



Installation Manual

Energy Storage System (ESS)

Storion-SMILE5

V1.71



IMPRINT

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1. Introduction

1.1 System Introduction

AlphaESS SMILE5 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:

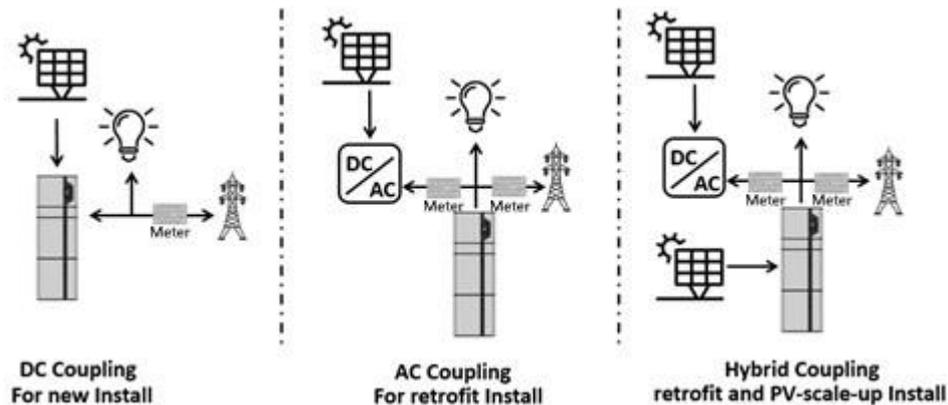


Figure 1 DC- and AC-/ Hybrid-coupled Storage System - Scheme

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°C or over 50°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 AlphaESS Storion-SMILE5 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.**

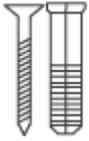
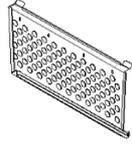
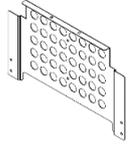
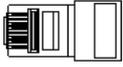
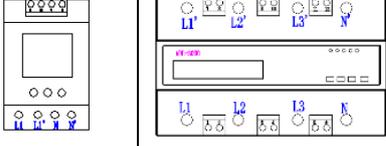
The inverter and battery are heavy. There is risk of injury if the inverter or battery is lifted incorrectly or dropped during transport or when attaching to or removing from the wall.

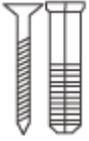
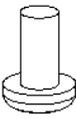
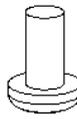
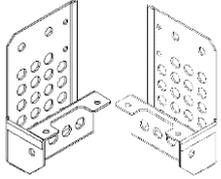
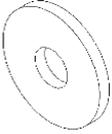
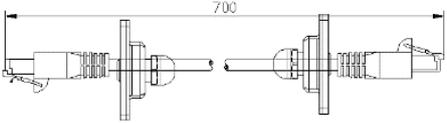
- Lifting and transporting the inverter and battery must be carried out by more than 2 people.

1.3 Parts List

Check the following parts list to ensure it is complete.

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

SMILE5-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

SMILE5-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

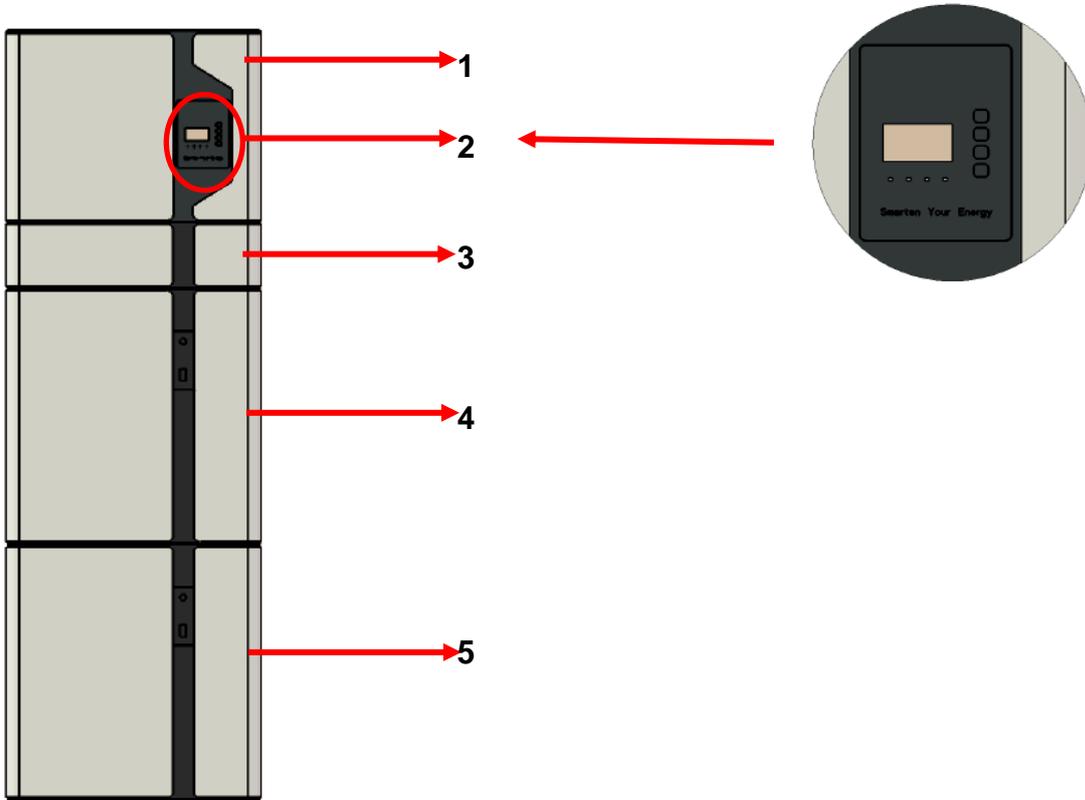


Figure 2 Storion-SMILE5 Delivery Scope

Object	Description
1	Hybrid Inverter with Cable Box
2	Display Screen
3	Cable Box Part of Inverter
4	SMILE5-BAT (Battery 1)
5	SMILE5-BAT (Battery 2)

Cable Box Part

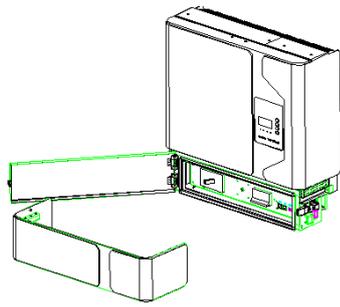


Figure 3 Inverter with Cable Box – Front View

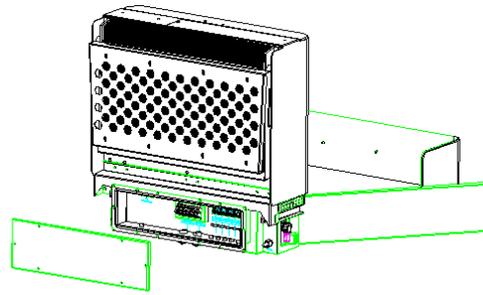


Figure 4 Inverter with Cable Box - Rear View

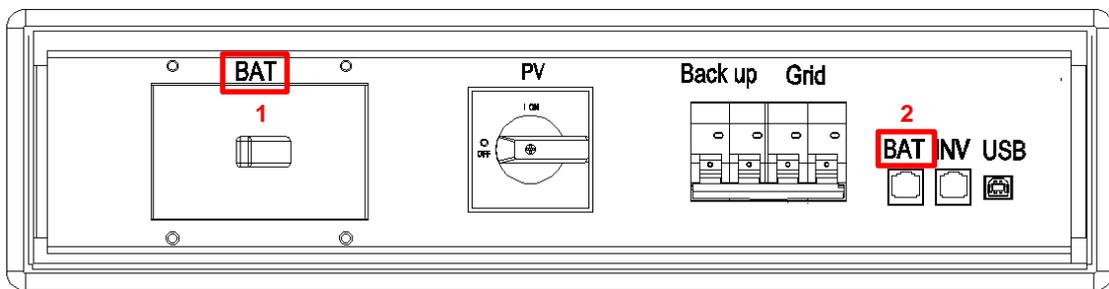


Figure 5 Cable Box Part– Front View

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		

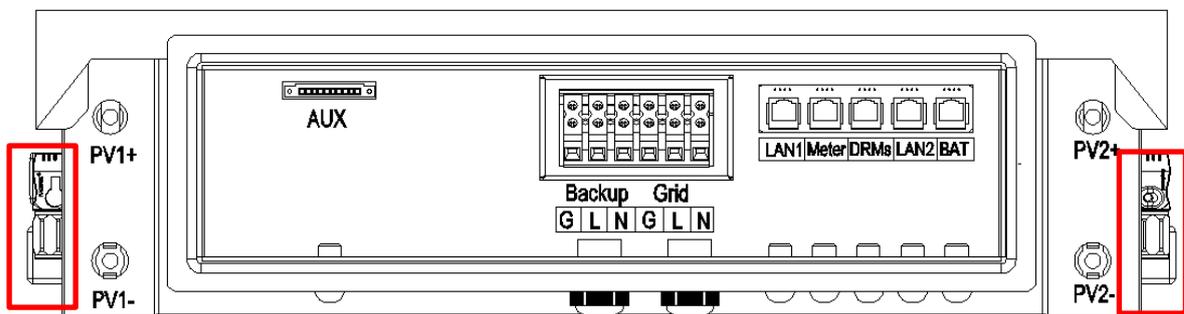


Figure 6 Cable Box Part - Rear View

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 AlphaESS does not assume any direct or indirect liability.

- Product modified, design changed or parts replaced without AlphaESS authorization;
- Changes, or attempted repairs and erasing of series number or seals by non AlphaESS 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 AlphaESS Storion-SMILE5.

(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.

