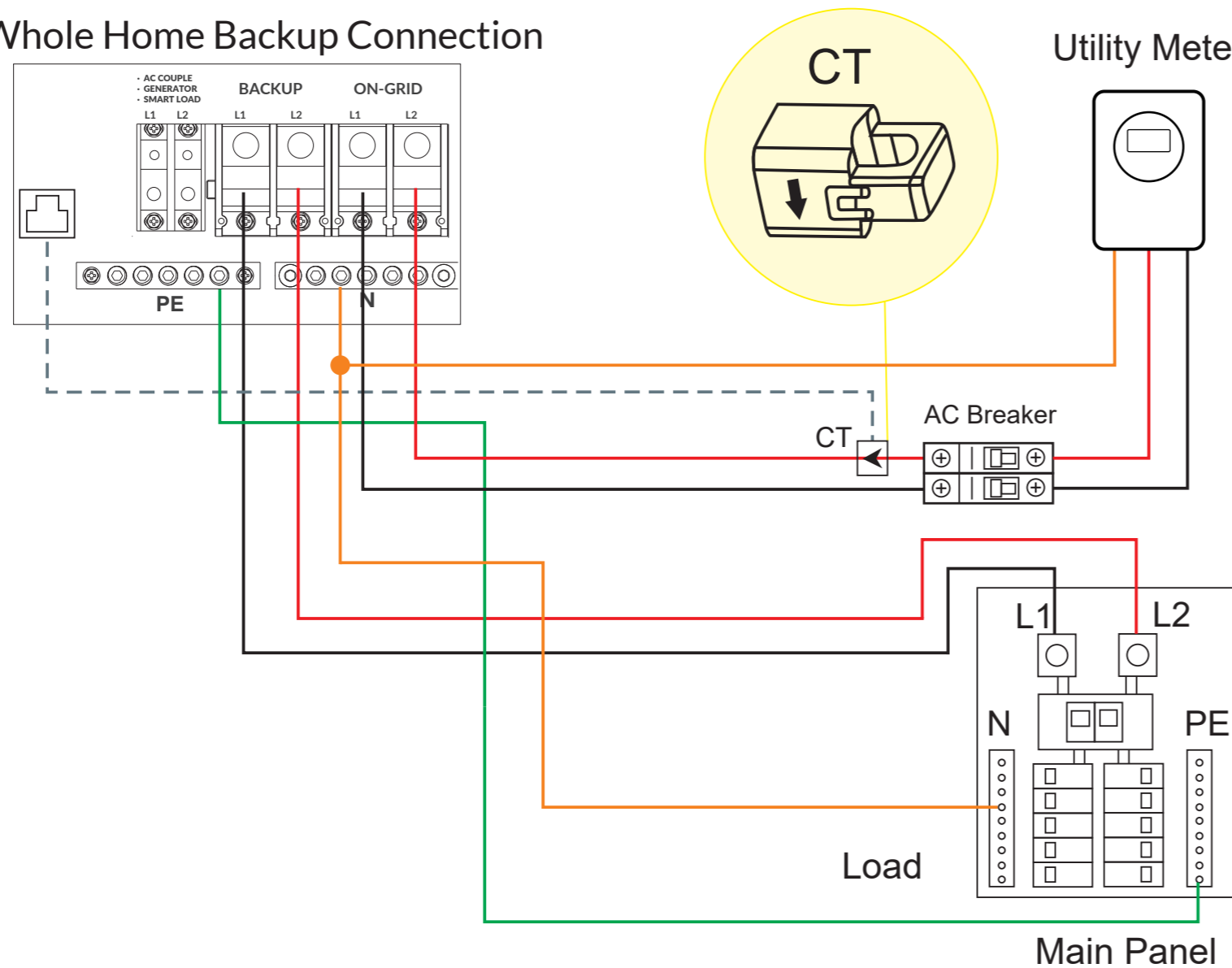
### 2-1 Whole Home Backup - No Solar

#### 1. AC Breaker Contractor supplied - Not included

L1 of the meter is connected to L1 of the inverter ON GRID, and L2 is connected to L2 of the inverter ON GRID. The BACKUP L1 is connected to the L1 of the MAIN PANEL, and the backup L2 is connected to the L2 of the MAIN PANEL. PE connects to the PE port on the MAIN PANEL.

