



# Installation Manual

## Energy Storage System (ESS)

### NEOSUN HOME ESS



V1.72

# 1. Introduction

## 1.1 System Introduction

NEOSUN HOME ESS can be applied in DC-coupled systems (mostly new installation), AC-coupled systems (mostly retrofit) and Hybrid-coupled systems (mostly retrofit, and PV capacity-increase), as the following scheme:

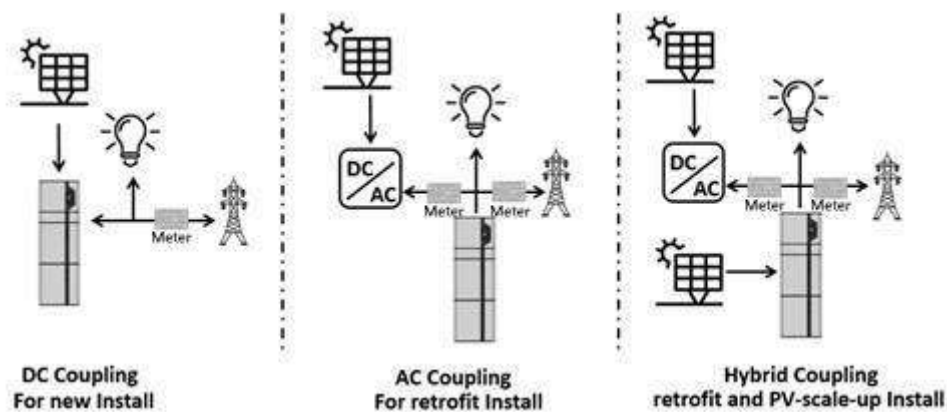


Figure 1 DC- and AC-/ Hybrid-coupled Storage System - Scheme

### CAUTION:

For the AC-/ Hybrid-coupled system, unlike DC, two power meters are to be mounted.

## 1.2 General Precautions

### DANGER

**Danger to life due to high voltages of the PV array, battery and electric shock.**

When exposed to sunlight, the PV array generates dangerous DC voltage which will be present in the DC conductors and the live components of the inverter. Touching the DC conductors or the live components can lead to lethal electric shocks. If you disconnect the DC connectors from the system under load, an electric arc may occur leading to electric shock and burns.

- Do not touch uninsulated cable ends.
- Do not touch the DC conductors.
- Do not open the inverter and battery.
- Do not wipe the system with damp cloth.
- Have the system installed and commissioned by qualified people with the appropriate skills only.
- Prior to performing any work on the inverter or the battery pack, disconnect the inverter from all voltage sources as described in this document.

**WARNING****Risk of chemical burns from electrolyte or toxic gases.**

During standard operation, no electrolyte shall leak from the battery pack and no toxic gases shall form. Despite careful construction, if the Battery Pack is damaged or a fault occurs, it is possible that electrolyte may be leaked or toxic gases formed.

- Do not install the system in any environment of temperature below  $-10^{\circ}\text{C}$  or over  $50^{\circ}\text{C}$  and in which humidity is over 85%.
- Do not touch the system with wet hands.
- Do not put any heavy objects on top of the system.
- Do not damage the system with sharp objects.
- Do not install or operate the system in potentially explosive atmospheres or areas of high humidity.
- Do not mount the inverter and the battery pack in areas containing highly flammable materials or gases.
- If moisture has penetrated the system (e.g. due to a damaged enclosure), do not install or operate the system.
- Do not move the system when it is already connected with battery modules.
- Secure the system to prevent tipping with restraining straps in your vehicle.
- The transportation of NEOSUN HOME ESS must be made by the manufacturer or an instructed personal. These instructions shall be recorded and repeated.
- A certified ABC fire extinguisher with minimum capacity of 2kg must be carried along when transporting.
- It is totally prohibited to smoke in the vehicle as well as close to the vehicle when loading and unloading.
- For the exchange of a battery module, please request for new hazardous goods packaging if needed, pack it and let it be picked up by the suppliers.
- In case of contact with electrolyte, rinse the affected areas immediately with water and consult a doctor without delay.

**CAUTION:****Risk of injury through lifting or dropping the system.**

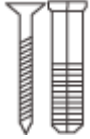


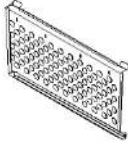
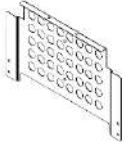

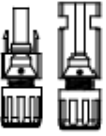

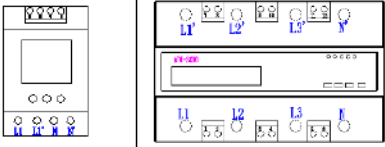
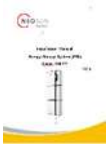

The inverter and battery are heavy. There is risk of injury if the inverter or battery is lifted incorrectly or dropped during transport or when attaching to or removing from the wall.

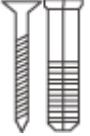
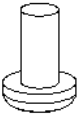
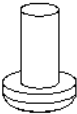
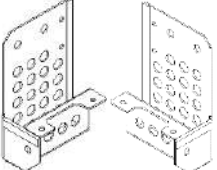



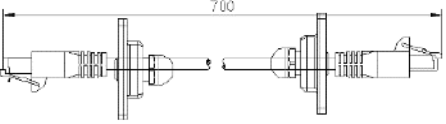
- Lifting and transporting the inverter and battery must be carried out by more than 2 people.

### 1.3 Parts List

Check the following parts list to ensure it is complete.

NEOSUN ESS delivers a total system separately on site to client, this consists of:

NEOSUN-INV					
					
8x M8*60	2x M4	4x M6	1x Mounting Panel	1x Mounting Bracket	10x M6 Gasket
					
2x MC4	8x RJ45 Connectors	1x Meter (1x SM 60A or 1x ADL 3000)		1x Installation Manual	1x User Manual

NEOSUN-BAT			
			
6x M8*60	6x M5*10	6x M4*10	2x Mounting Panel
			
6x M6 Gasket	2x Power Cable (1 black, 1 red)	1x User Manual	Battery Communication Cable

## 1.4 System Appearance

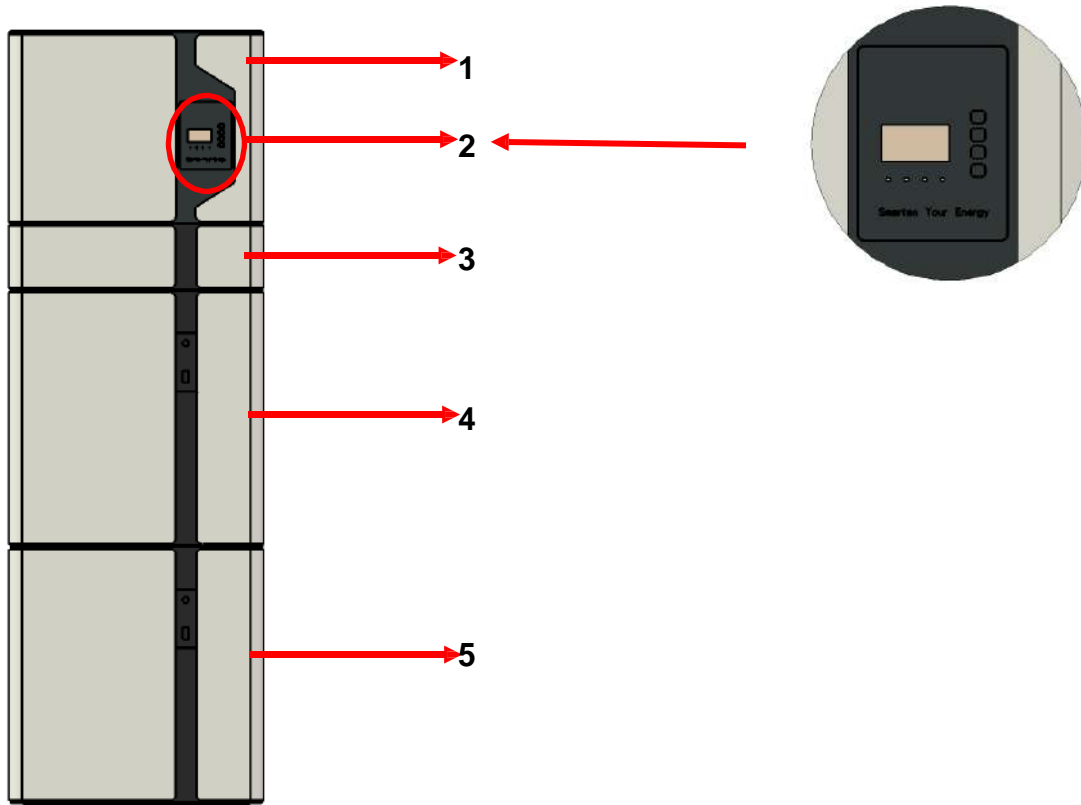
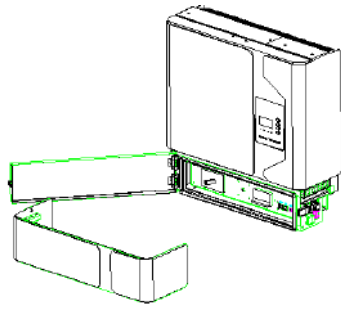


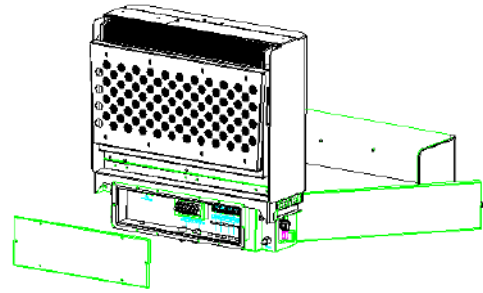
Figure 2 NEOSUN HOME ESS Delivery Scope

Object	Description
1	Hybrid Inverter with Cable Box
2	Display Screen
3	Cable Box Part of Inverter
4	NEOSUN-BAT (Battery 1)
5	NEOSUN-BAT (Battery 2)

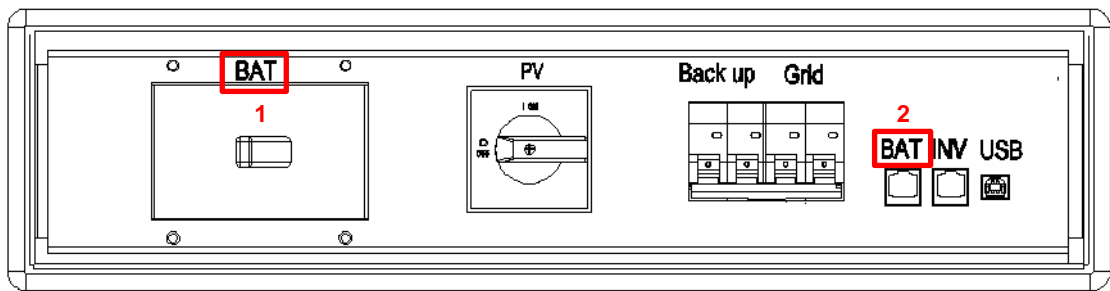
**Cable Box Part**



**Figure 3 Inverter without Cable Box Covers - Front View**

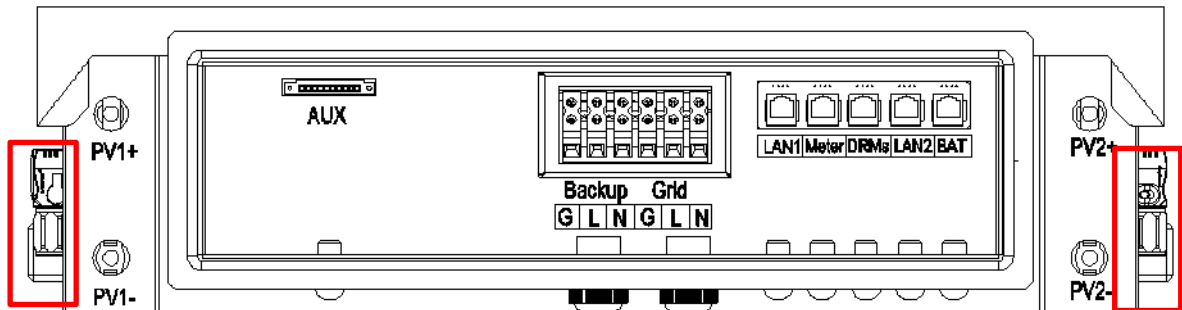


**Figure 4 Inverter without Cable Box Covers - Rear View**



**Figure 5 Cable Box Part without Covers - Front View**

Item	Description	Item	Description
BAT(1)	Battery Switch	PV	PV Switch
GRID	GRID Switch	Back up	Backup Switch
INV	Inverter Debug Communication	BAT(2)	Battery Debug Communication
USB	USB Debug Communication		



**Figure 6 Cable Box Part without Covers - Rear View**

Object	Description	Item	Description
PV1, PV2	PV Connector	METER	RS485 Connection for Meter
GRID/ BACKUP	Terminal Board AC/Grid	LAN1	Ethernet Connection
LAN2	Ethernet for Evergen	DRMS	DRED Connect for SAA
BAT	Battery Communication	AUX	Dry Contact
Terminal 1, 2	Battery Connect Terminal		

## 1.5 Liability Limitation

Any product damage or property loss caused by the following conditions NEOSUN does not assume any direct or indirect liability.