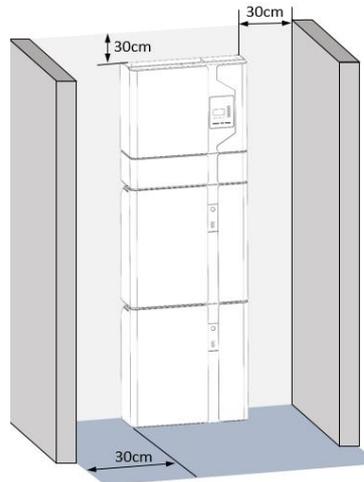


Figure 7 Limit Distance of Installation to Neighboring Objects

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

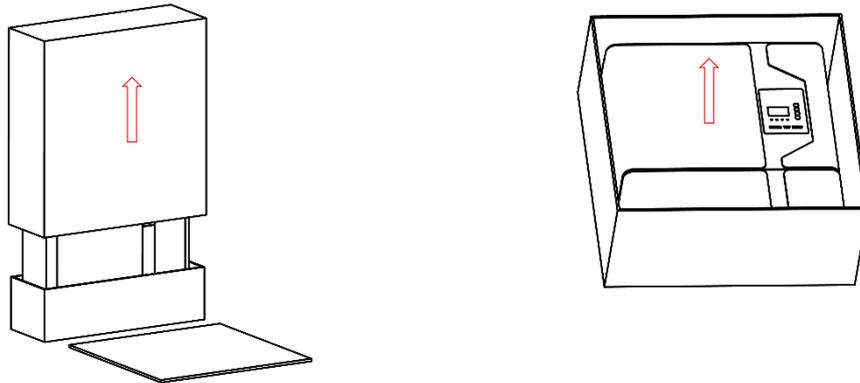


Figure 8 Unpacking the inverter and battery

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

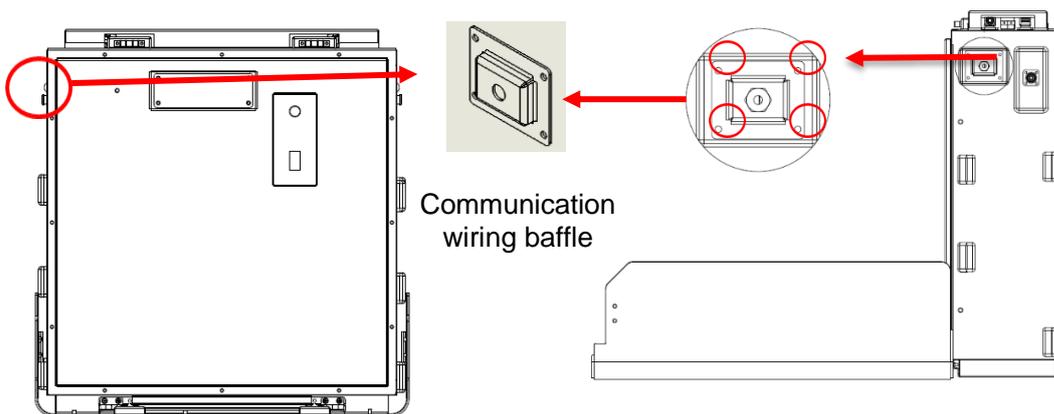


Figure 9 Battery with Lid off - Front View

Figure 10 Battery with Lid off – Side View

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

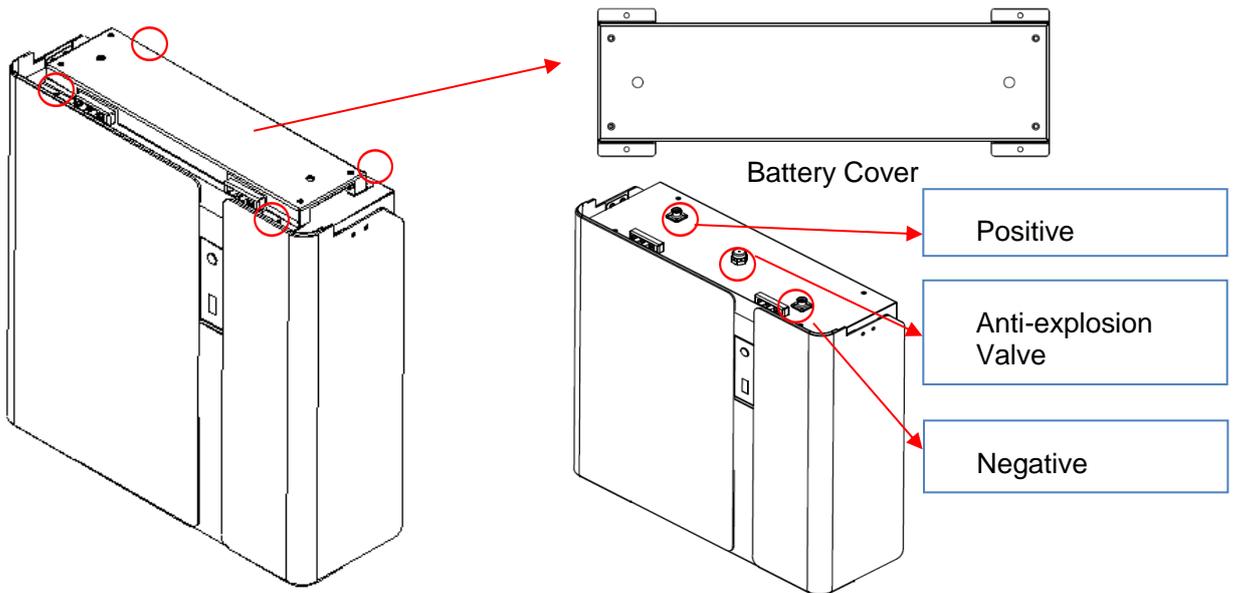


Figure 11 Disassembly Diagram of Battery Top Cover

Step 3: Remove the top cover of the battery.

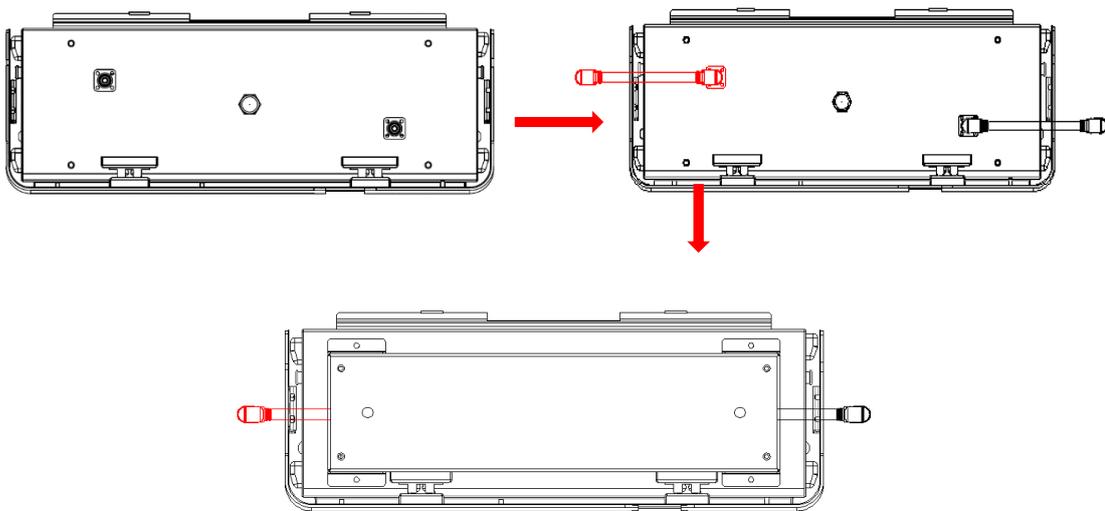


Figure 12 Battery power cable installation diagram

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

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

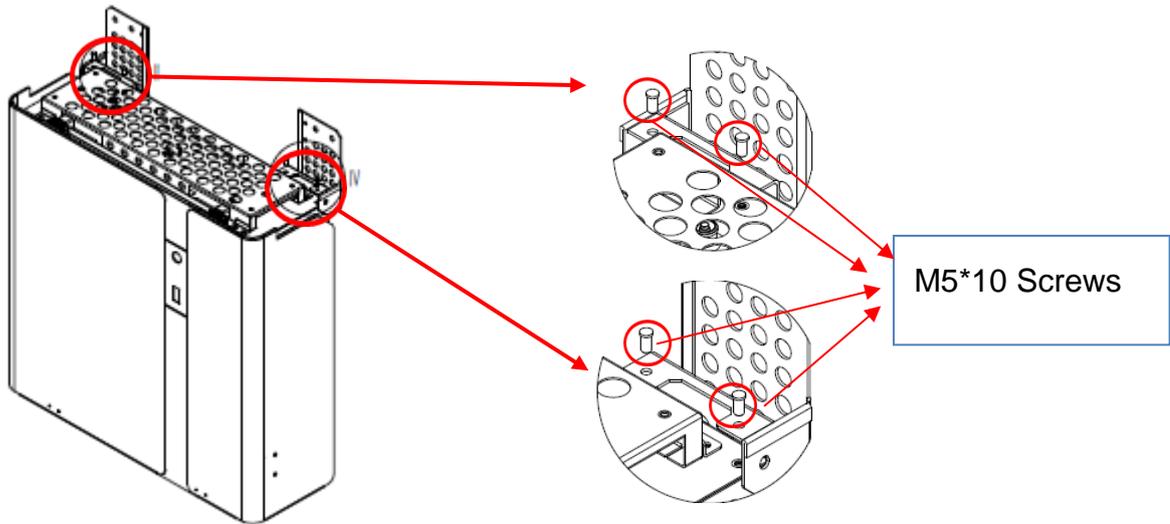


Figure 13 Assemble Battery Mounting Panel

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

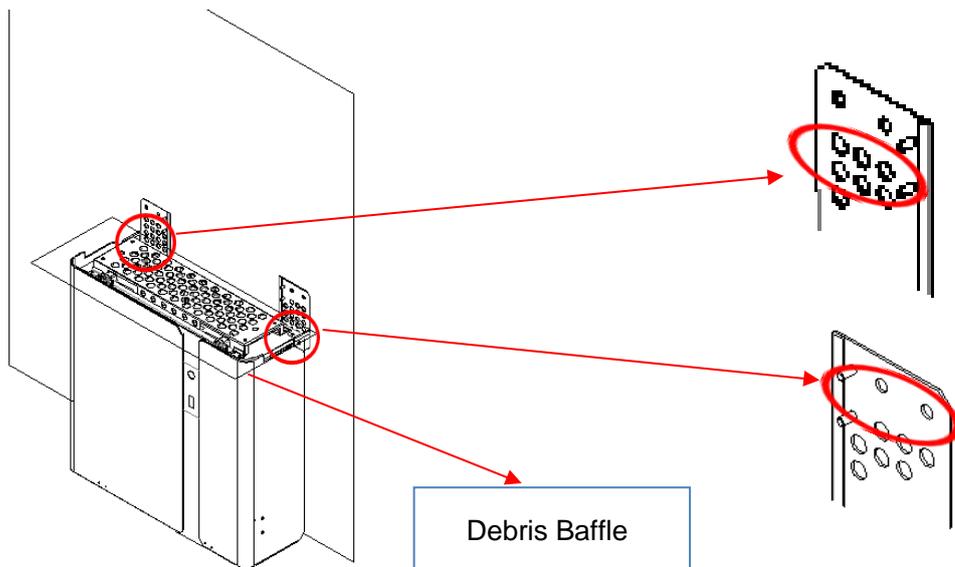


Figure 14 Battery Installation - Drill Holes

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.