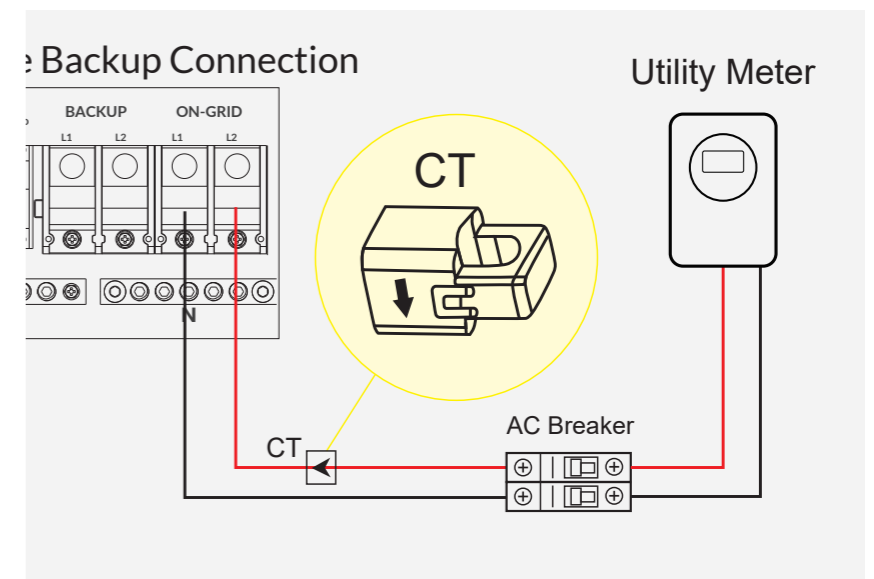
**NOTE:** AC Breaker not supplied

Whole Home Backup Connection



#### CT wiring is shown as follows

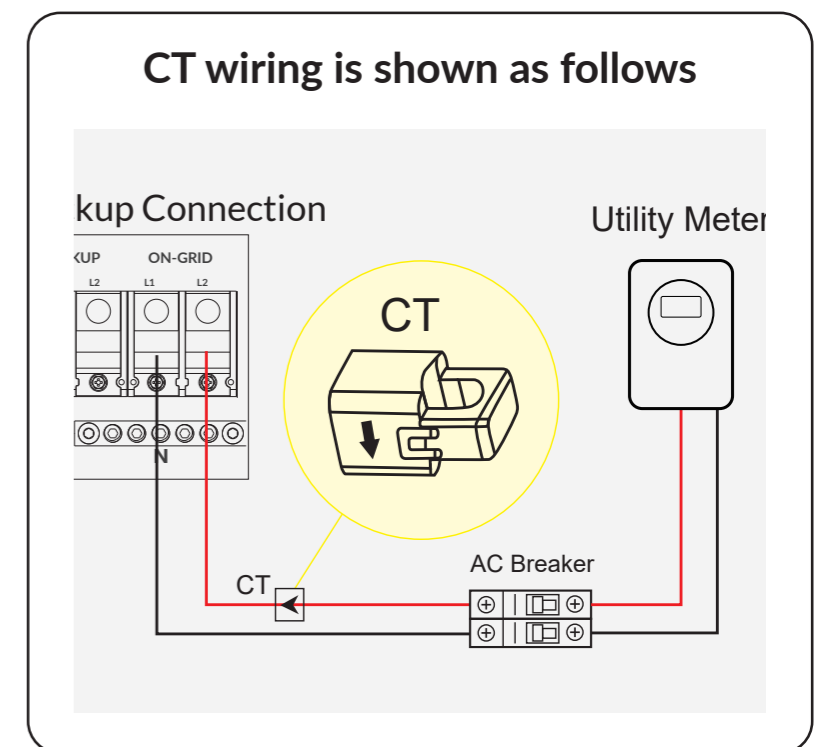