- Product modified, design changed or parts replaced without NEOSUN Energy authorization;
- Changes, or attempted repairs and erasing of series number or seals by non NEOSUN Energy technician;
- System design and installation are not in compliance with standards and regulations;
- Failure to comply with the local safety regulations (VDE for DE, SAA for AU);
- Transport damage (including painting scratch caused by rubbing inside packaging during shipping). A claim should be made directly to shipping or insurance company in this case as soon as the container/packaging is unloaded and such damage is identified;
- Failure to follow any/all of the user manual, the installation guide and the maintenance regulations;
- Improper use or misuse of the device;
- Insufficient ventilation of the device;
- The maintenance procedures relating to the product have not been followed to an acceptable standard;
- Force majeure (violent or stormy weather, lightning, overvoltage, fire etc.);
- Damages caused by any external factors.

## 2. Installation

This Manual introduces the basic steps how to install and set up NEOSUN HOME ESS.

**(i) NOTE: please pay attention for unpacking the battery, the worst case is that some components could be damaged.**

Observe the specified minimum distances to neighboring objects.

The minimum distances ensure that:

- There is sufficient heat dissipation,
- The storage system door can be opened easily,
- There is sufficient space for carrying out maintenance work.

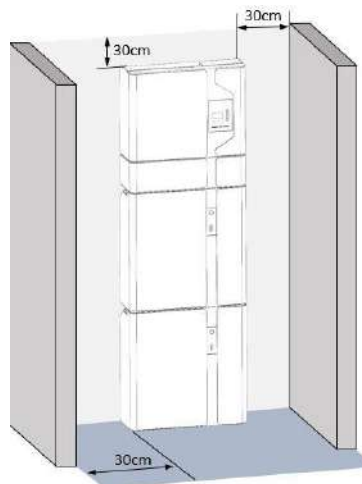


Figure 7 Limit Distance of Installation to Neighboring Objects

### 2.1 Installation Site and Environment

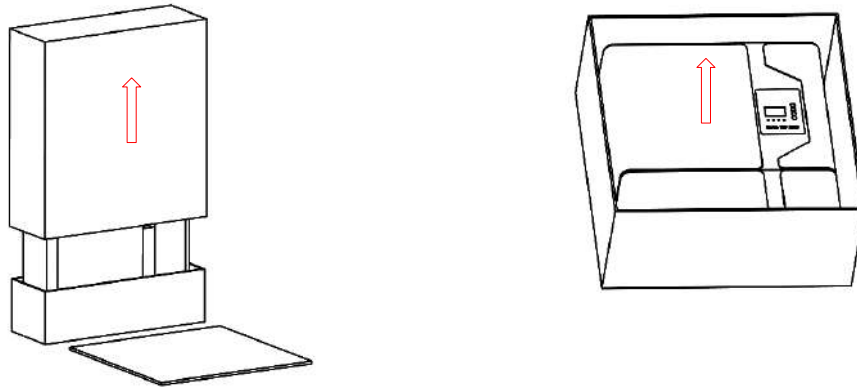
The following sites are not allowed for installation:

- Sites where the freezing point is reached.
- Sites with humidity and condensation over 85%.
- Sites which are salty and where humid air can penetrate.
- Flooded areas.
- Earthquake areas –additional security measures are required here.
- Sites that are higher than 2000 meters above the sea level.
- Sites with explosive atmosphere.
- Sites with direct sunlight.
- Sites with extreme change of ambient temperature.
- Wet rooms.
- Sites with highly flammable materials or gases.



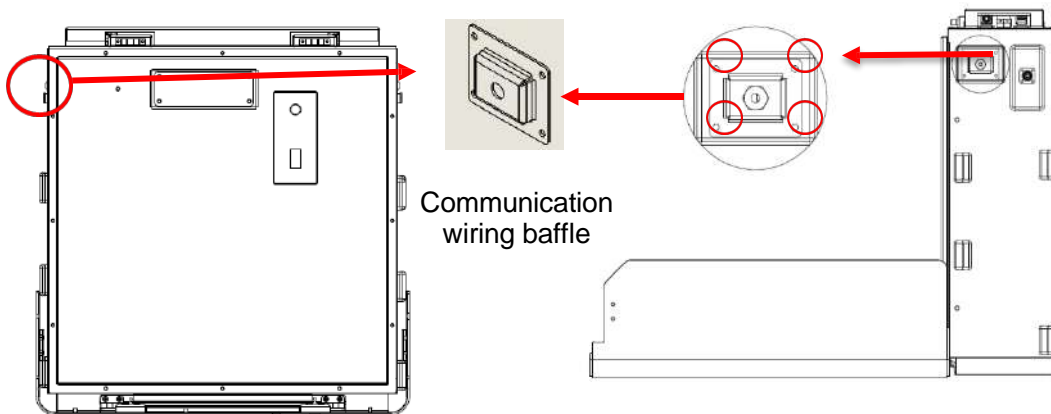
- Sites with a potentially explosive atmosphere.
- Installation wall load must be more than 180 kg

## 2.2 Installation



**Figure 8 Unpacking the inverter and battery**

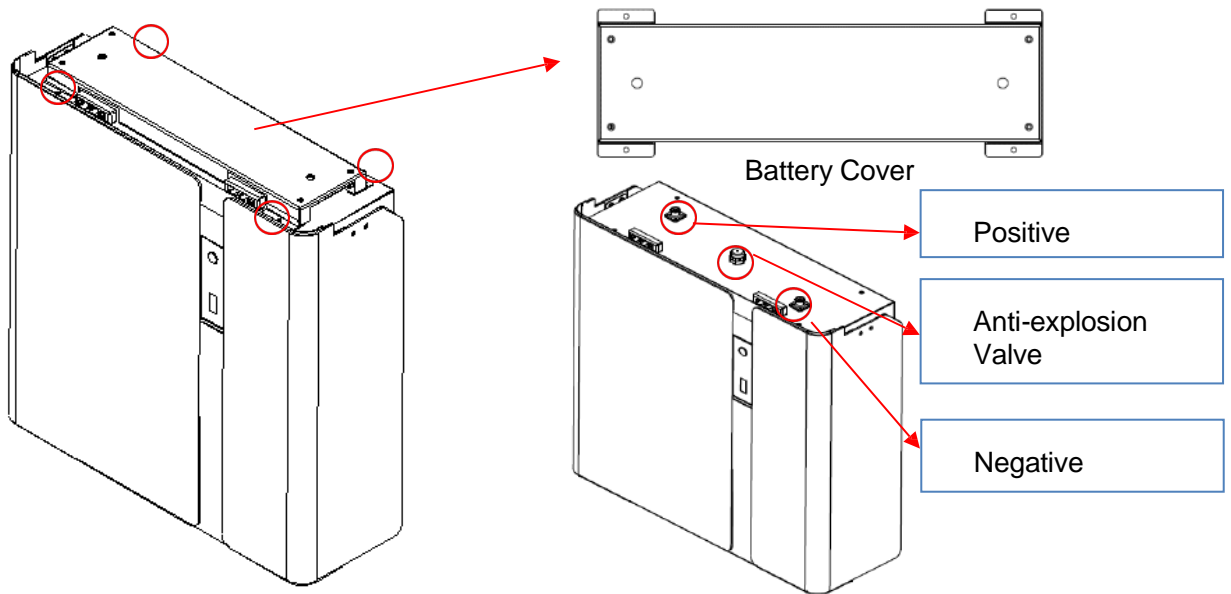
**Step 1:** Remove the battery and inverter from the packaging box.



**Figure 9 Battery with Lid off - Front View**

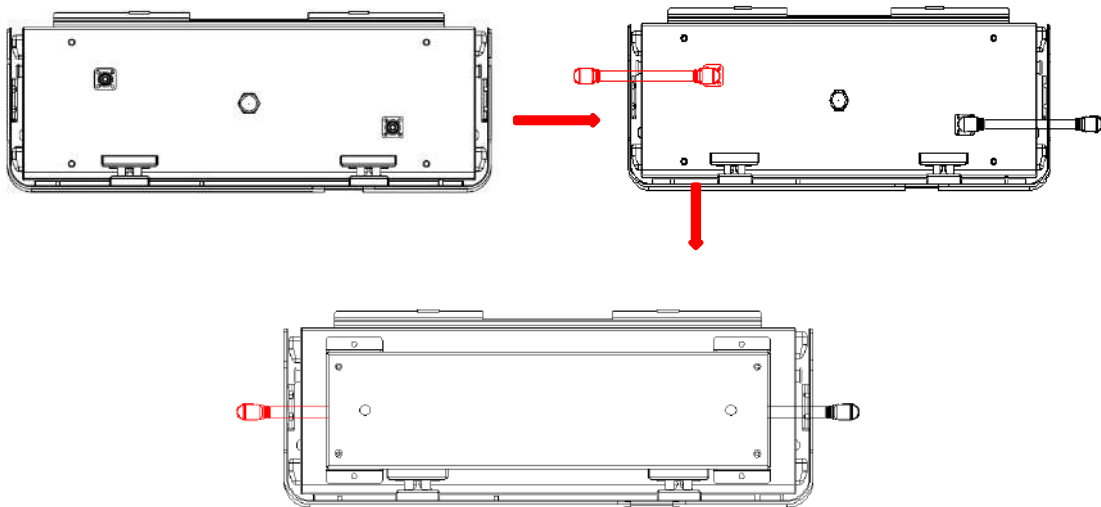
**Figure 10 Battery with Lid off – Side View**

**Step 2:** Open battery housing case and remove communication wiring baffle at the left side.



**Figure 11 Disassembly Diagram of Battery Top Cover**

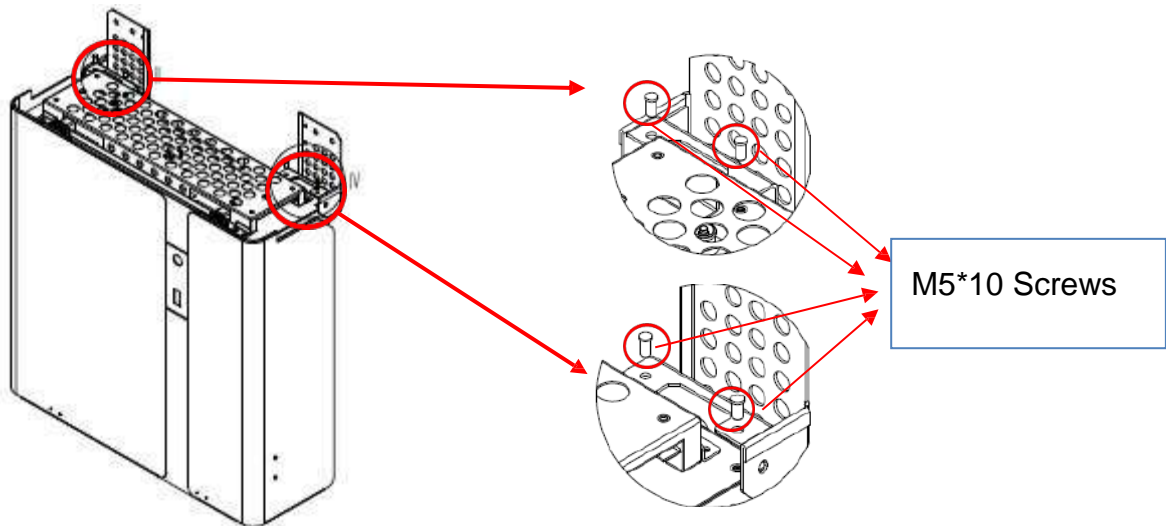
**Step 3:** Remove the top cover of the battery.