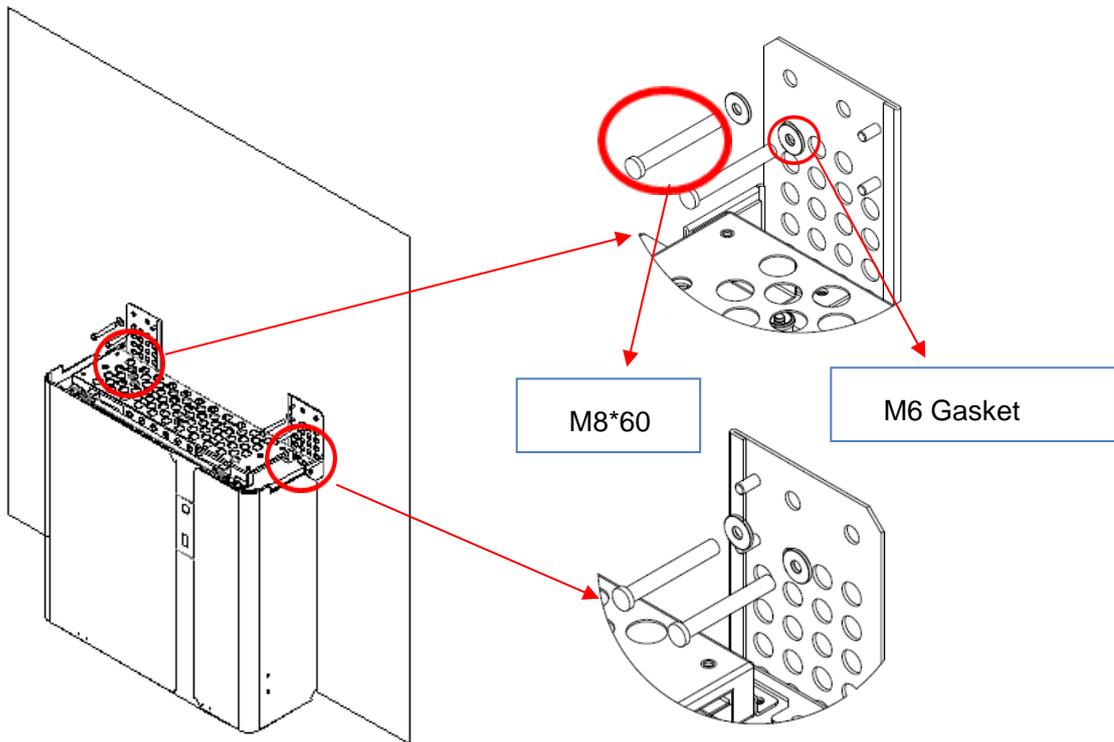


Figure 15 Battery Installation – Mounting on the Wall

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

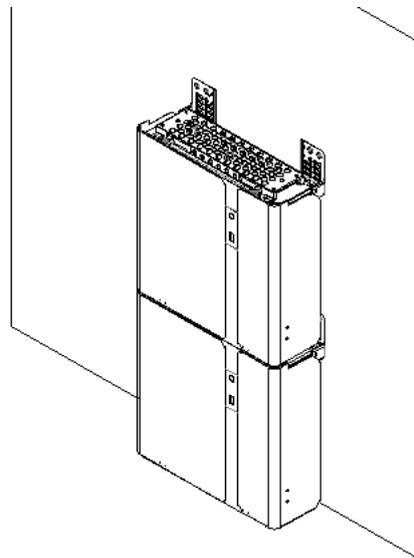


Figure 16 Battery Installation – Second Battery Installation

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

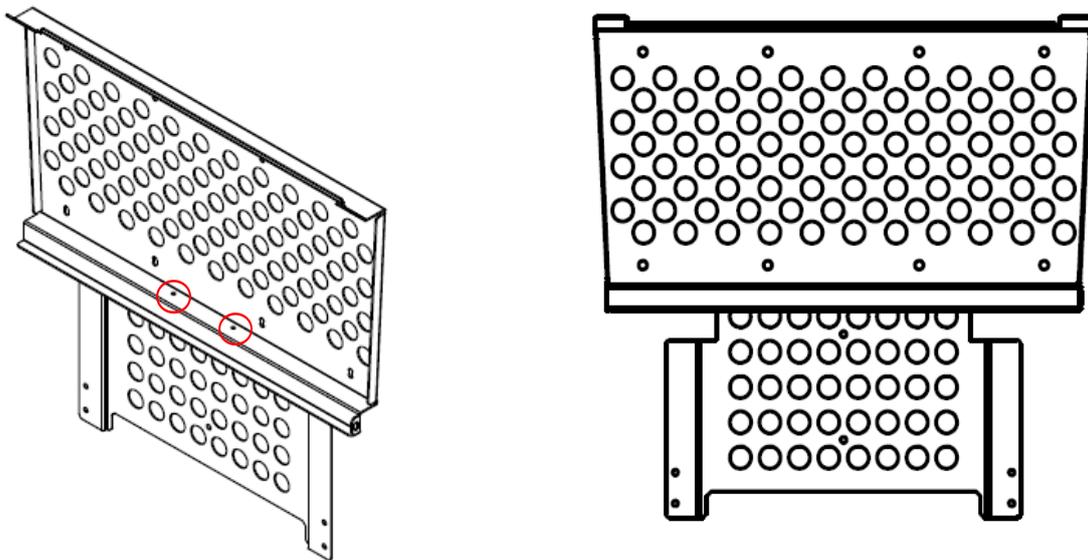


Figure 17 Inverter Mounting Panel Installation

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

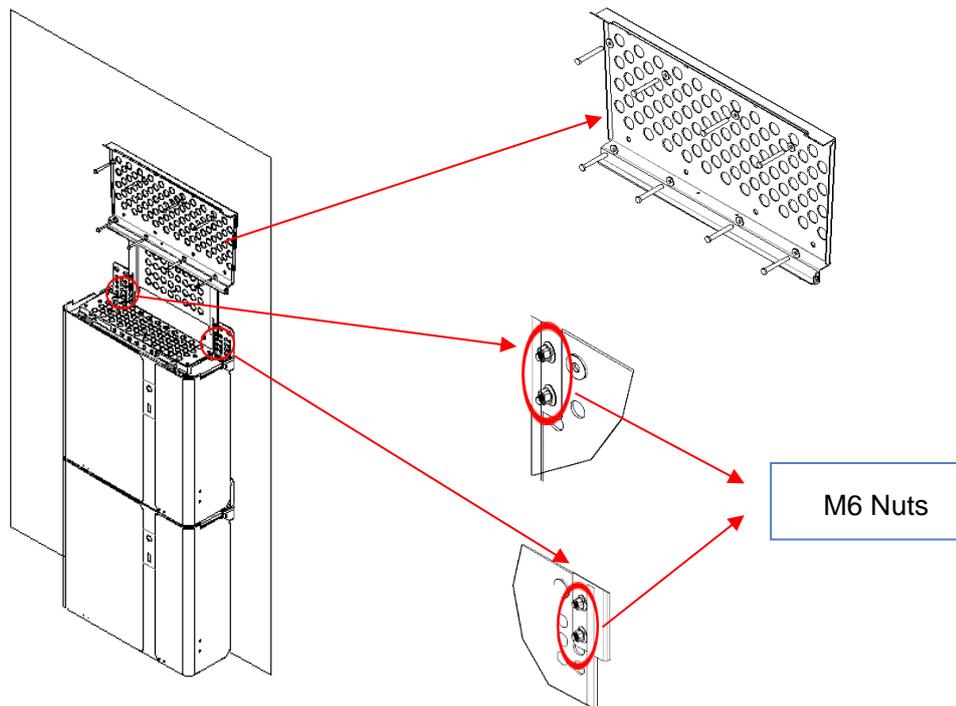


Figure 18 Inverter Installation - Inverter Mounting Panel

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

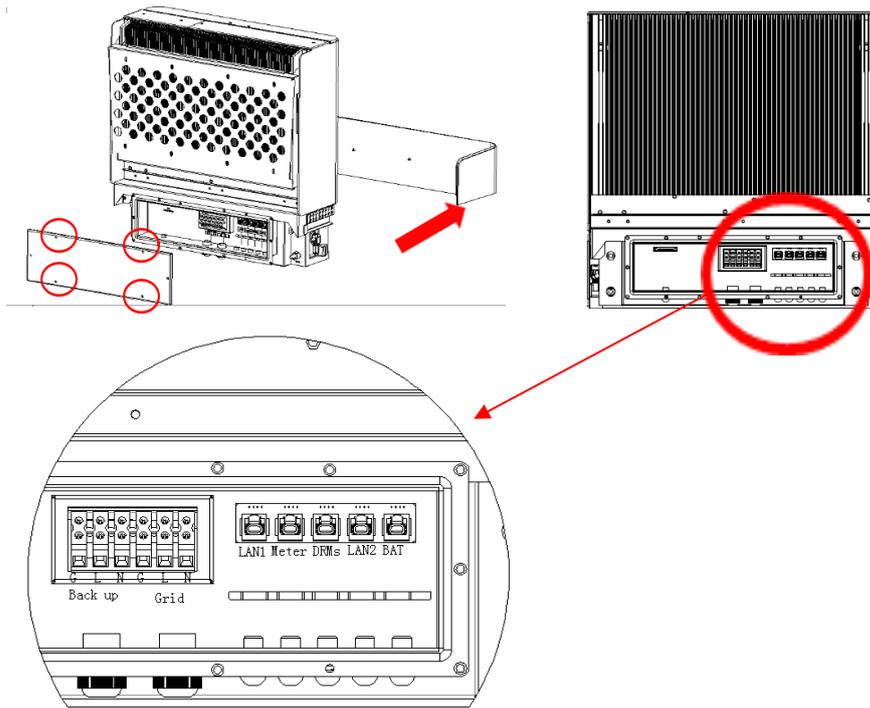


Figure 19 Cable Box Wiring Diagram

Step 11: Remove the cable box front cover, it can be removed by hand without tools. Remove the screw to take off the back cover. Set the front and back covers of cable box aside.