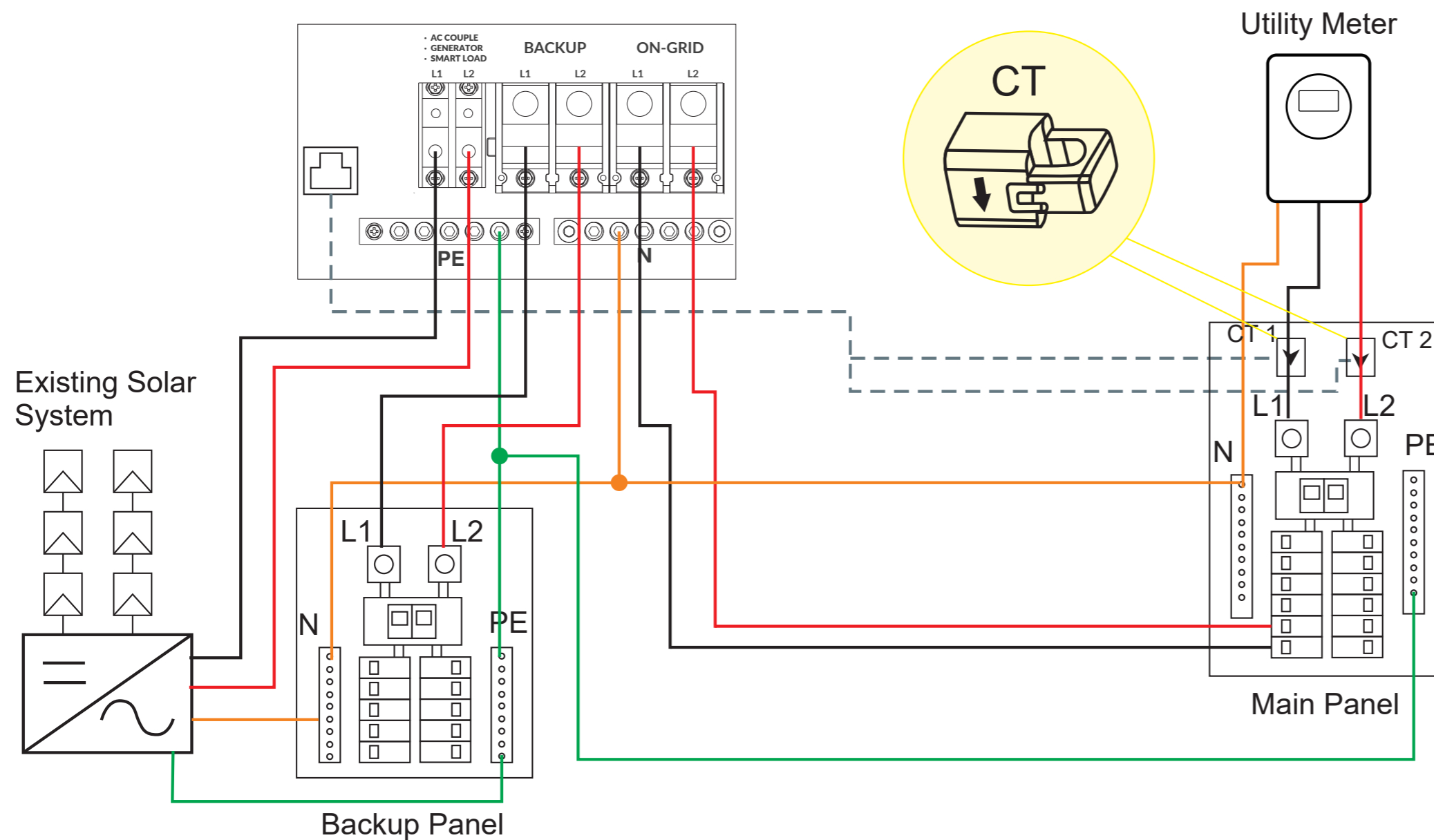
Ensure the directional arrow's on the CT's point towards the terminal connections, inside the M Hybrid Inverter.