**Figure 12 Battery power cable installation diagram**

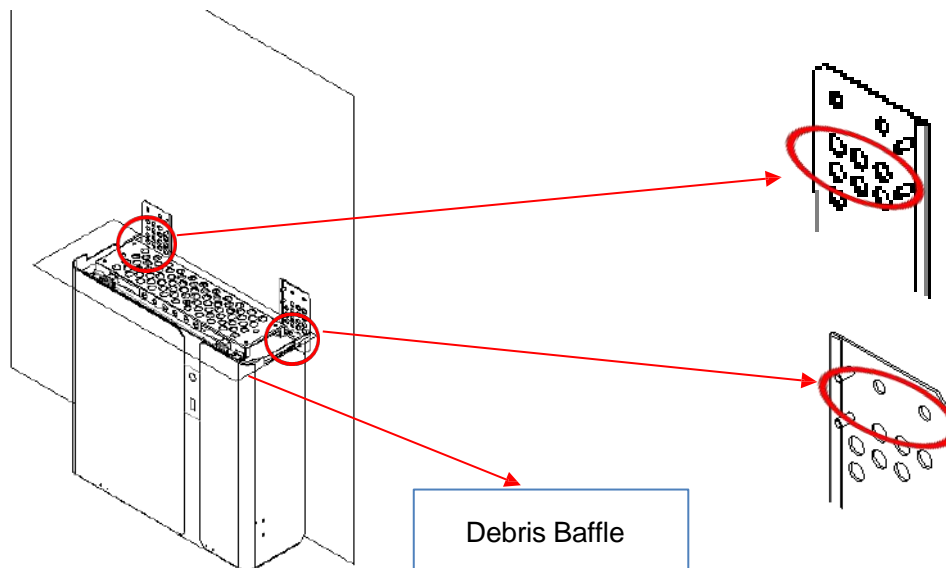
**Step 4:** Close the battery front cover and connect the power cable at the top.

**ⓘ NOTE:** if there is an "indoor" sign on the top cover, the battery can only be installed indoor.



**Figure 13 Assemble Battery Mounting Panel**

**Step 5:** Assemble the battery mounting panel on the battery.

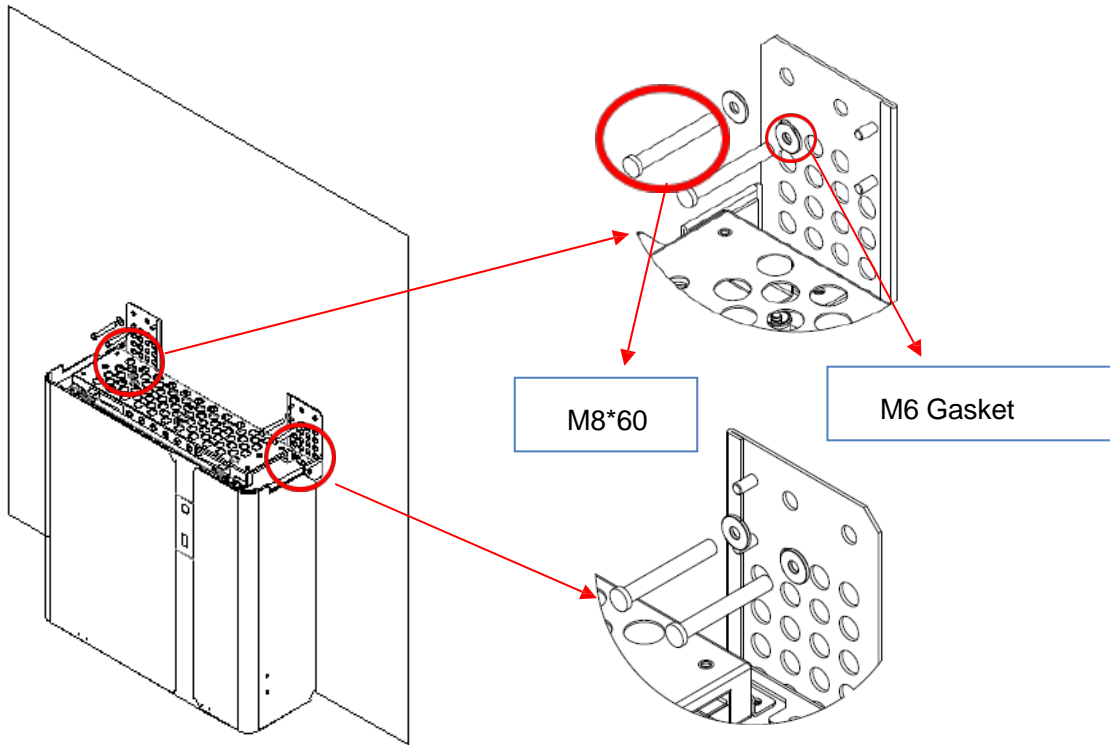


**Figure 14 Battery Installation - Drill Holes**

**Step 6:** Keep the battery against the wall, drill holes on the wall with an impact drill.

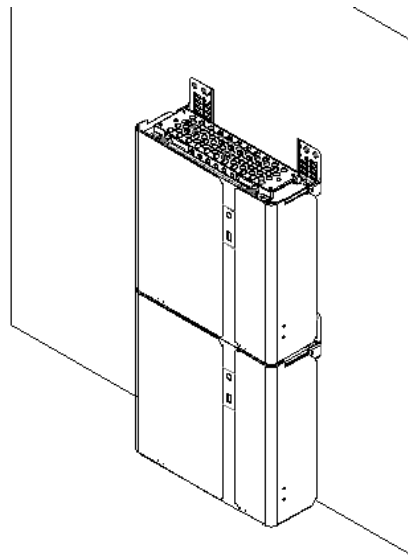
**(i) NOTE:** please make sure a layer of protection must be placed over the battery while drilling, it could be paper, wood board or packaging bubble, as Figure 14 shows) .

The ground upon which the battery will be placed on must be less than 3 degree to the horizontal level.



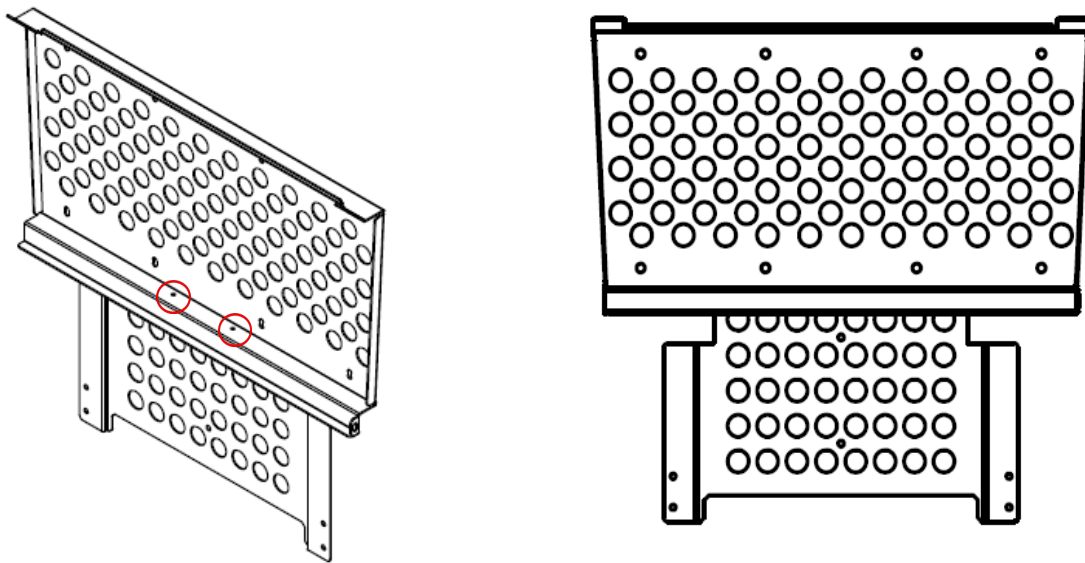
**Figure 15 Battery Installation – Mounting on the Wall**

**Step 7:** Remove the debris baffle and secure the battery to the wall with screws.



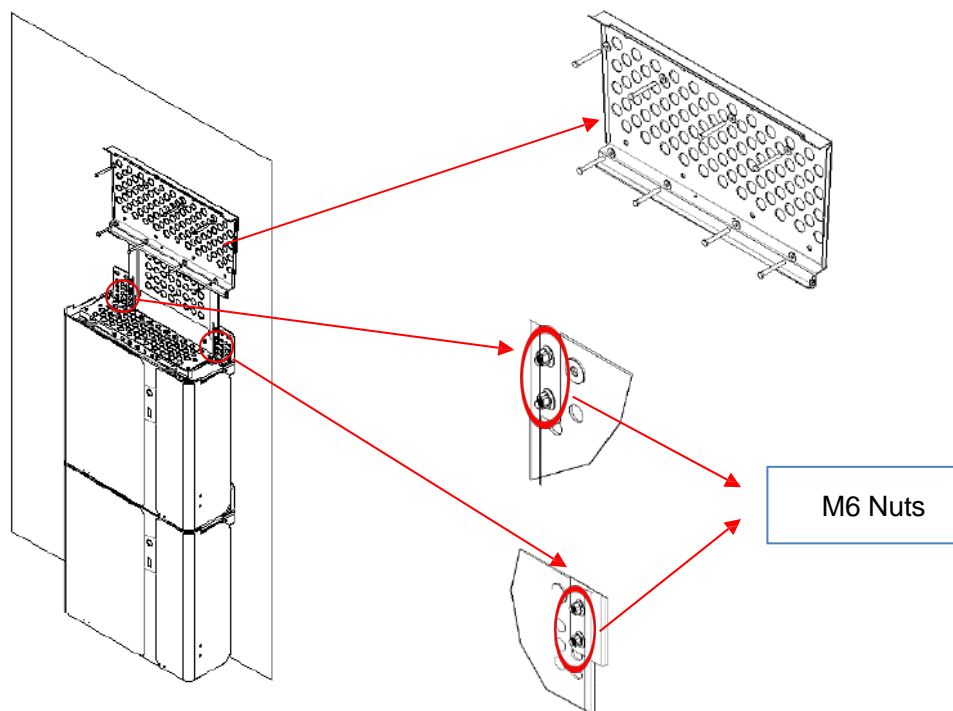
**Figure 16 Battery Installation – Second Battery Installation**