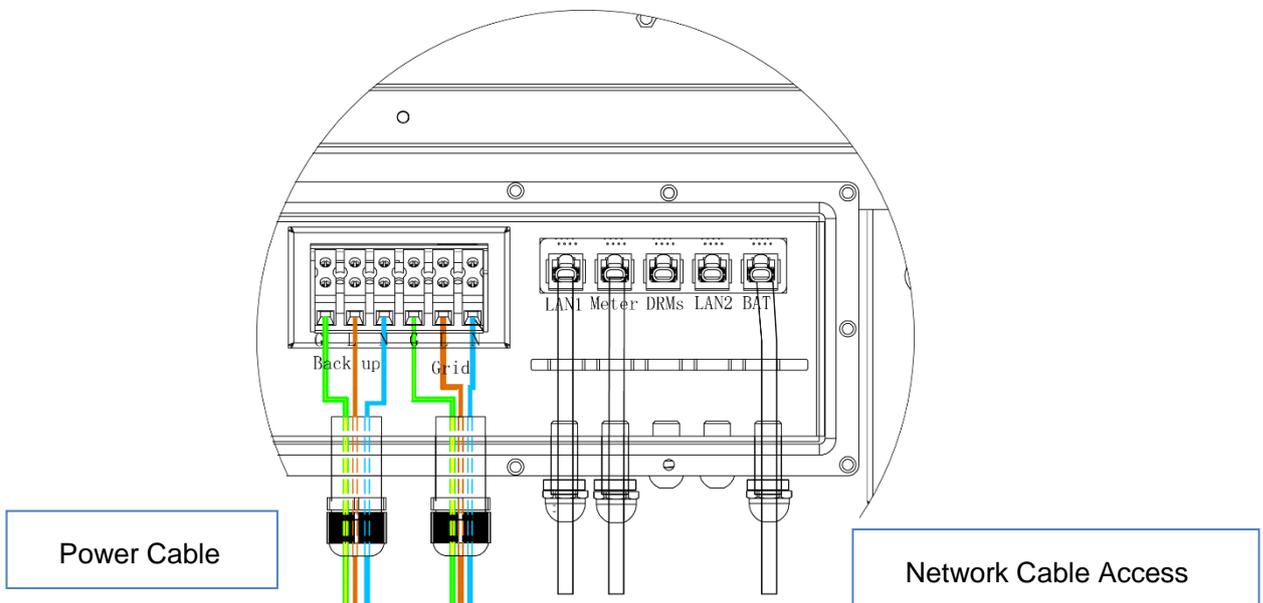


Figure 20 Communication and Power Cable Access

Step 12: Screw off the big and small waterproof terminals and pass the network cable through the terminals, into the switch box. At the same time connect the power cable of output side through waterproof terminal following the diagram. (Here the network cable is not equipped with RJ45 plug).

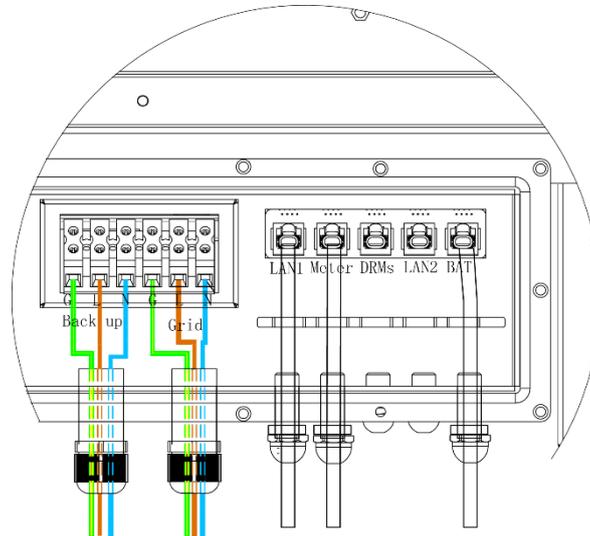


Figure 21 Network Cable Connection Diagram

Step 13: Lock waterproof connector, plug in the RJ45 plugs on LAN1 and Meter's ends inside cable box, and then plug in RJ45 and cable on the other side of LAN1 and Meter's ends outside of cable box (leave some length as the other side might need to be connect to router or meter). At the same time, connect RJ45 into BAT end inside of cable box and leave the outside end there for now).

NOTE: the current of the breaker that connects the inverter must be more than 25A.

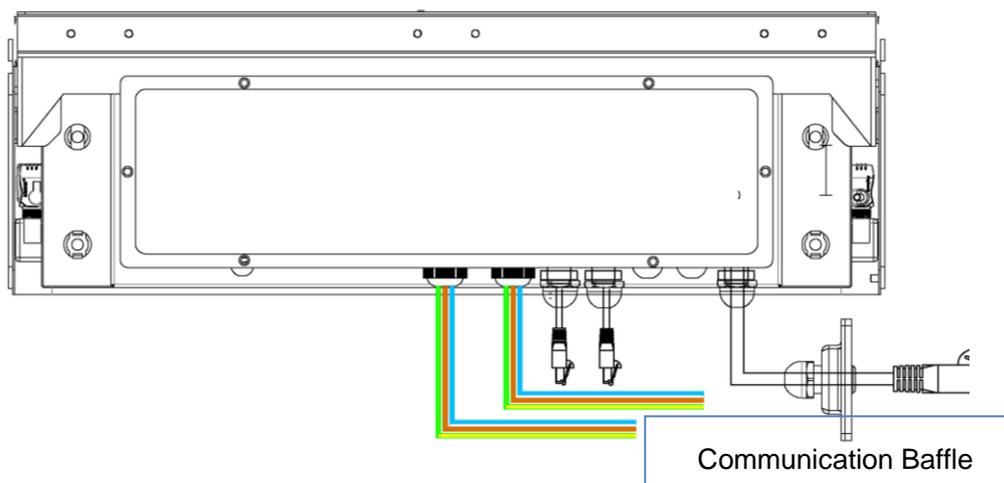


Figure 22 Inverter Wiring Completion Diagram

Step 14: Lock the cable box back cover, leave the power line and communication line hang on the outside. Follow the diagram, pass the BAT-communication cable through the battery communication baffle in Step 2 and connect an RJ45 connector, see Figure 22.

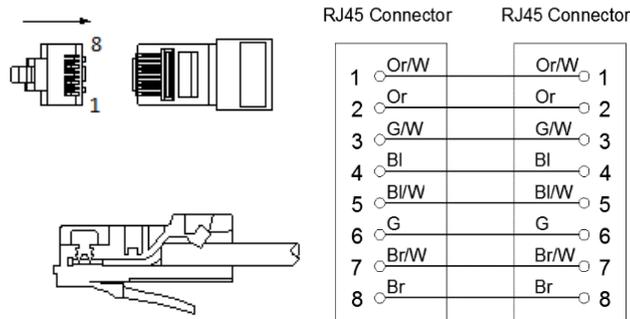


Figure 23 Network Cable Type B

NOTE: The communication cable is in type B, see Figure 23. Leave the power cables and communication cables hang on the outside. Leave the device aside.

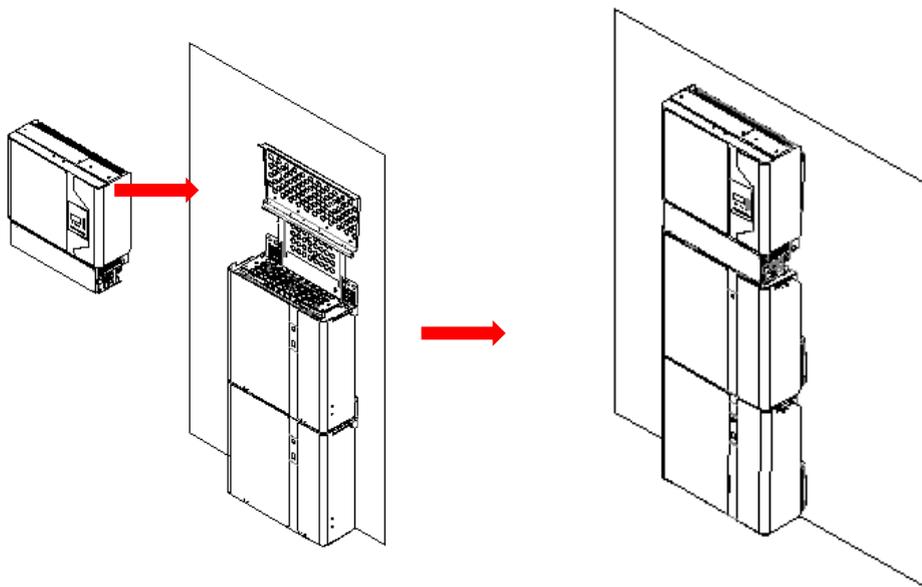


Figure 24 Inverter Installation on the Wall

Step 15: 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.

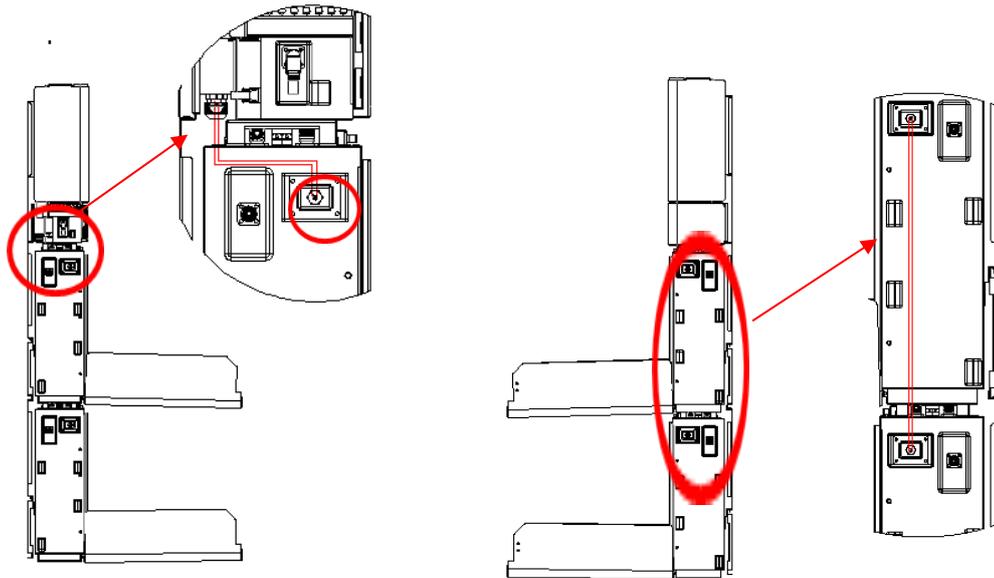


Figure 25 Wiring the Communication Cable

Step 16: Connect the communication cable from cable box from step14 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 been connected first)

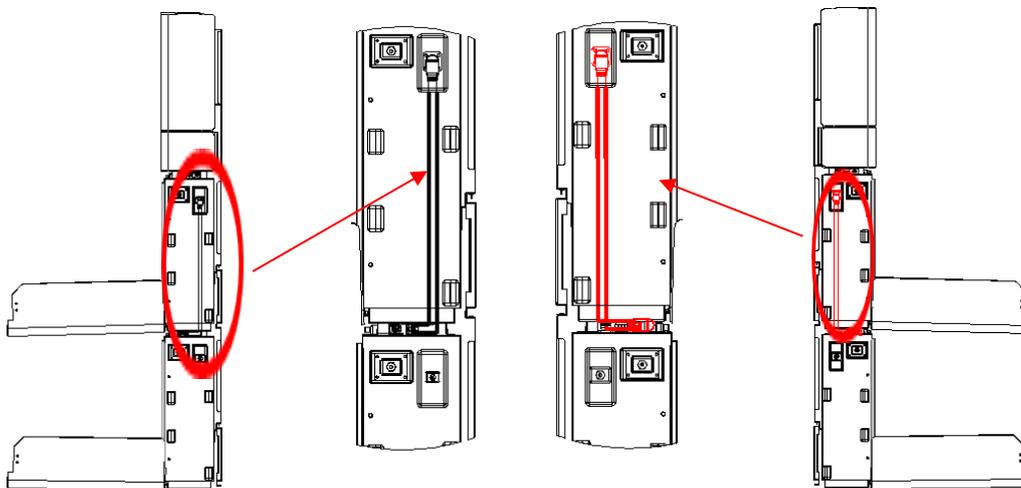


Figure 26 Wiring the Battery Power Cable

Step 17: Connect the batteries from Step4 to the terminals. Make sure that red connects to red and black connects to black.