## 2-2 Whole Home Backup with AC coupled

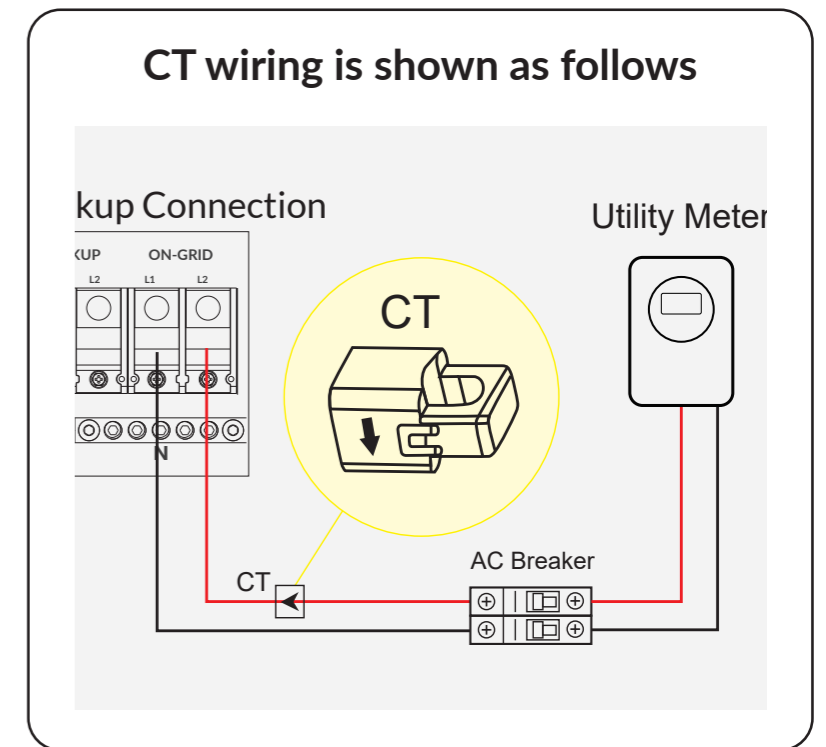
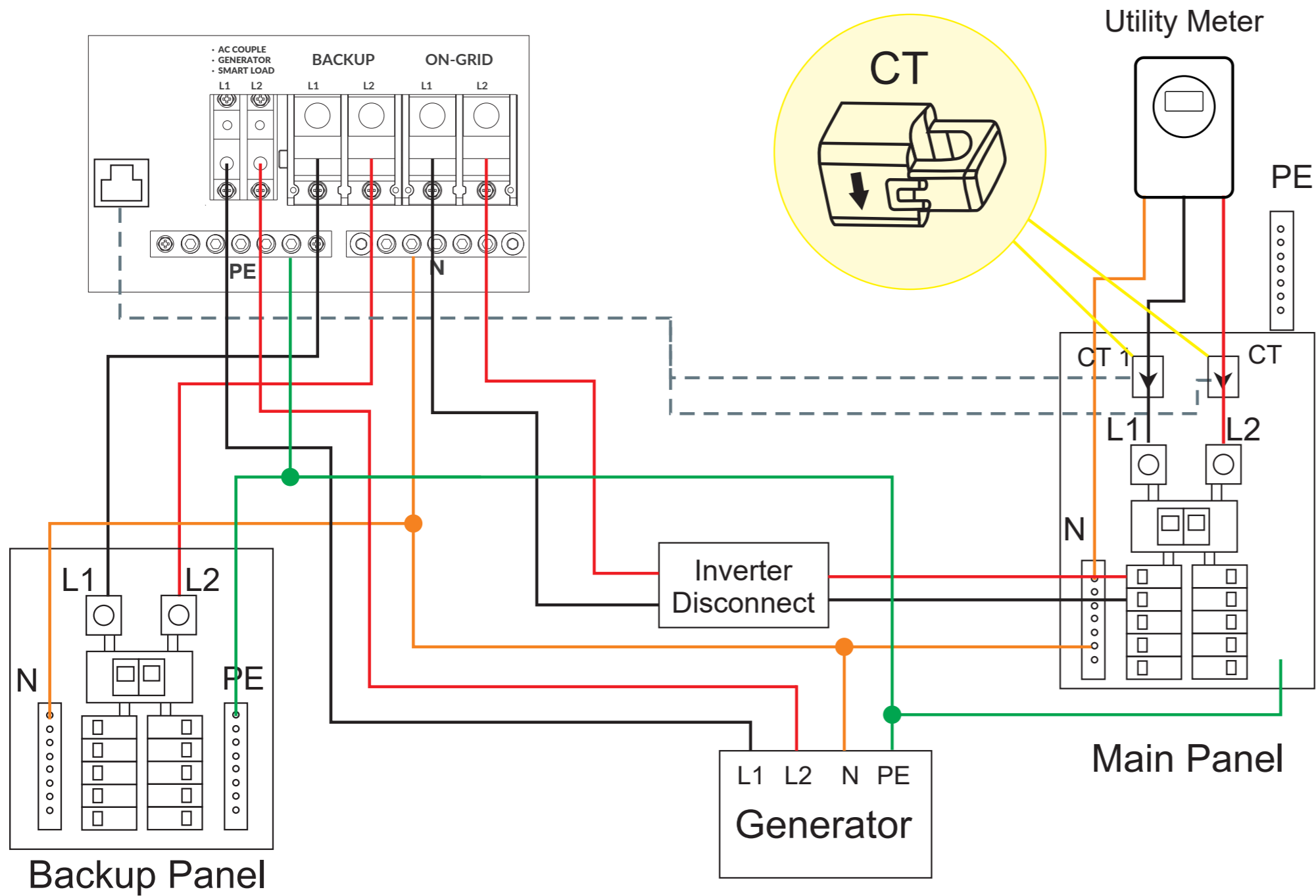
The Backup Panel is optional, and the LOAD on the inverter is connected to the load to be backed up in the home. L1 of the GRID is connected to L1 of the MAIN PANEL, and L2 is connected to L2 of the MAIN PANEL. The Existing Solar System is connected to L1 of GEN.