**Step 8:** Follow Step6 and Step7 to install the second battery.



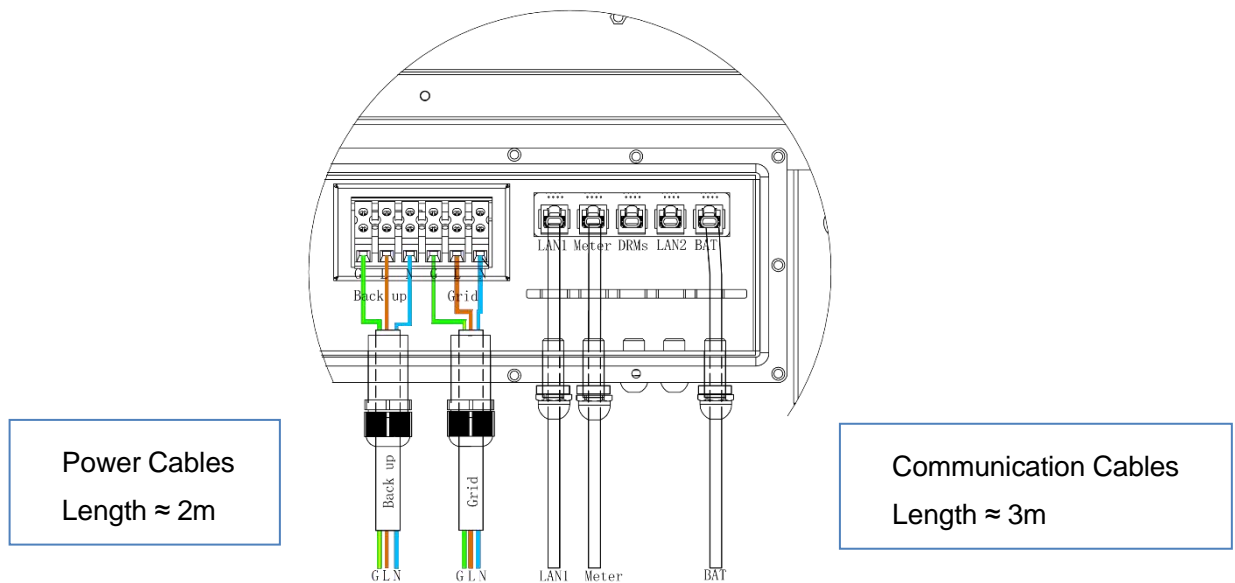
**Figure 17 Inverter Mounting Panel Installation**

**Step 9:** Install the inverter mounting panel and mounting bracket with M4 nuts as shown above.



**Figure 18 Inverter Installation - Inverter Mounting Panel**

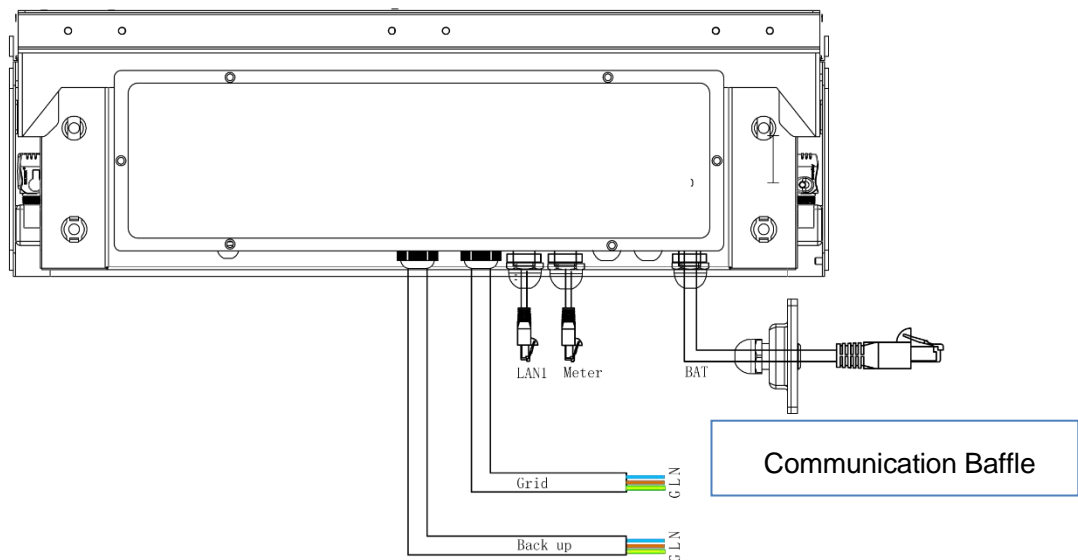
**Step 10:** Drill holes on the wall with impact drill first then install and position inverter mounting panel. Battery installation is now completed.



**Figure 19 Cable Box with pre-wired Cables, Section View.**

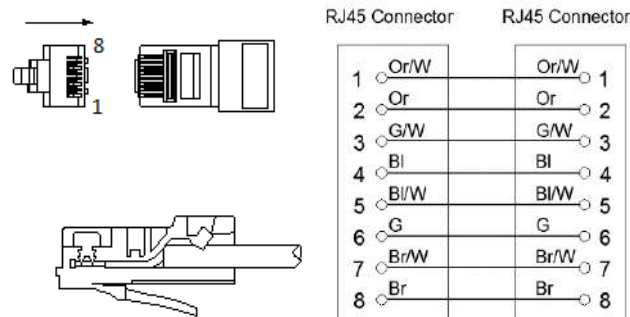
**Step 11:** Remove the cable box front cover, it can be removed by hand without tools. Set the front covers of cable box aside. For the outdoor users, the back cover is not to be taken off. The communication and power cables have already been connected inside the cable box.

**NOTE:** The communication cables outside are not equipped with RJ45 connectors. The current of the breaker that connects the inverter must be more than 25A.



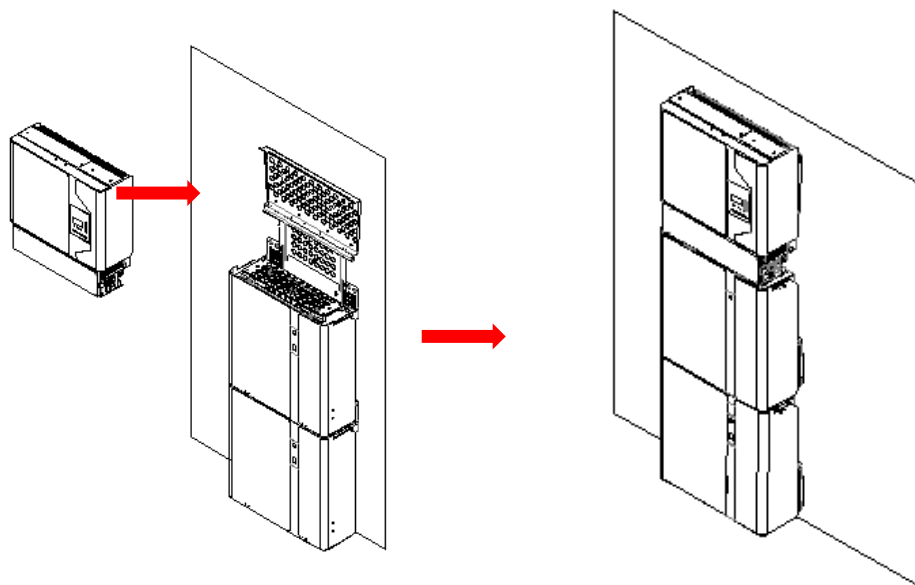
**Figure 20 Inverter with pre-wired Cables**

**Step 12:** Pass the BAT-communication cable through the battery communication baffle in Step 2 and connect an RJ45 connector, see Figure 20. Connect LAN1-, Meter-communication cables with RJ45 connectors.



**Figure 21 Network Cable Type B**

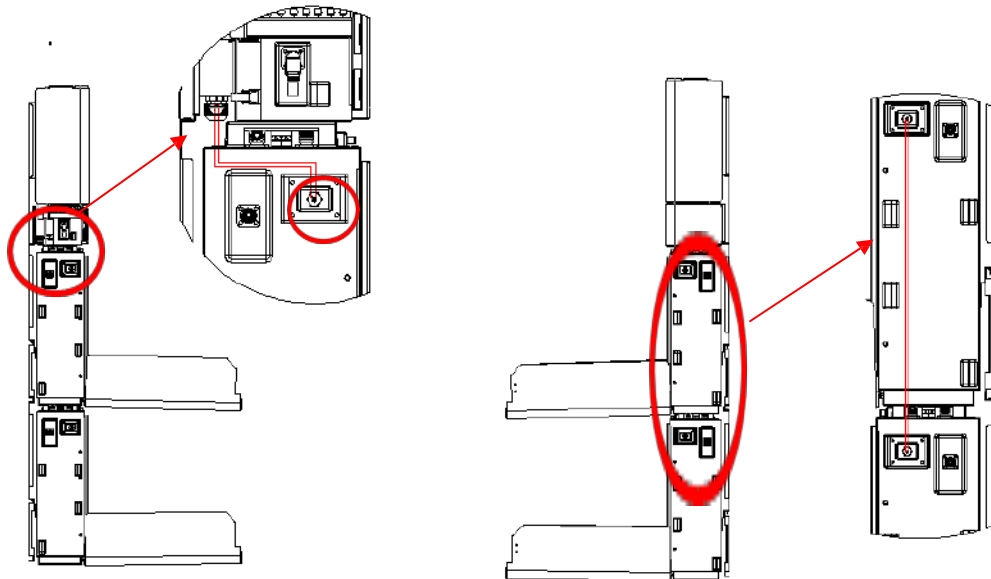
**NOTE:** The communication cable is in type B, see Figure 21. Leave the power cables and communication cables hang on the outside. Leave the device aside.



**Figure 22 Inverter Installation on the Wall**

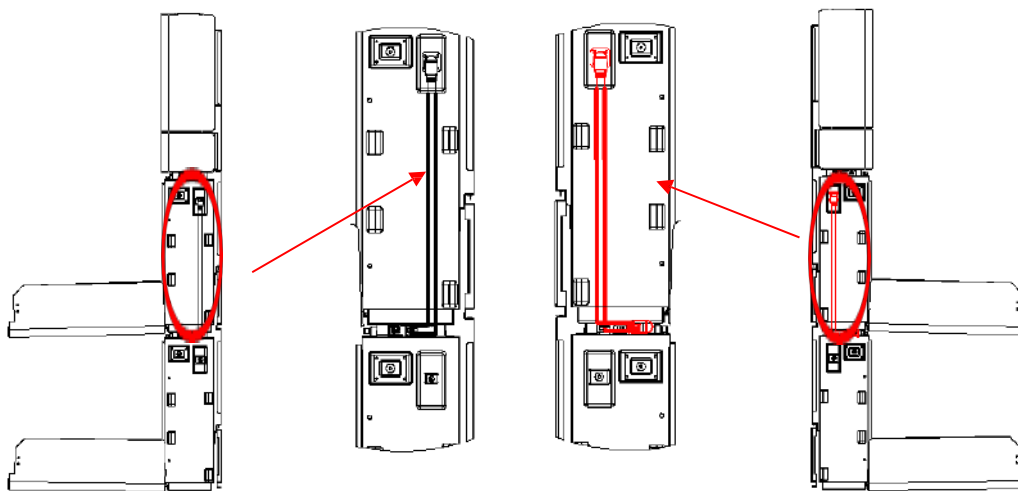
**Step 13:** Hang the inverter onto the mounting panels, adjust the entire system and ensure that the battery and the inverter have been securely hung onto the panels and brackets.