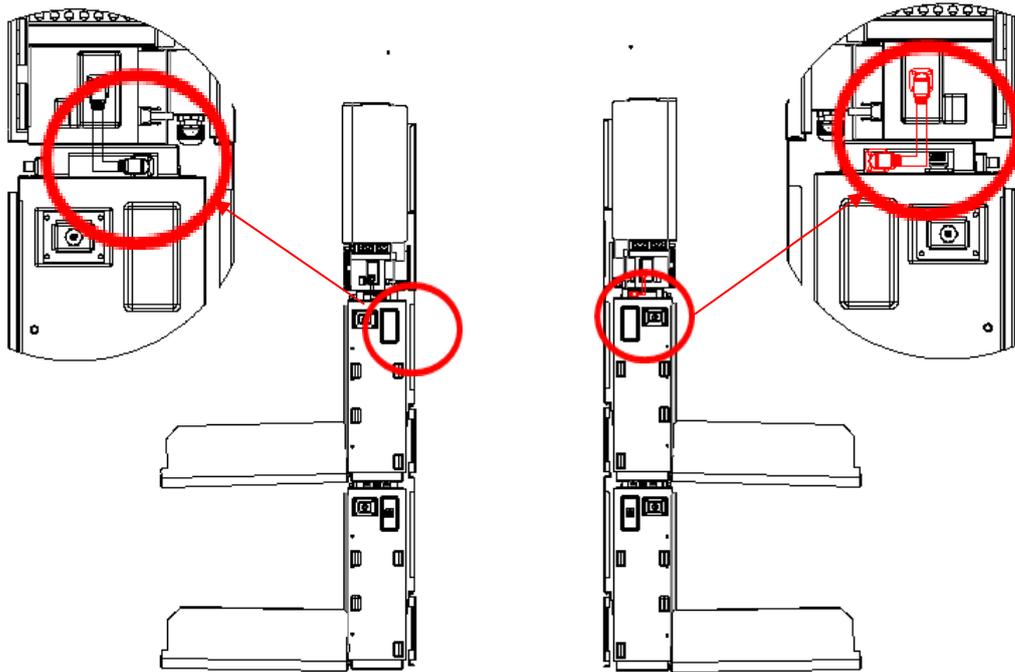


Figure 27 Wiring the Power Cable of the Cable Box

Step 18: Connect the power cable from Step4 to the terminals of cable box. Make sure that red connects to red and black connects to black.

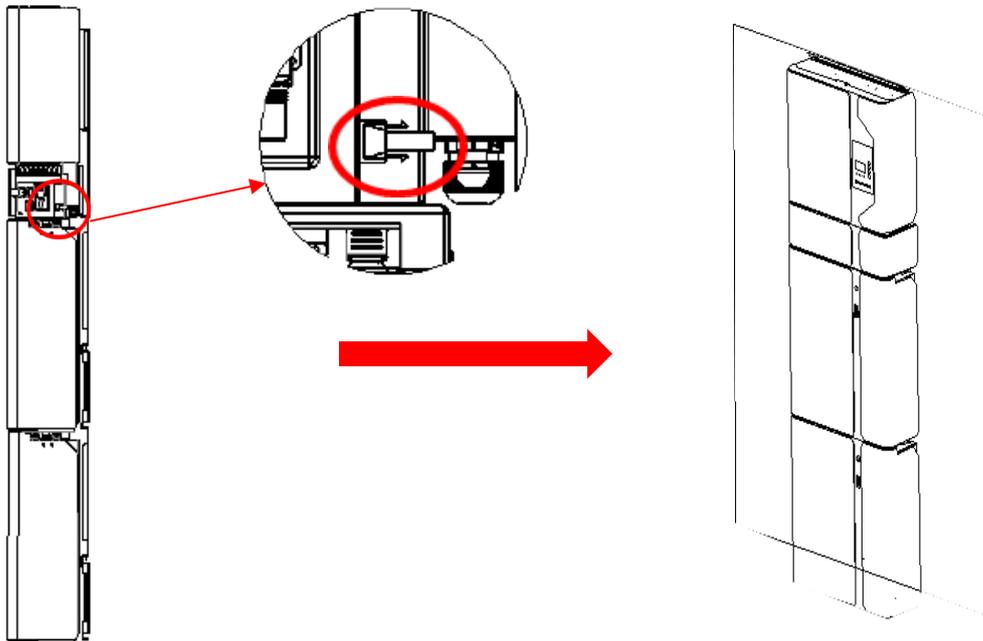


Figure 28 PV Wiring

Step 19: 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.

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

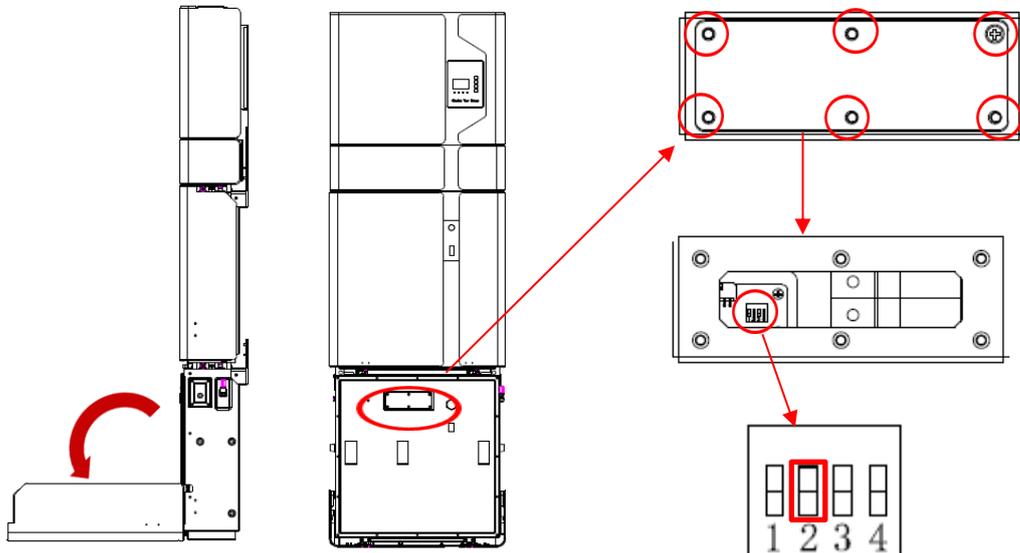


Figure 29 DIP Operation

Step 20: 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.

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.

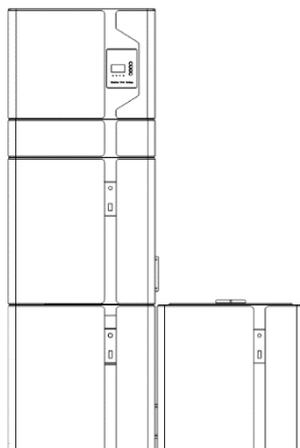


Figure 30 Increase the Battery Modules

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:

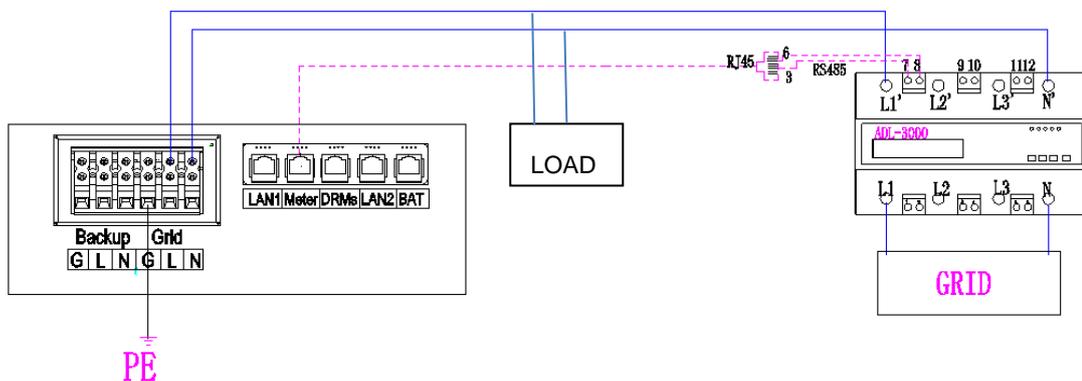


Figure 31 ADL-3000 single-phase Connect (with CT, without Meter Plug)

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

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

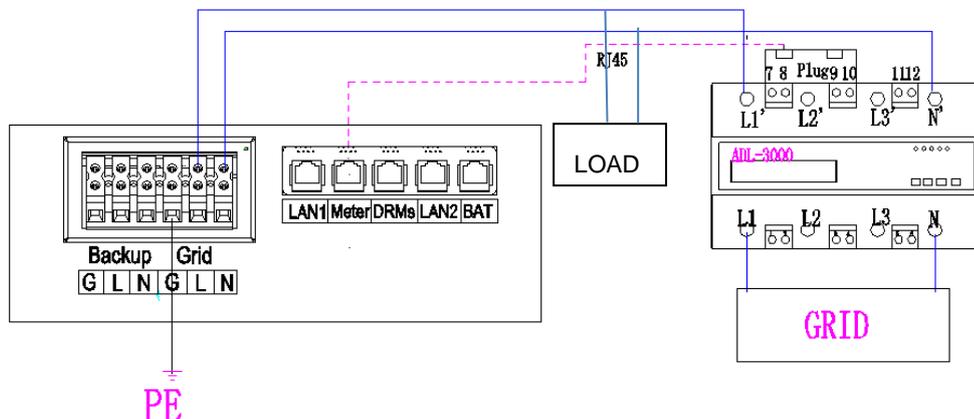


Figure 32 ADL-3000 single-phase Connect (without CT, with Meter plug)