Connection for AC coupled solar system



## 2-3 Partial backup mode

The L1 from the MAIN PANEL is connected to the L1 of the inverter ON GRID, and the L2 is connected to the L2 of the inverter ON GRID. BACKUP panel is optional. The load to be powered on is connected to the backup panel of the inverter.

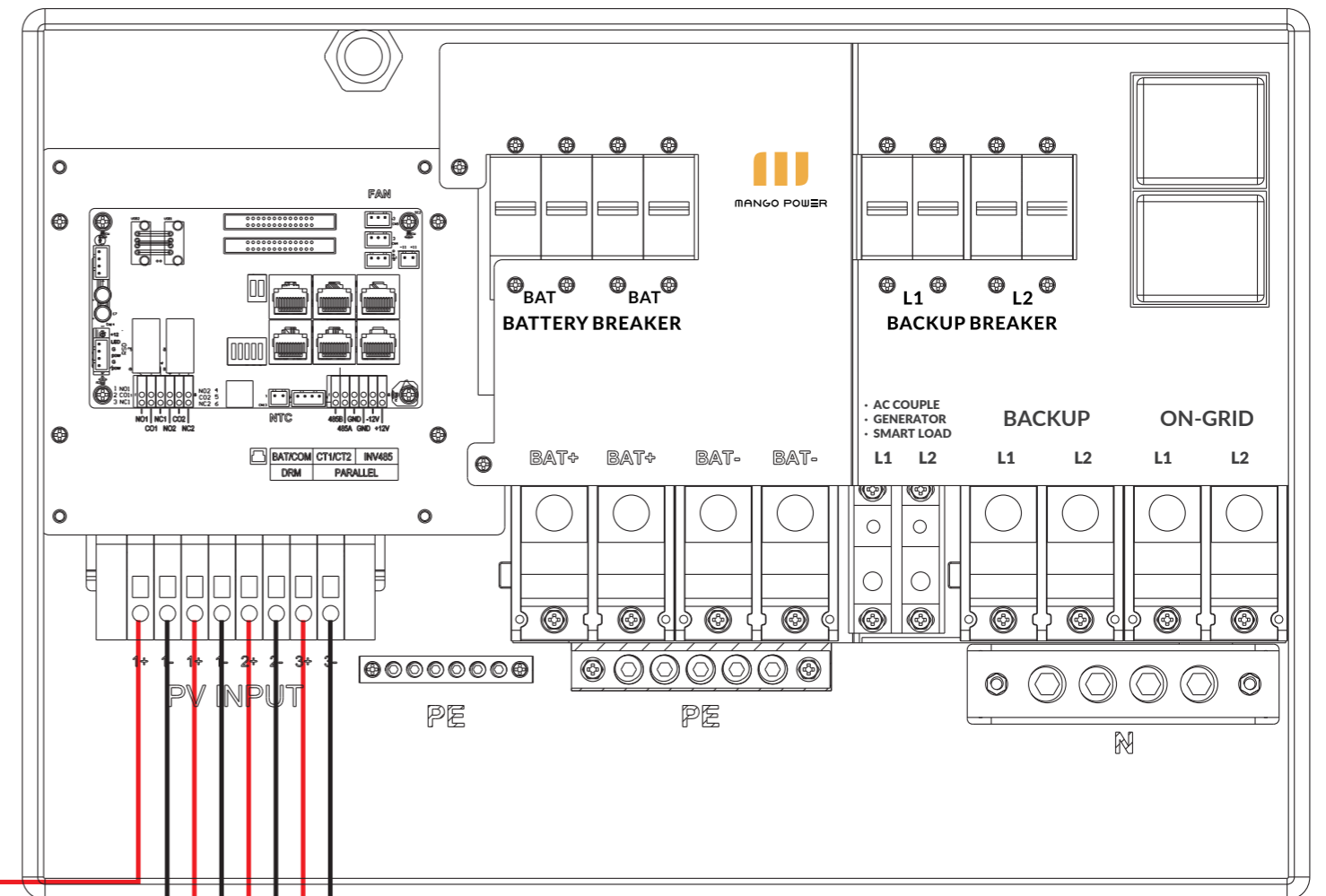


## 2-4 DC Coupled

The PV Connection cable is shown in the following figure

1. The inverter has three MPPTs. For MPPT1, users can connect two strings. For MPPT2 and MPPT3, users can connect one string. All three MPPTs work independently. All of these strings are to be connected directly into the Inverter. **Do not use a PV combiner as this may cause damage to the inverter.**
2. When users connect 2 strings to MPPT1, make sure the two strings have same quantity of solar panels. The inverter will limit the total MPPT1/MPPT2/MPPT3 input current to 25A/15A/15A automatically.
3. The inverter will limit the max solar input power to 18kW totally.

Face the same direction



# 3. System Commissioning

1. Ensure all wires are connected properly, prior commissioning the Mango Power M

2. Address the batteries according to table

Address	Position of Dip Switch			
	#1	#2	#3	#4
1	ON	OFF	OFF	OFF
2	OFF	ON	OFF	OFF
3	ON	ON	OFF	OFF
4	OFF	OFF	ON	OFF
5	ON	OFF	ON	OFF
6	OFF	ON	ON	OFF
7	ON	ON	ON	OFF
8	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON
16	OFF	OFF	OFF	OFF