**NOTE:** Pay attention to the placing direction of the power and communication cables.



**Figure 22 Wiring the Communication Cable**

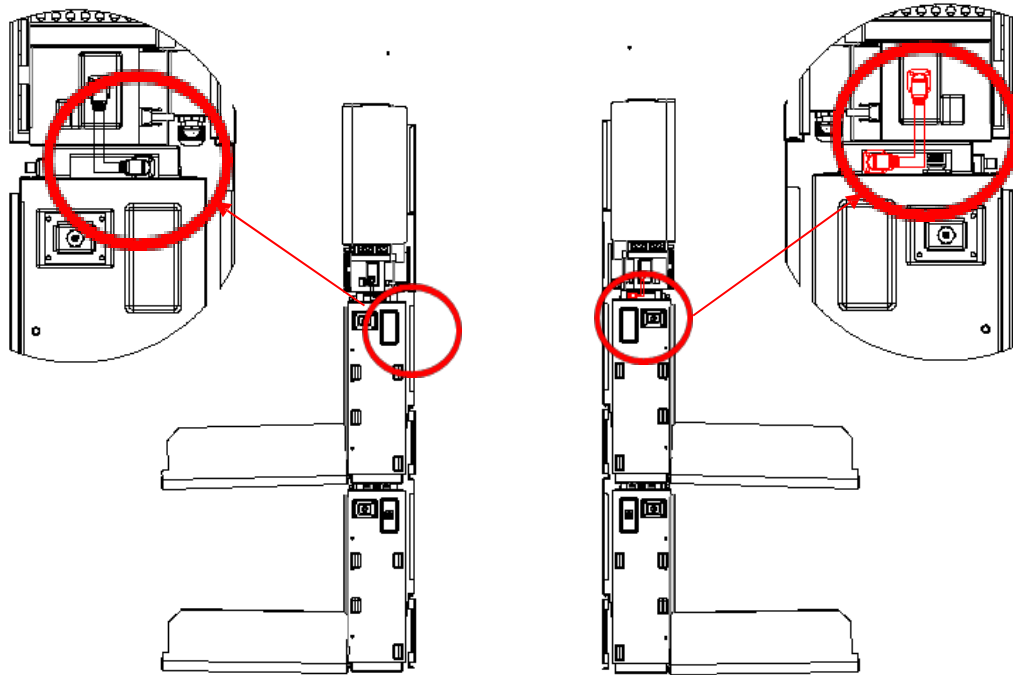
**Step 14:** Connect the communication cable from cable box from **Step 12** to the battery. Use the communication cable from parts list to connect the two batteries at the side. After all above connections done then lock all communication baffles. (If you want to add more the batteries, the new batteries have to be connected first)



**Figure 23 Wiring the Battery Power Cable**

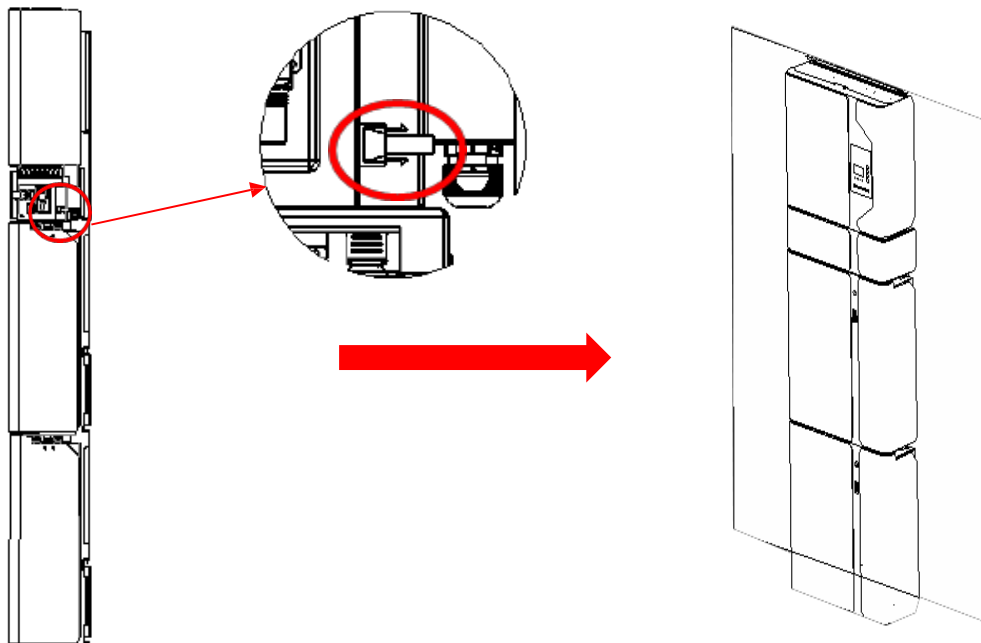
**Step 15:** Connect the batteries from Step 4 to the terminals. Make sure that red connects to red and black connects to black.





**Figure 24 Wiring the Power Cable of the Cable Box**

**Step 16:** Connect the power cable from Step 4 to the terminals of cable box. Make sure that red connects to red and black connects to black.

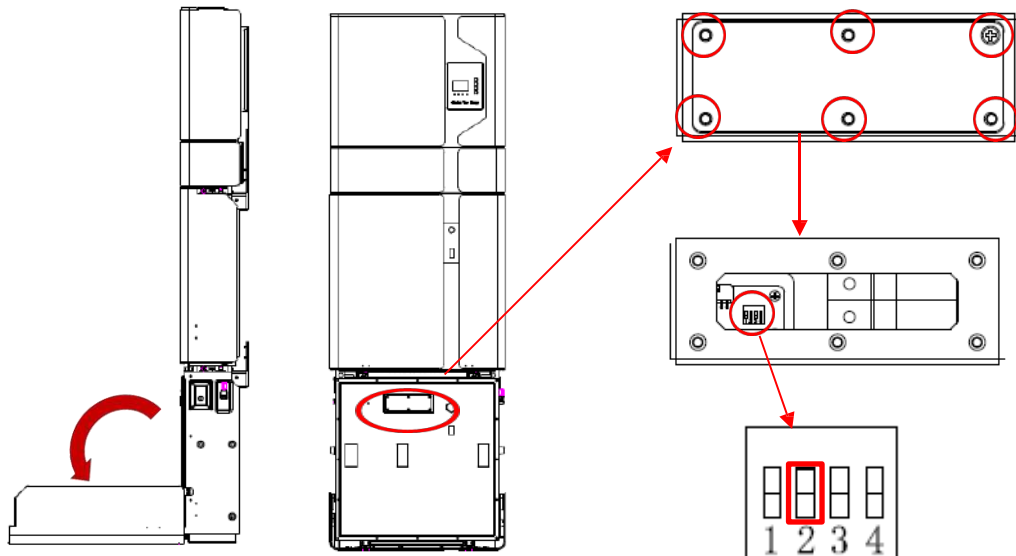


**Figure 25 PV Wiring**

**Step 17:** Close the battery covers and connect the PV MC4 connectors as shown in the diagram (both sides). At the same time connect all the AC, meter

communication cable, ethernet communication cable and then close the cable box cover. The installation is now complete.

**i NOTE: the RCD unit must be installed. A 100mA RCD device is recommended.**



**Figure 26 DIP Operation**

**Step 18:** Open battery housing case and remove DIP baffle, set the DIP switch 2 to “on” mode at the bottom of the module. Then close the DIP baffle and battery housing case.

**i NOTE: only the farthest battery from inverter need to set DIP.**

If you want to add more batteries, please install the extra ones by the side as shown below.



**Figure 27 Increase the Battery Modules**

**i** **NOTE:** when adding on battery modules, please install only by side. You can add up to 6 extra batteries with each two in a string.

## 2.3 Power Meter

The power meter should be installed and connected in the distribution box. There are three kinds of power meters, ADL-3000, SM 60A or backup box can be chosen.

- **ADL-3000:** three-/ single-phase meter (with or without CT)
- **SM60A:** single-phase meter
- **Backup Box:** three-/ single-phase meter (Contain off-grid switching and load management)

### 2.3.1 Meter ADL-3000 (If Applicable)

**ADL-3000 single-phase connect (without CT, without meter plug), if applicable:**

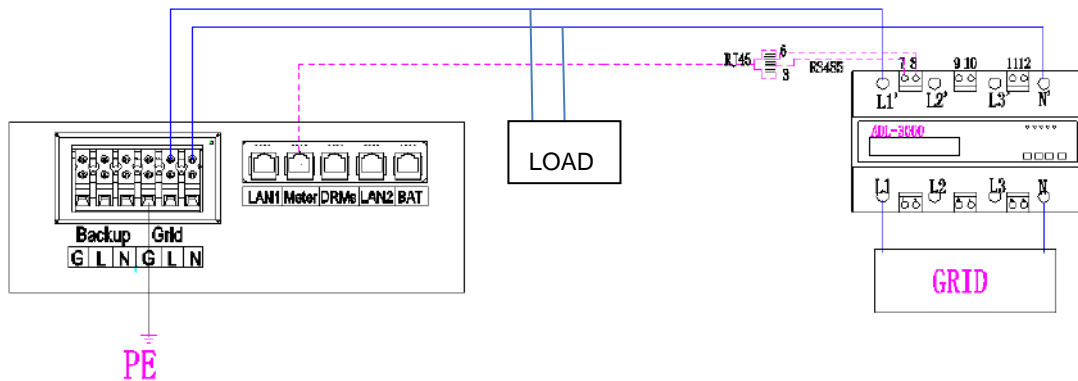


Figure 28 ADL-3000 single-phase Connect (with CT, without Meter Plug)

**i** **NOTE:** Meter 7, 8 connect the RJ45 3, 6, then RJ45 connect the cable box/super cable box.

**ADL-3000 single-phase connect (without CT, with meter plug), if applicable:**

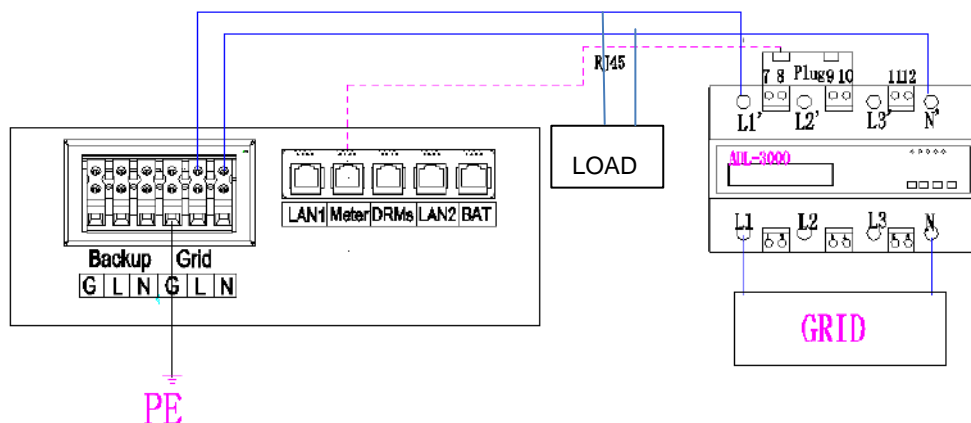
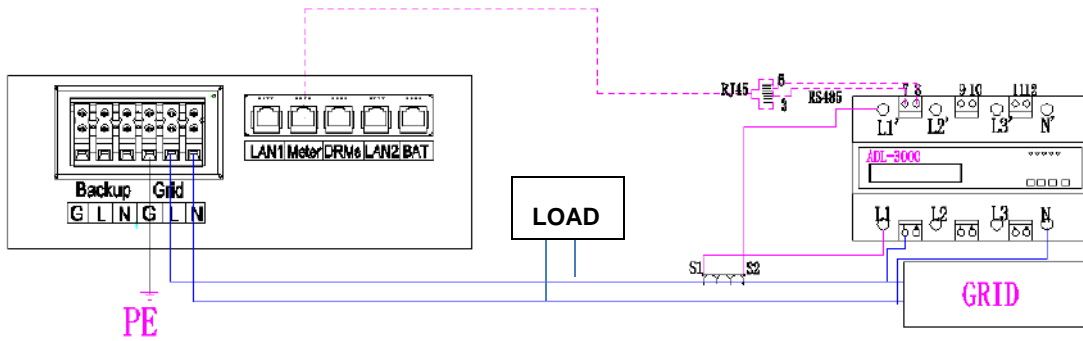


Figure 29 ADL-3000 single-phase Connect (without CT, with Meter plug)