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

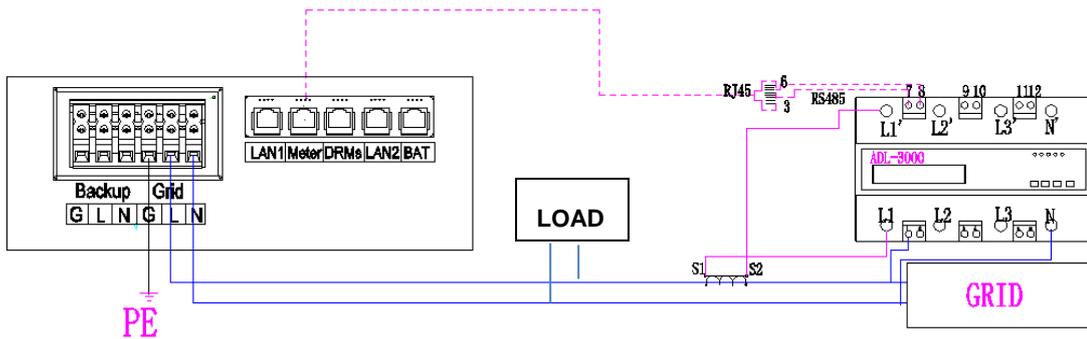


Figure 33 ADL-3000 single-phase Connect (with CT, without Meter plug)

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:

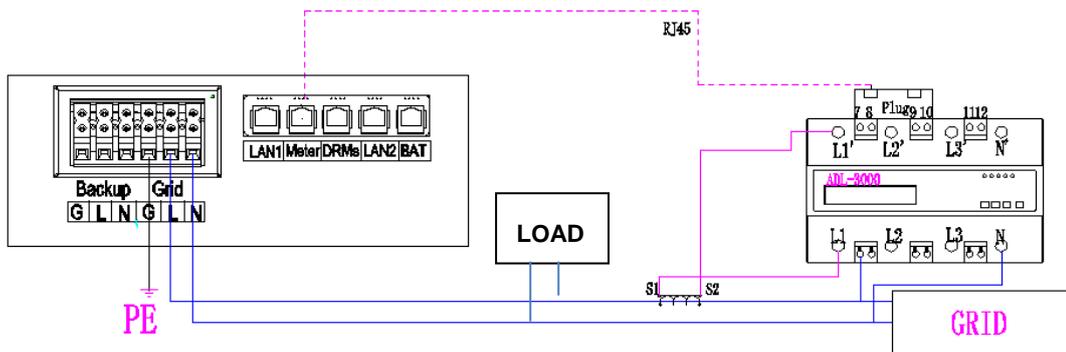


Figure 34 ADL-3000 single-phase Connect (with CT, with Meter plug)

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

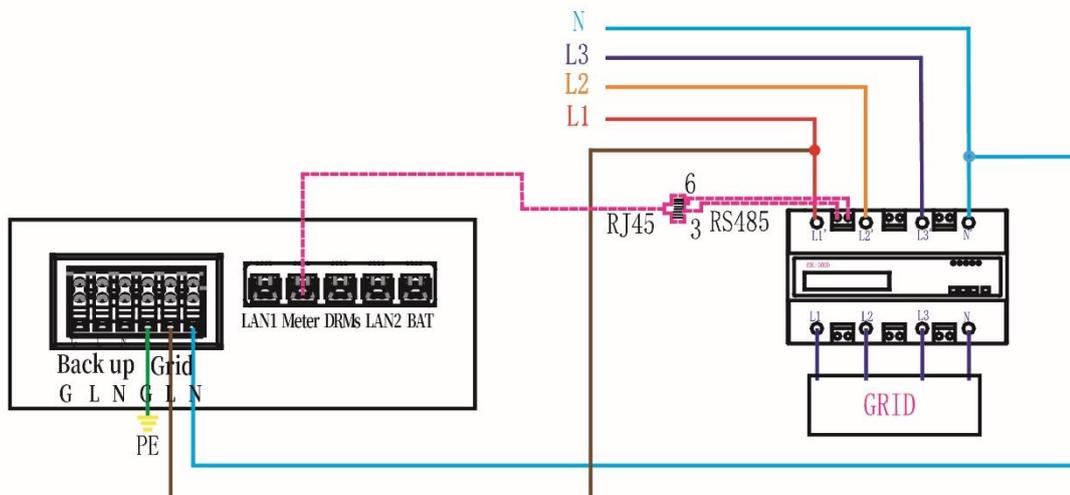


Figure 35 ADL-3000 three-phase Connect (without CT, without Meter plug)

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:

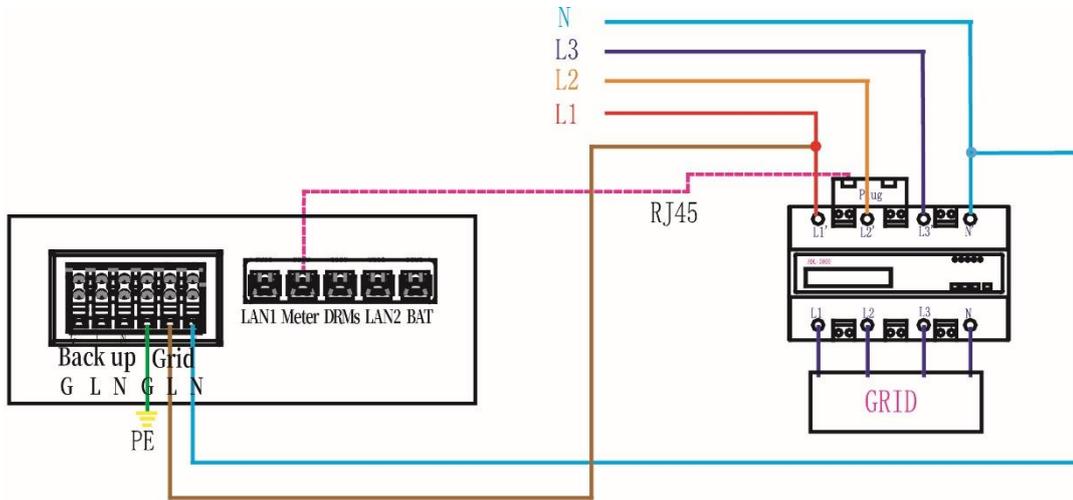


Figure 36 ADL-3000 three-phase Connect (without CT, with Meter plug)

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

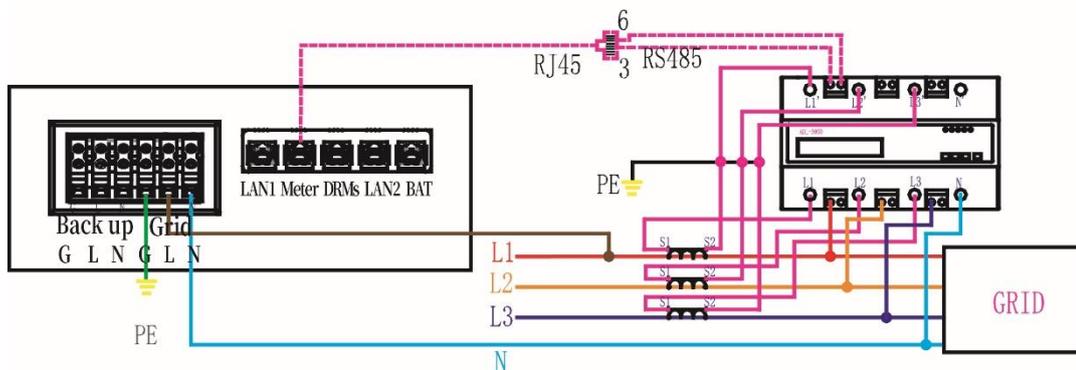


Figure 37 ADL-3000 three-phase Connect (with CT, without Meter plug)

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:

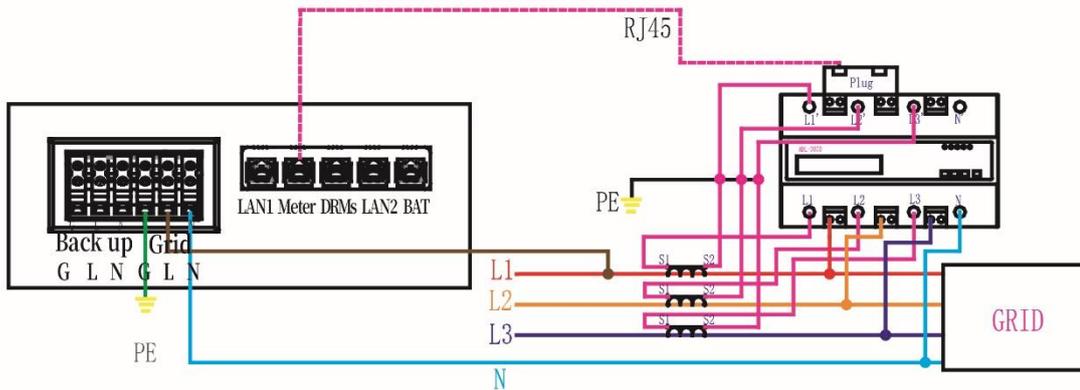


Figure 38 ADL-3000 three-phase Connect (with CT, with Meter plug)

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

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

Option 1: with Meter Plug

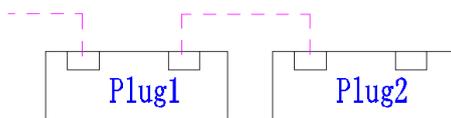


Figure 39 Two Meter Connect, with Meter Plug

Option 2: without Meter Plug

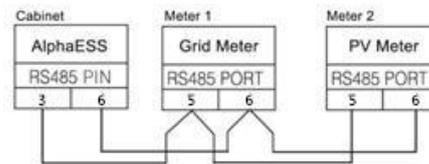


Figure 40 Two Meter Connect, without Meter Plug

2.3.2 Meter SM60A (If Applicable)

SM60A connect (with meter plug), if applicable:

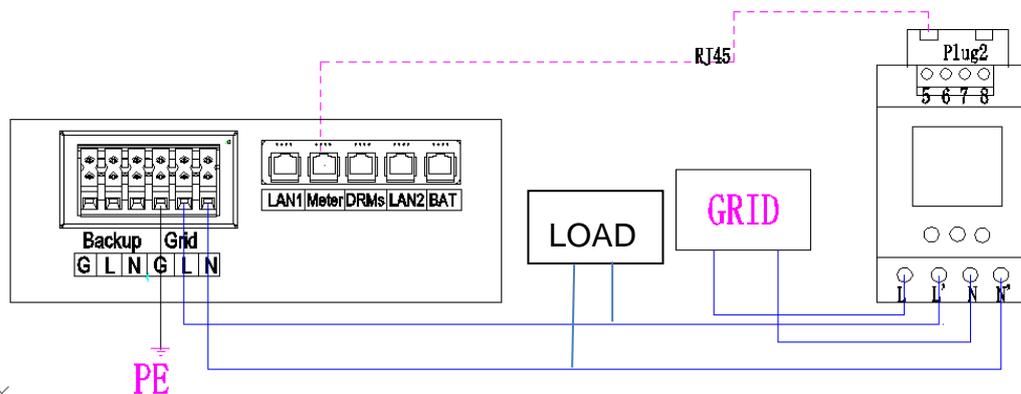


Figure 41 SM60A connect (with meter plug)

SM60A connect (without meter plug), if applicable:

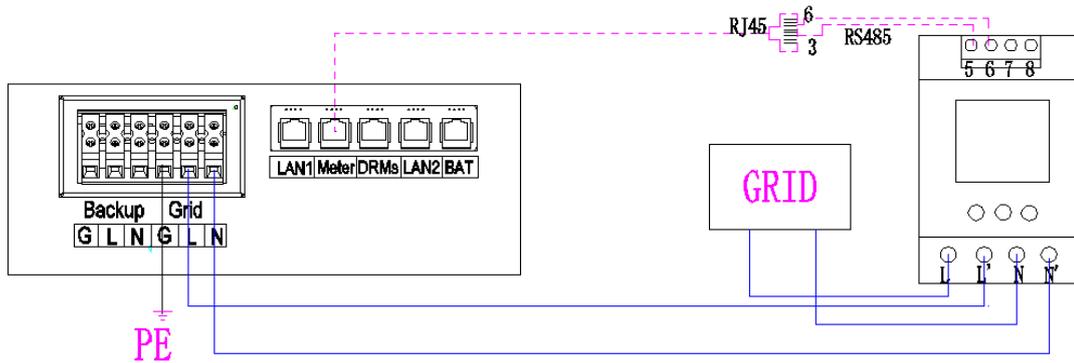


Figure 42 SM60A connect (without meter plug)

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

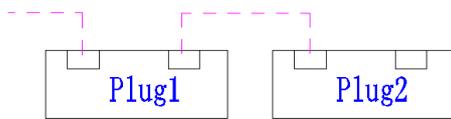


Figure 43 Two Meter Connect, with Meter Plug

Option 2: without Meter Plug

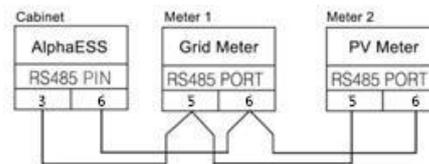


Figure 44 Two Meter Connect, without Meter Plug

2.3.3 Backup Box (If Applicable)

Backup Box Connect to SMILE5 (single-phase grid in house):

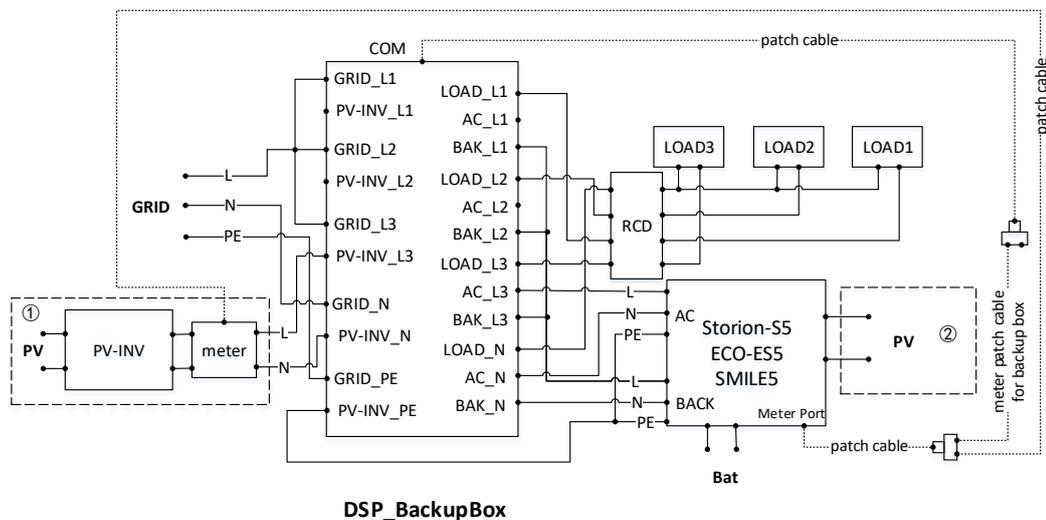
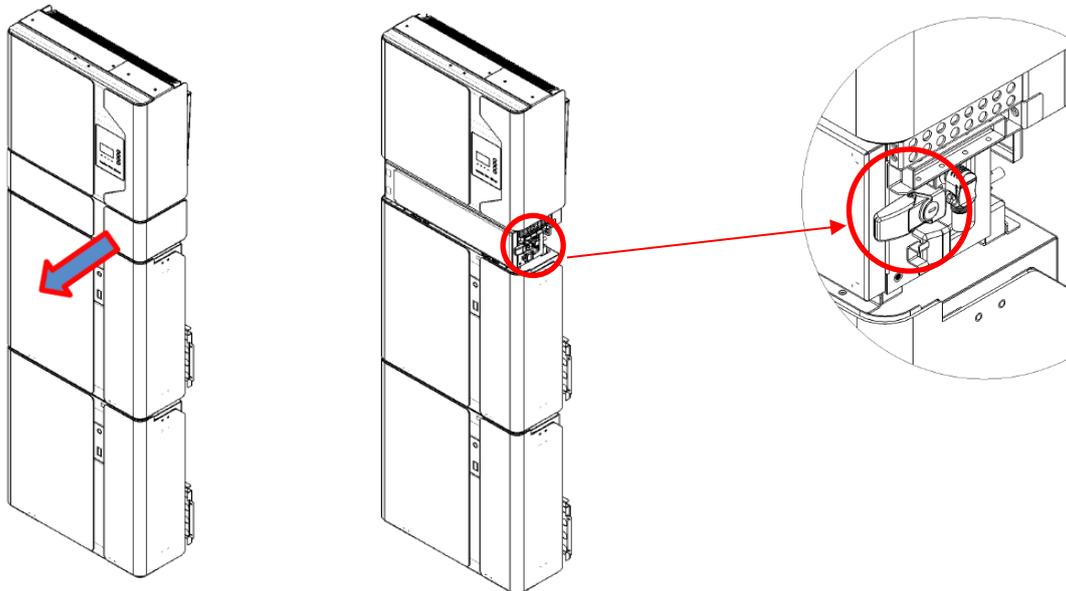


Figure 45 Backup Box Connect to SMILE5 (single phase grid in house)

3. System Operation

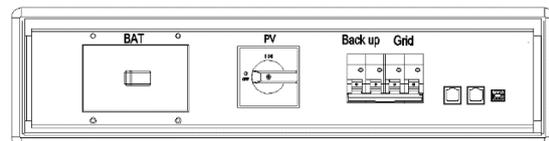
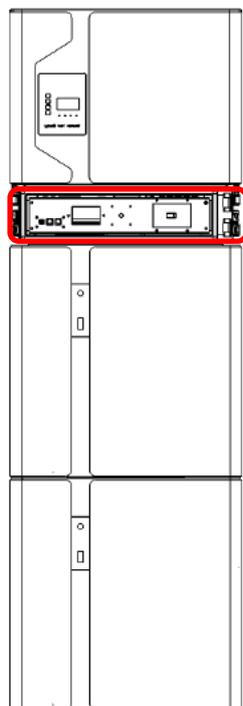
3.1 Switch on

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.

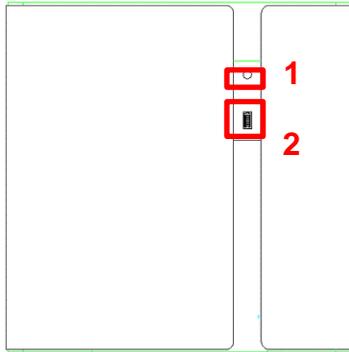


Step 3: Turn on the PV switch on the cable box.

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 SMILE5-BAT user manual.

4. EMS Introduction and Set up

4.1 Function Description

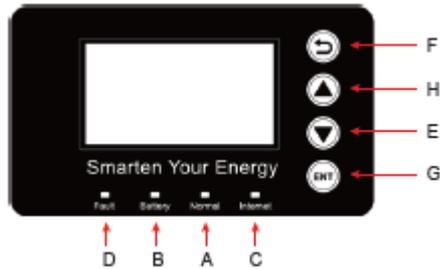


Figure 46 SMILE5 EMS Interface

Object	Name	Description
A	Indicator LED	Green: The inverter is in normal state.
B		Blue: The battery is in charging or discharging.
C		Yellow: The inverter is in communication.
D		Red: 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

Power	0W
Total	00.0kWh
Battery	%
Normal	

Figure 47 Main Interface

>>>> MENU <<<<<
>Status
History
Setting

Figure 48 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

>>>> Status <<<<<
>Grid
Solar
Battery

Figure 49 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.

>>>>> Grid <<<<<<	
> U	230.2V
I	2.0A
F	49.99Hz

Figure 50 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 51 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 52 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 53 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 54 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 55 History Menu

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

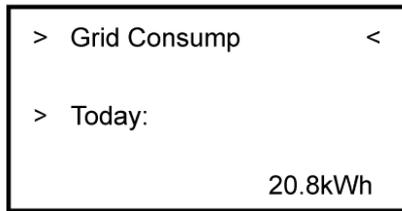


Figure 56 Grid Consumption Interface

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

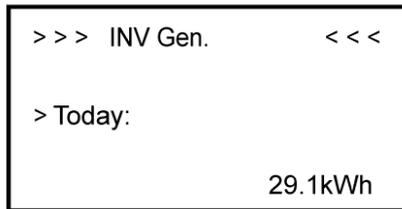


Figure 57 INV Gen. Interface

INV Gen. interface displays today's or total electricity quantity generated from SMILE5-INV.

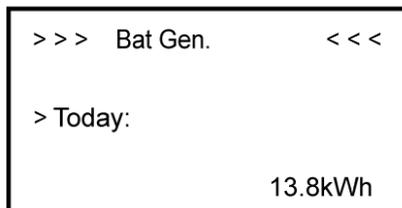


Figure 58 Bat Gen. Interface

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

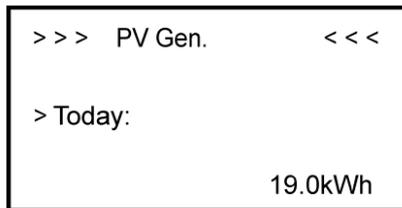


Figure 59 PV Gen. Interface

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

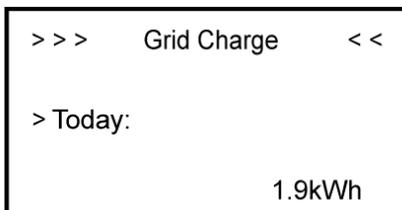


Figure 60 Grid Charge. Interface

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

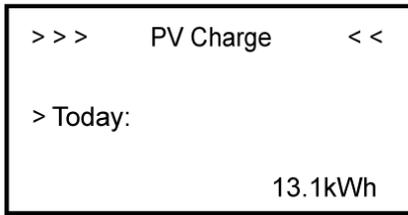


Figure 61 PV Charge. Interface

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

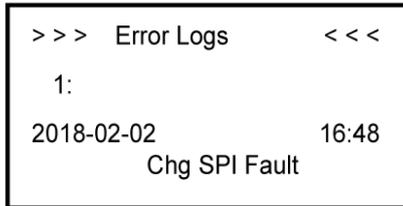


Figure 62 Error Logs Interface

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

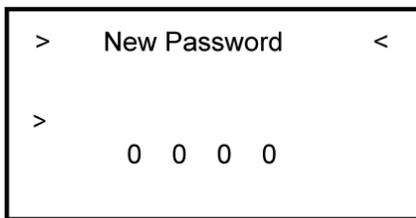


Figure 63 Password Interface

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).