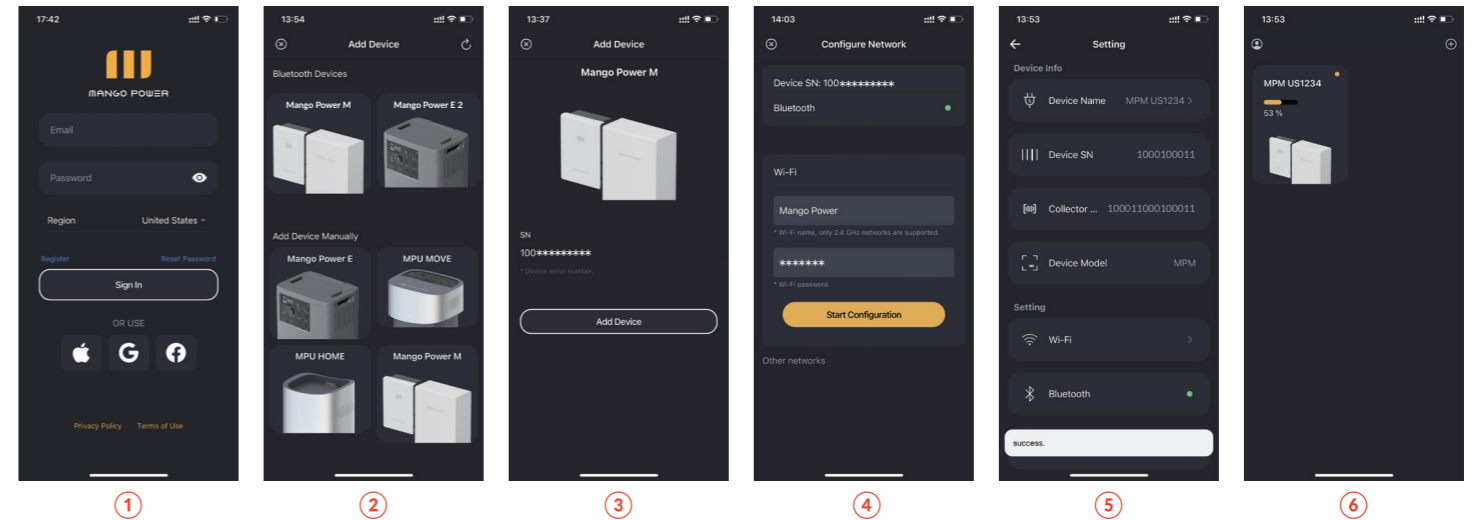
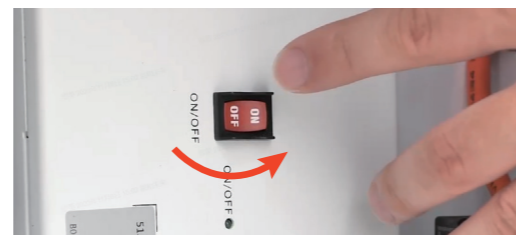


**NOTE:** In case of multiple parallel M Batteries, you can distinguish them by setting the address via the DIP switch on BMS. Sharing the same address should be avoided. For definitions of BMS DIP switch, please refer to the following.

3. Inside the M Cabinet turn each of the M Battery ON

4. Switch the battery breakers inside the M Hybrid Inverter to the ON position.

5. Switch the backup breakers inside the M Hybrid Inverter to the ON position.



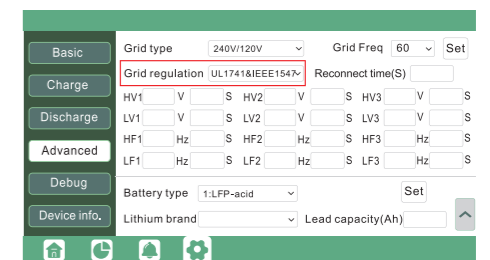
## 6. Connecting the App

**NOTE:** The following procedure is to be performed using the homeowners device.

1. Download the Mango Power and register an account.
2. Ensure Bluetooth is enabled.
3. Press "Add a device".
4. Select the Mango Power M, identified by SN to be added.
5. Configure the Wi-Fi, enter the SSID and Password. Wait for the connection success message.
6. Device status: Return to the Device details page. Wait 15 seconds to refresh the page and check the online status of the device. Indicated with a yellow status indicator dot in the upper right corner of the device tile.