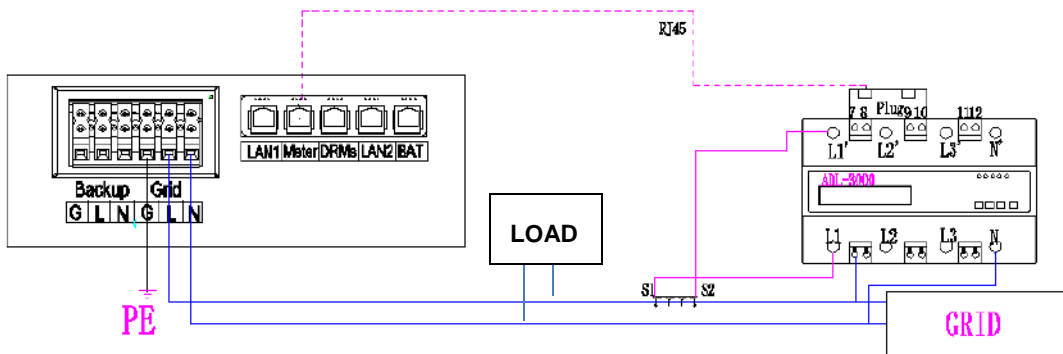
**ADL-3000 single-phase connect (with CT, without meter plug), if applicable:**



**Figure 30 ADL-3000 single-phase Connect (with CT, without Meter plug)**

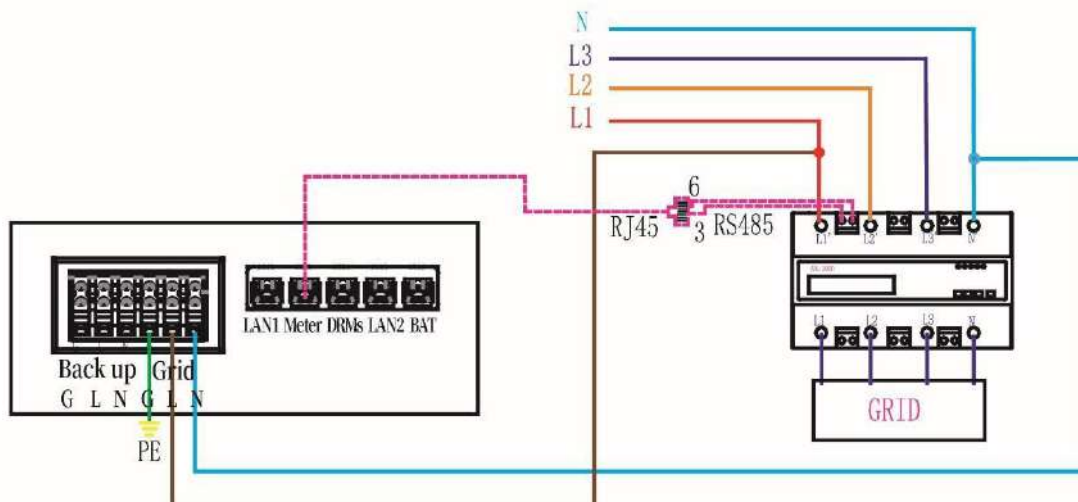
**NOTE:** Meter 7, 8 connect the RJ45 3, 6, then RJ45 connect the cable box/super cable box.

**ADL-3000 single-phase connect (with CT, meter plug), if applicable:**



**Figure 31 ADL-3000 single-phase Connect (with CT, with Meter plug)**

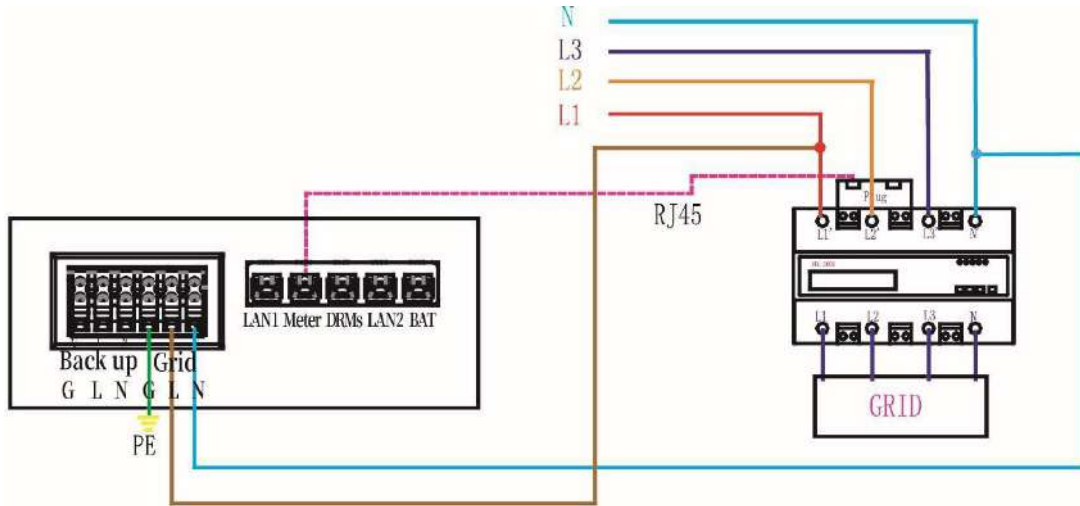
**ADL-3000 three-phase connect (without CT, without meter plug), if applicable:**



**Figure 32 ADL-3000 three-phase Connect (without CT, without Meter plug)**

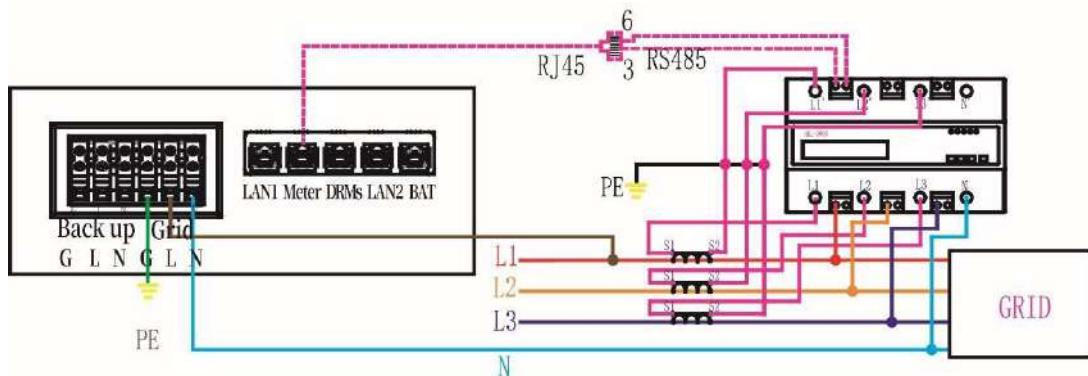
**i** NOTE: Meter 7, 8 connect the RJ45 3, 6, then RJ45 connect the cable box/super cable box.

**ADL-3000 three-phase connect (without CT, with meter plug), if applicable:**



**Figure 33 ADL-3000 three-phase Connect (without CT, with Meter plug)**

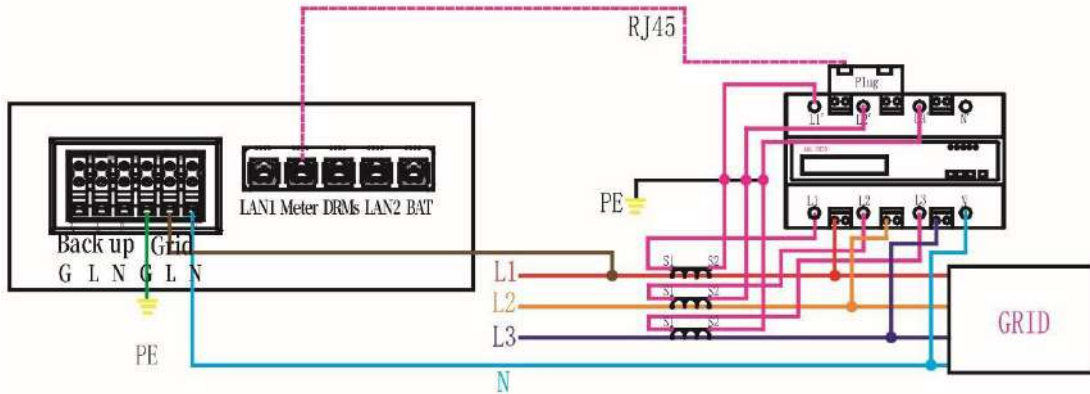
**ADL-3000 three-phase connect (with CT, without meter plug), if applicable:**



**Figure 34 ADL-3000 three-phase Connect (with CT, without Meter plug)**

**i** NOTE: Meter 7, 8 connect the RJ45 3, 6, then RJ45 connect the cable box/super cable box.

**ADL-3000 three-phase connect (with CT, with meter plug), if applicable:**

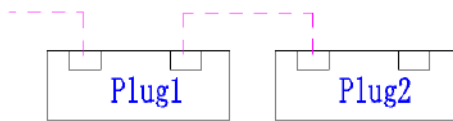


**Figure 35 ADL-3000 three-phase Connect (with CT, with Meter plug)**

**NOTE:** CT connect, connect S1 to L1, S2 to L1'.

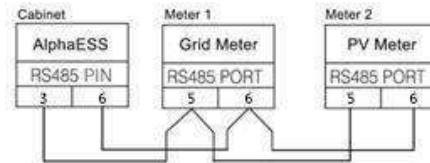
For AC-/ Hybrid-system, there are two meter needed:

**Option 1: with Meter Plug**



**Figure 36 Two Meter Connect, with Meter Plug**

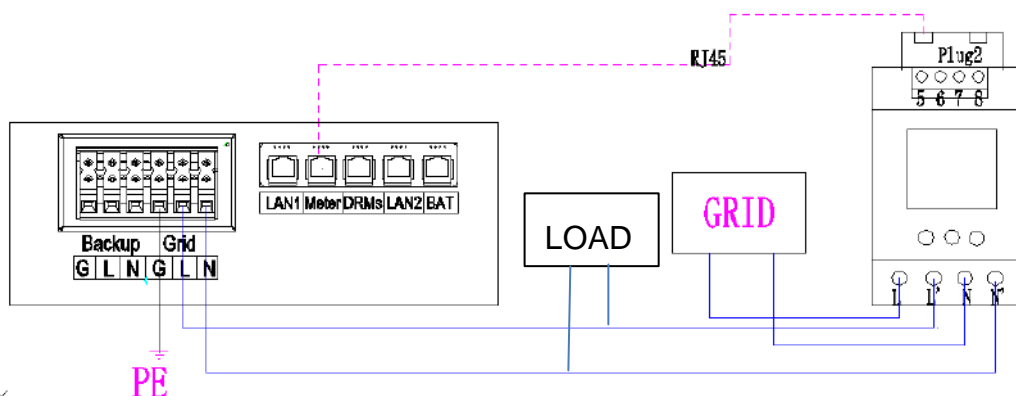
**Option 2: without Meter Plug**



**Figure 37 Two Meter Connect, without Meter Plug**

**2.3.2 Meter SM60A (If Applicable)**

**SM60A connect (with meter plug), if applicable:**



**Figure 38 SM60A connect (with meter plug)**

**SM60A connect(without meter plug), if applicable:**

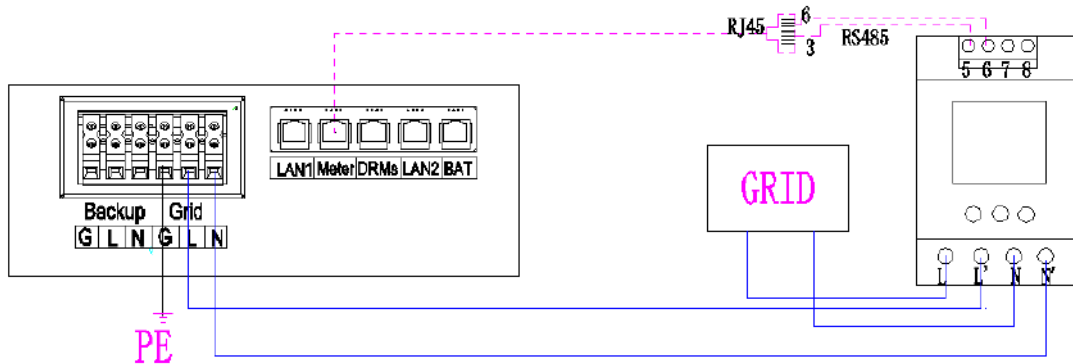


Figure 39 SM60A connect (without meter plug)

**NOTE:** Meter 5, 6 connect the RJ45 3, 6, then RJ45 connect the cable box/super cable box.

For AC/Hybrid system, there are two meter needed:

**Option 1: with Meter Plug**

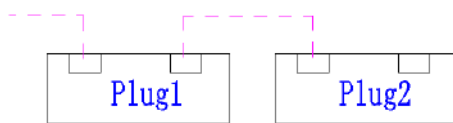


Figure 40 Two Meter Connect, with Meter Plug

**Option 2: without Meter Plug**

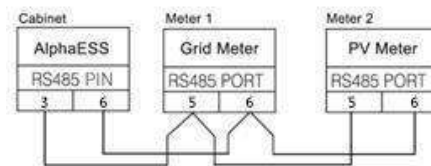


Figure 41 Two Meter Connect, without Meter Plug

**2.3.3 Backup Box (If Applicable)**

Backup Box Connect to NEOSUN HOME ESS (single-phase grid in house):

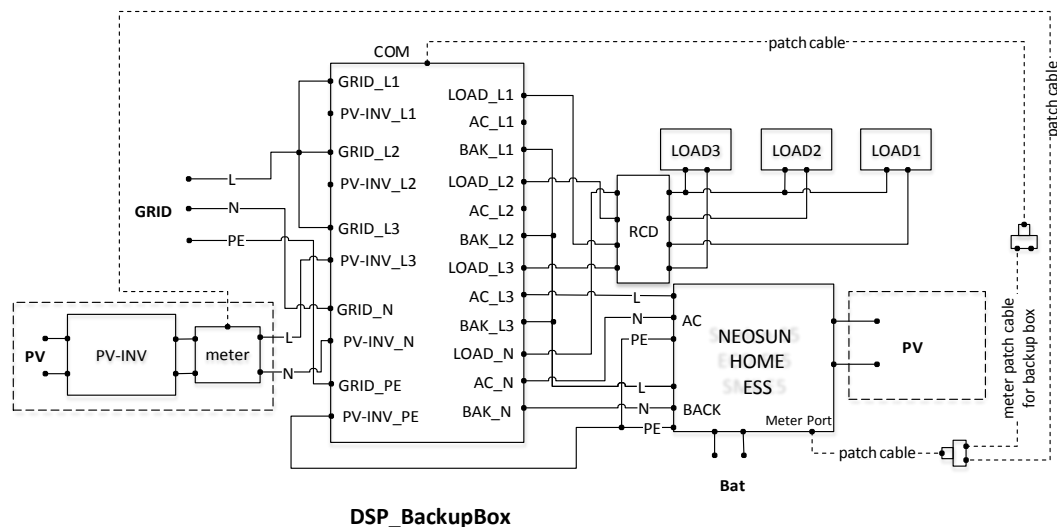
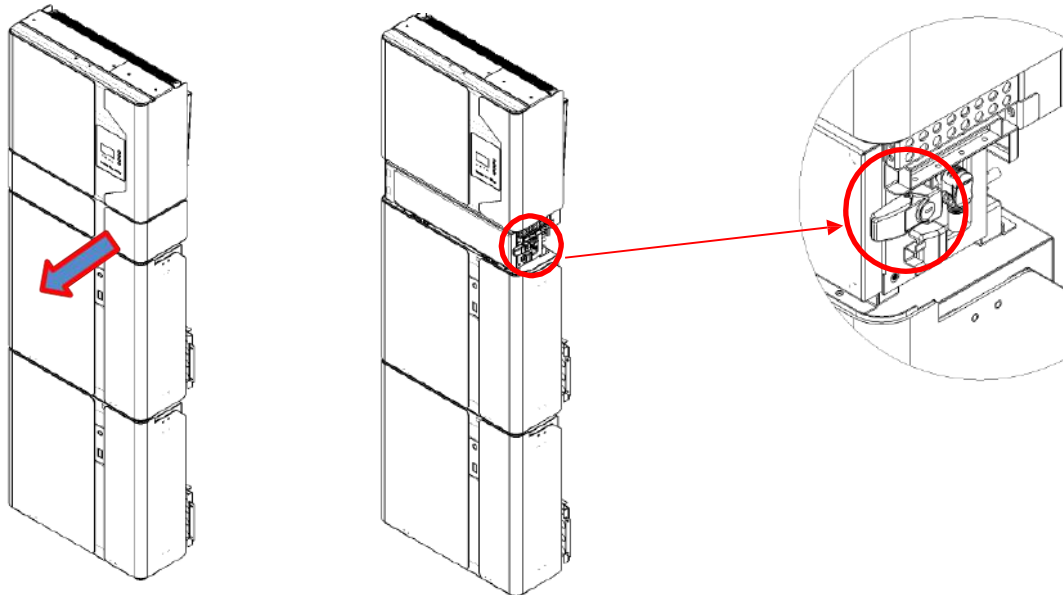


Figure 42 Backup Box Connect to NEOSUN HOME ESS (single phase grid in house)

### 3. System Operation

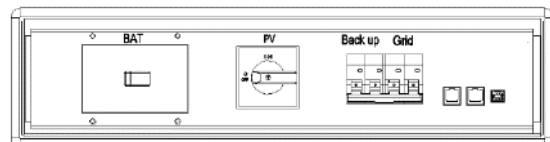
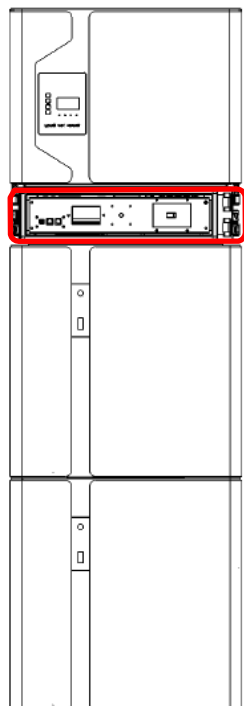
#### 3.1 Switch on

System shall be turned on in the correct sequence to avoid any damage.



**Step 1:** Open cable box outer shell.

**Step 2:** Unlock then open Cable box inner cover. Cable box locker can be opened without tools.



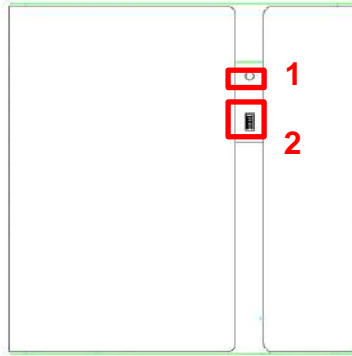
**Step 3:** Turn on the PV switch on the cable box.

**Step 4:** Turn on the GR switch.

**Step 5:** If backup load is applied, connect it to Backup ports and turn on the Backup switch; if not, then keep the Backup switch off.

**NOTE:** the Backup switch is only used when a backup load is applied.





**Step 6:** Turn on the Battery switch.

**Step 7:** Press button 1 on all the batteries, and the indicator light 2 will be on.

**Step 8:** Close the inner cover and outer shell of Cable box.

### 3.2 Switch off

**Step 1:** Open Cable box following the steps in 4.1 Step 1, 2.

**Step 2:** Press button 1 on all the batteries, till the lights off.

**Step 3:** Turn off the Battery switch.

**Step 4:** Turn off the GRID switch.

**Step 5:** If backup load is applied, turn off the Backup switch.

**Step 6:** Turn off the PV switch on the cable box.

**Step 7:** Close the inner cover and outer shell of Cable box.

More information can be found in NEOSUN-BAT user manual.

## 4. EMS Introduction and Set up

### 4.1 Function Description



Figure 43 NEOSUN HOME ESS EMS Interface

Object	Name	Description
A	Indicator LED	<b>Green:</b> The inverter is in normal state.
B		<b>Blue:</b> The battery is in charging or discharging.
C		<b>Yellow:</b> The inverter is in communication.
D		<b>Red:</b> The inverter is in fault.
E	Button Function	Down Button: Move cursor to downside or decrease value.
F		Return Button: Escape from current interface or function.
G		ENT Button: Confirm the selection.
H		Up button: Move cursor to upside or increase value.
I	LCD Screen	Display the information of the inverter in this LCD screen.

## 4.2 Introduction

This part is suitable for EMS firmware-version 1.01.67 and above.

### 4.2.1 Main

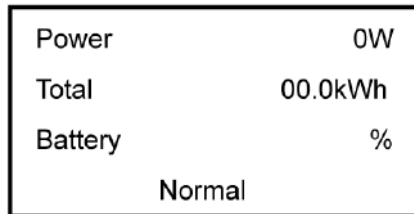


Figure 44 Main Interface

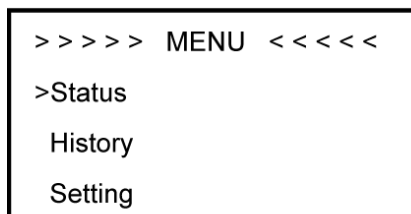


Figure 45 Main Menu

Main displays the inverter working status and information, including:

- Power: Total PV power
- Total: Total power generation.
- Battery: Current remaining battery power (SOC).
- Normal: Current working state of the equipment, including Standby.

In the Main interface, press ENT key to enter the Menu main interface.

Through the up and down key, select the sub-menu, press the ENT key to enter the select sub-menu, press Return key to return to the previous layer.

### 4.2.2 Status



Figure 46 Status Menu

Status menu contains five sub-menus: Solar, Battery, Grid, UPS and Comm display the relevant information about the current physical or communication interface respectively.

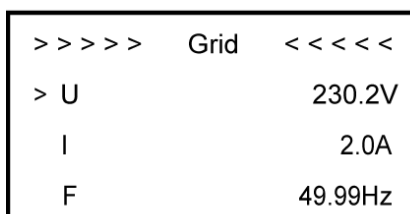


Figure 47 Grid Interface

Grid interface displays the real-time information on the city electric side:

voltage U, current I, frequency F,  $P_{Inv}$ ,  $P_{MeterAC}$ ,  $P_{MeterDC}$ .

```

>>>> Solar <<<<<
> U1          360.0V
  I1          1.0A
  P1          360W
  
```

Figure 48 Solar Interface

Solar interface displays the real-time information of PV side: voltage U1, current I1, power P1, voltage U2, current I2 and power P2.

```

>>> Battery <<<<
> U           48.0V
  I           10.0A
  P           480W
  
```

Figure 49 Battery Interface

Battery interface displays the real-time information of battery side: voltage U, current I, power P, residual capacity of Battery (SOC), the internal environmental temperature Temp

```

>>>> UPS <<<<<
> U           230.2V
  I           2.0A
  P           460W
  
```

Figure 50 UPS Interface

UPS interface displays the real-time information in this mode: voltage U, current I, power P, frequency F

```

>>>> Comm <<<<<
> BMS         Yes
  Net         Yes
  MeterGrid   Yes
  
```

Figure 51 Communication Interface

Communication interface displays the real-time communication situation of BMS, Net, MeterGrid and MeterDC.

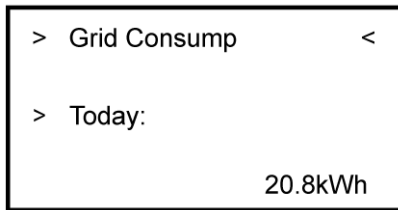
### 4.2.3 History

```

>>>> History <<<<
> Grid Consump
  INV Gen.
  BAT Gen.
  
```

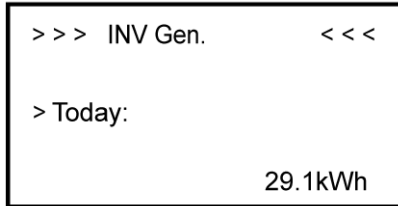
Figure 52 History Menu

History menu contains seven sub-menus: Grid Consumption, INV Gen., BAT Gen., PV Gen., Grid Charge, PV Charge, Error Logs



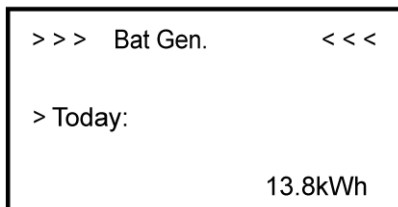
**Figure 53 Grid Consumption Interface**

Grid Consumption interface displays today's or total load consumption from grid



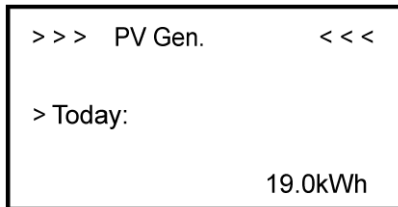
**Figure 54 INV Gen. Interface**

INV Gen. interface displays today's or total electricity quantity generated from NEOSUN-INV.