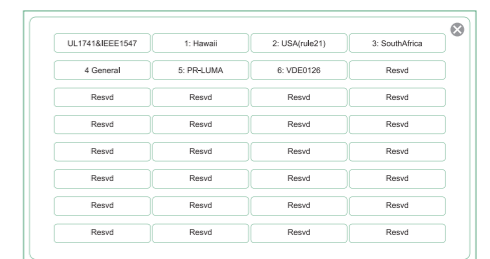
## 7. Parameter setting

Refer to the parameter settings section for specific reference grid regulations



## 8. Confirm System Status

Return to the home page and verify the status indicator is "Normal"

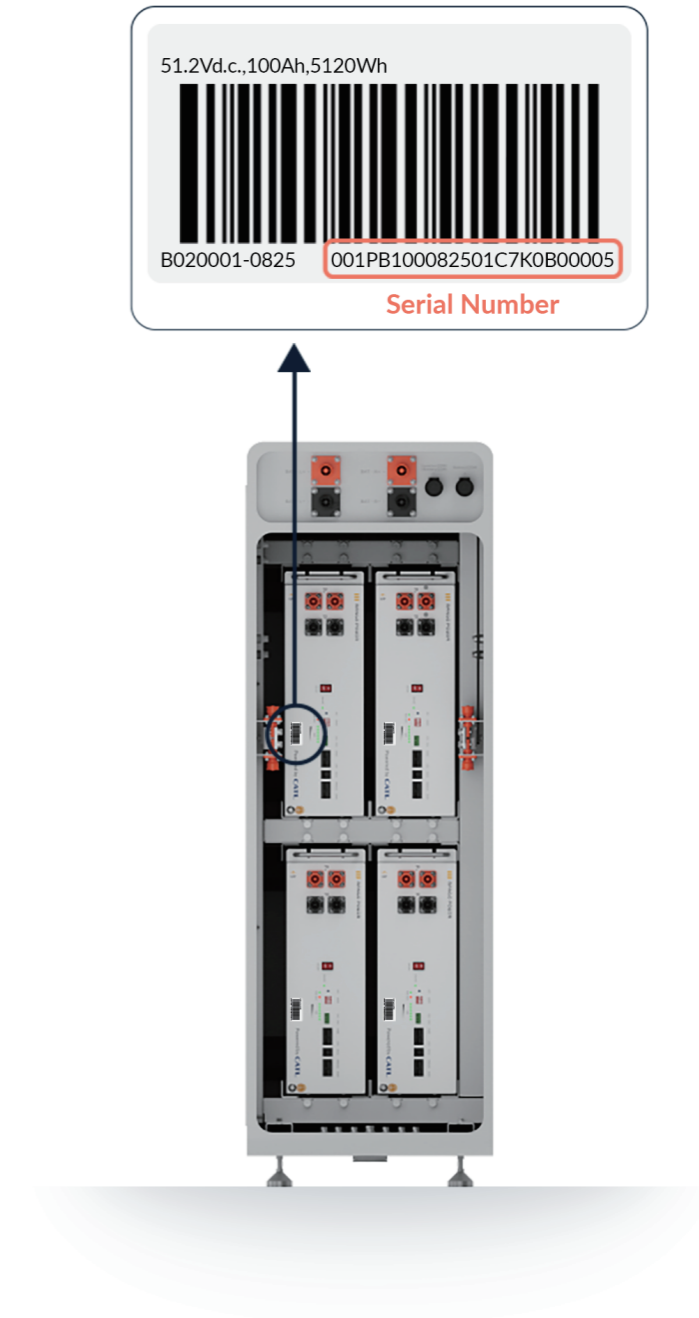


## 4. Warranty Registration

**Note:** This step must be performed, otherwise the warranty cannot be guaranteed.

Please click on the link or scan the QR code to fill in the machine's SN and installation date.

<https://mp-aftersales.mangopower.com/>



## 5. Install M Cabinet Door

1. Place the M Cabinet door in position
2. Secure the bolts around the parameter of the M Cabinet door and ensure a secure fit.