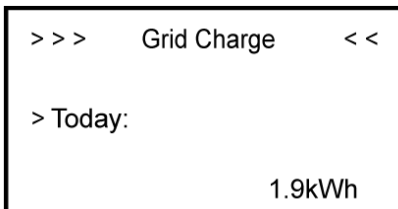
**Figure 55 Bat Gen. Interface**

Bat Gen. interface displays today's or total electricity quantity discharged from the battery.



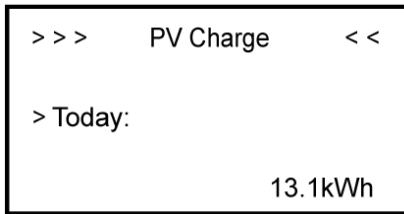
**Figure 56 PV Gen. Interface**

PV Gen. interface displays today's or total electricity quantity generated from the PV-panels.



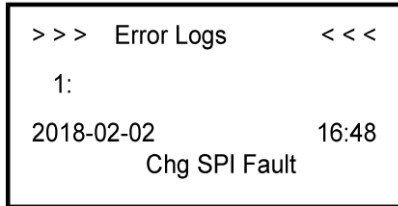
**Figure 57 Grid Charge. Interface**

Grid Charge interface displays today's or total electricity quantity battery charging from the grid.



**Figure 58 PV Charge. Interface**

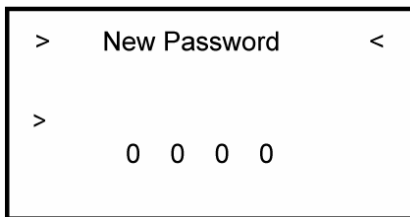
PV Charge interface displays today's or total electricity quantity battery charging from the PV-panels.



**Figure 59 Error Logs Interface**

Error Logs interface displays 10 pieces of the latest fault records of device, including the name of the fault and time of error

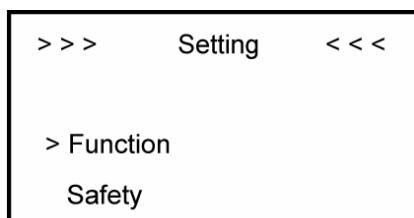
#### 4.2.4 Setting



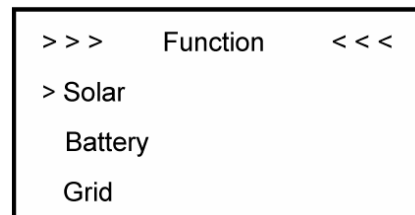
**Figure 60 Password Interface**

**Step 1:** Click setting and enter the password.

The installation's password is four digits password: 1111, after four-digits password is correctly input, you can enter into the main Setting interface (administrator permissions).



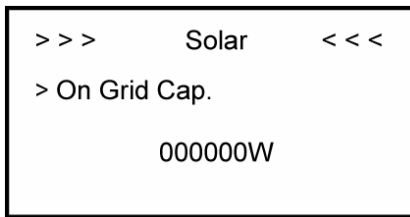
**Figure 61 Setting Menu**



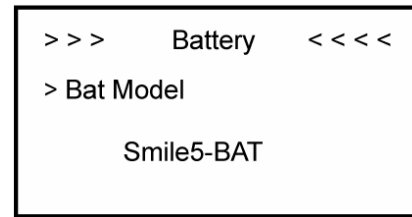
**Figure 62 Function Interface**

**Step 2:** Click Function to enter function setting.

**Step 3:** Click Solar to set the Solar relevant information.



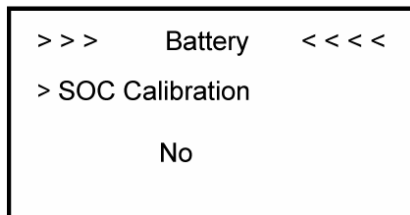
**Figure 63 Solar Setting Interface**



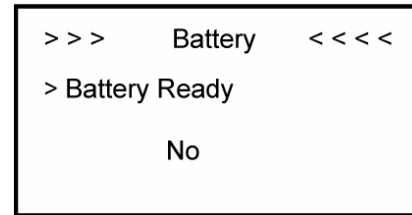
**Figure 64 Battery Model Interface**

**Step 4:** Set on-grid capacity, storage capacity and number of PV strings (MPPT number).

**Step 5:** Click the Battery Function and check battery type NEOSUN-BAT.



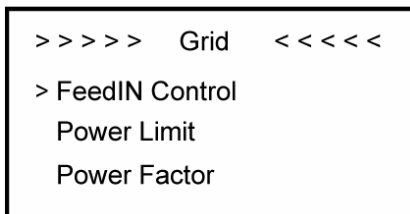
**Figure 65 SOC Calibration Interface**



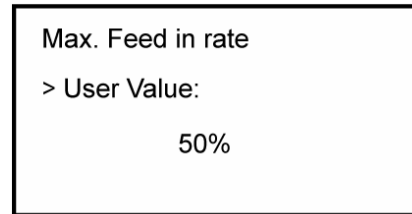
**Figure 66 Battery Ready Interface**

**Step 6:** Check SOC Calibration function set No.

**Step 7:** Check the Battery Ready function set No. If you only use the inverter without battery, please set it Yes.



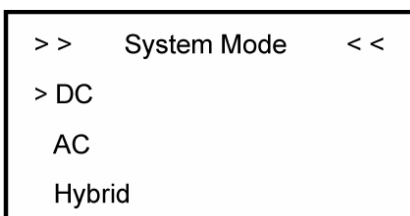
**Figure 67 Grid Setting Interface**



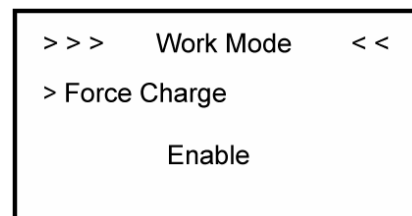
**Figure 68 Max. Feed in rate Setting Interface**

**Step 8:** Click the Grid Function to set up relevant parameters about the grid

**Step 9:** Set the Max. Feed in rate value.



**Figure 69 System Mode Setting Interface**



**Figure 70 Work Mode Setting Interface**

**Step 10:** Click Function-System Mode to set system mode: DC, AC, Hybrid.

**Step 11:** Click the mode then set up work mode.(self-use or force time charge)

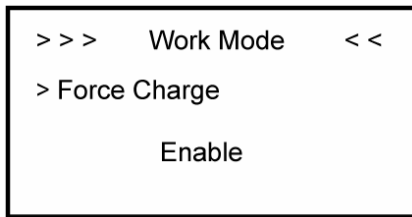


Figure 71 Force Charge Setting Interface

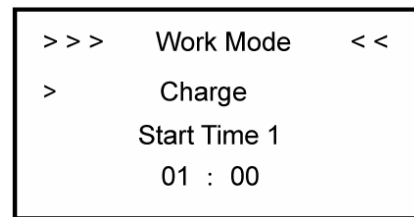


Figure 72 Force Charge Time Setting Interface

**Step 12:** If you want to use force charge, set Enable here.

**Step 13:** Set the charge and discharge time.

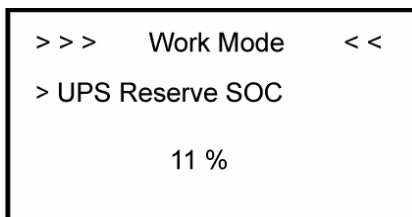


Figure 73 UPS Reserve SOC Setting Interface

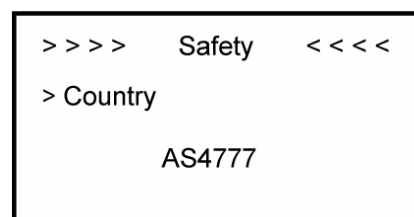


Figure 74 Safety Setting Interface

**Step 14:** Set the UPS Reserve SOC, it means how much battery energy to keep for UPS function.

**Step 15:** Click Safety in the setting menu. Set safety standard.

AS4777 for Australia, ARN4105 for Germany, CEI0\_21 for Italy, G83\_2 for Great Britain)

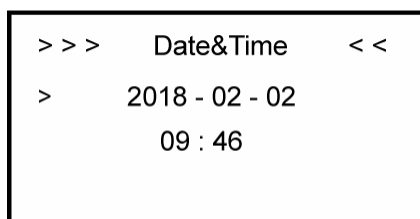


Figure 75 Date&Time Setting Interface

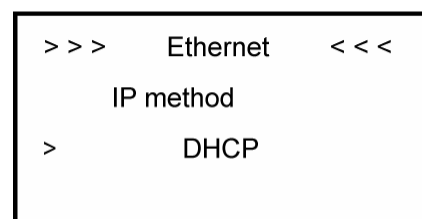


Figure 76 Ethernet interface

**Step 16:** Click System in the setting menu. Click Date & Time and set up the date and time.

**Step 17:** Click Ethernet to set the IP address. DHCP mode means that setup IP address is set up automatically.

If you want to set up the IP address manually, please choose manual mode.

**NOTE:** It is needed to set the following 3 parameters for manual mode:

IP Address: IP address;

**Subnet Mask:** Subnet mask;

Default Gateway: Default gateway;



Automatic display one parameter:

**MAC Address:** display MAC Address.

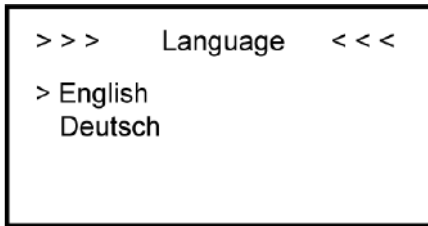


Figure 77 Date&Time Setting Interface

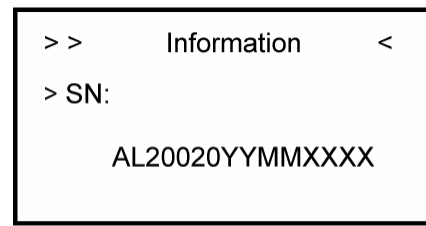


Figure 78 Date&Time Setting Interface

**Step 18:** Click Language to set language

**Step 19:** Make sure all the following number is correct.

## 6. Annex

### 6.1 Datasheet – NEOSUN HOME ESS

System	
Model	NEOSUN HOME ESS
Battery	NEOSUN-BAT
DOD	90%
Installed Capacity	5.7/11.5/17.2/22.9/28.7/34.4 kWh
Usable Capacity	5.2/10.3/15.5/20.6/25.8/30.9 kWh
Cycle Life	≥6000
Product Warranty	5 Years
Performance Warranty	10 Years
Phase	Single Phase
Display	LCD
Communication	Ethernet
Operating Temperature Range	-10° C To 50° C*
Humidity	15% - 85%
Protection Level	IP65
Dimensions (W x D x H)	600 x 600 x 1100 mm
Weight	220 kg (With two Batteries)
Inverter Model	NEOSUN-INV
Nominal Output Power	5000 W / 4600 W (DE)
Grid Output Voltage Range	180 - 270 Vac
Grid Frequency	50/60 Hz
Max. Input PV Power	6600 W
Max. Input PV Voltage	580 Vdc
Max. Input PV Current	2*15 A
Backup	UPS
Grid Regulation	VDE-AR-N 4105, VDE 0126-1-1, AS 4777.2 2015, CEI 0-21:2014, G59/3
Safety	IEC 62109-1&-2

**\*When the temperture is below 0°C or above 40°C, the performance will be limited.**