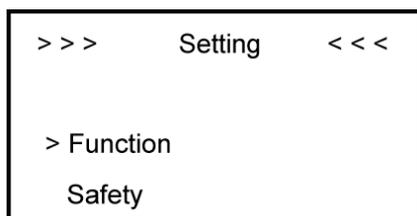


Figure 64 Setting Menu

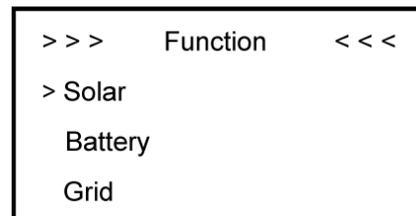
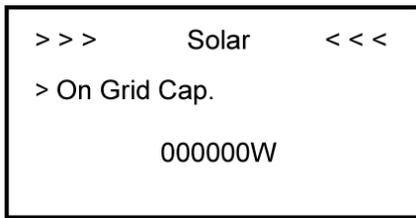
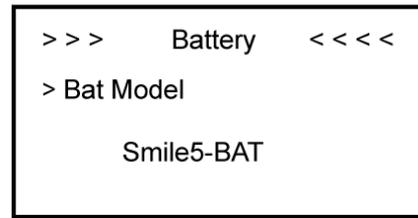


Figure 65 Function Interface

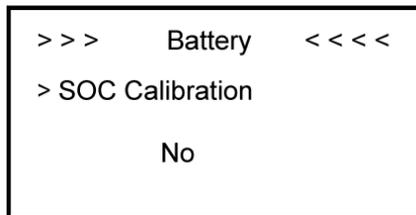
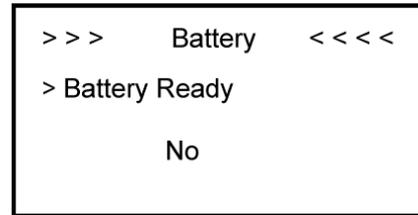
Step 2: Click Function to enter function setting.

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


Figure 66 Solar Setting Interface

Figure 67 Battery Model Interface

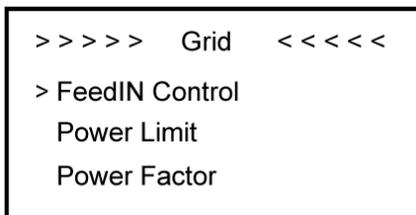
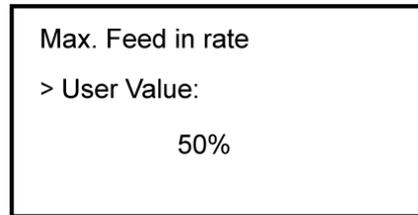
Step 4: Set on-grid capacity, storage capacity and number of PV strings (MPPT number).

Step 5: Click the Battery Function and check battery type SMILE5-BAT.


Figure 68 SOC Calibration Interface

Figure 69 Battery Ready Interface

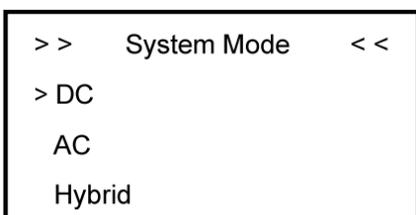
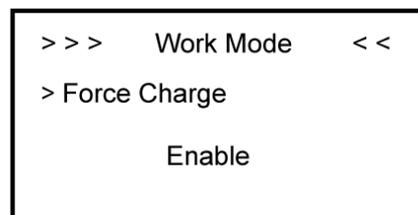
Step 6: Check SOC Calibration function set No.

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


Figure 70 Grid Setting Interface

Figure 71 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 72 System Mode Setting Interface

Figure 73 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)

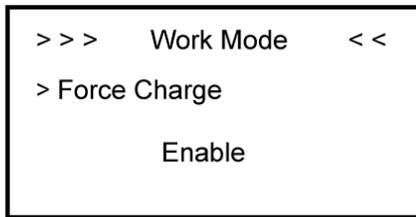


Figure 74 Force Charge Setting Interface

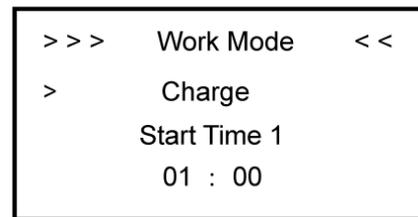


Figure 75 Force Charge Time Setting Interface

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

Step 13: Set the charge and discharge time.

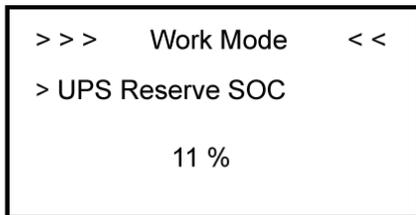


Figure 76 UPS Reserve SOC Setting Interface



Figure 77 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

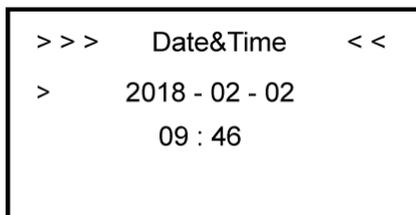


Figure 78 Date&Time Setting Interface

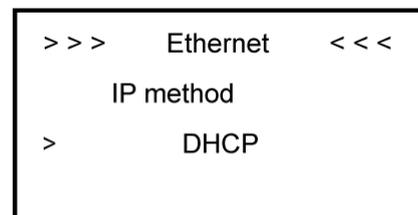


Figure 79 Ethernet interface

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.

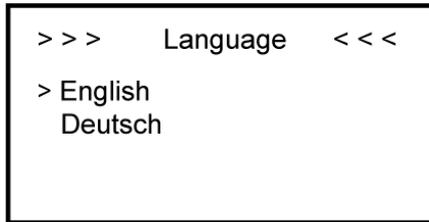


Figure 80 Date&Time Setting Interface

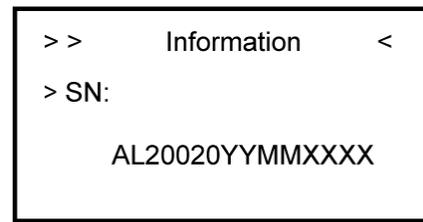


Figure 81 Date&Time Setting Interface

Step 18: Click Language to set language

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

5. Online Monitoring

5.1 Register

You have to create a new account on our webserver for the normal monitoring. In addition, a part of our warranty is based on this connection to our webserver. The data before the registration would not be retained on the webserver.

So please use the following steps:

Open the portal: www.alphaess.com.

Please fill in “Username”, “Password” and click “Login”, if you have registered.

If not, please register following these steps

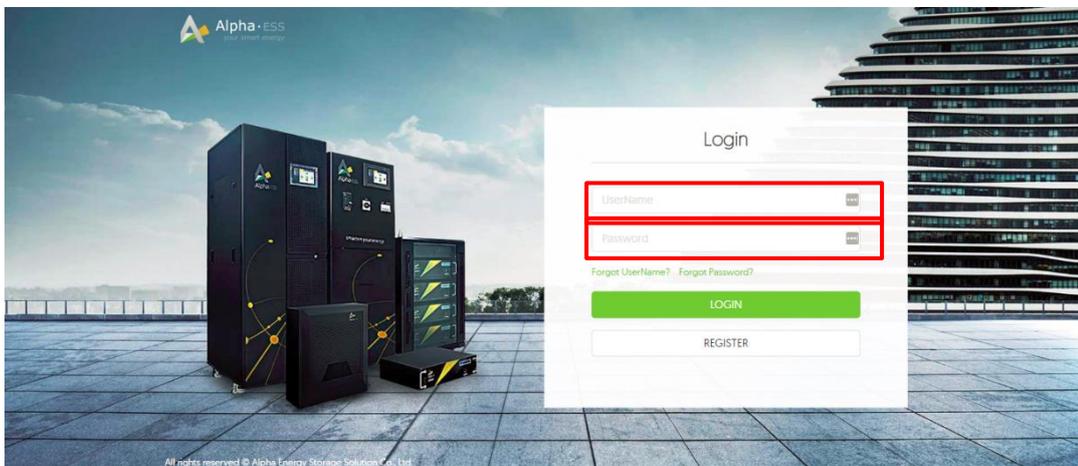


Figure 82 Monitoring Login Interface

Register

User Type * S/N

End user

* Username

* Password * Confirm Password

* Country * Province/State * City

Address * Zip Code

* Language * Contacts * Contact Number

* E-mail

Time zone [UTC-12:00] International Date Line West

Compulsorily upgrade?

Read and accept [Terms and Conditions](#)

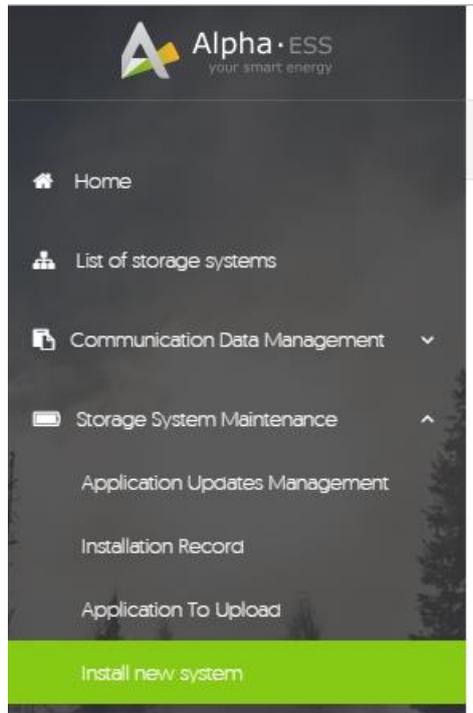
SIGN UP NOW
Back

Figure 74 Register Interface

In this form, all blanks marked with an asterisk must be filled out, you can choose End user or installer.

More detailed information can be obtained in Online Monitoring Webserver installation Manual.

5.2 Registering License



Click Install new system to register the license No.

Figure 74 Menu for Installer

Install new system

• S/N	• Check Code	• License No.
<input type="text"/>	<input type="text"/>	<input type="text"/>
• Installation Date	• Client Full Name	• Contact Number
<input type="text"/>	<input type="text"/>	<input type="text"/>
• Contact address		
<input type="text"/>		
Remark		
<input type="text"/>		
Attachment		
<input type="button" value="选择文件"/> 未选择任何文件		

Figure 74 System Registering Interface

Input **S/N**, **Check Code**, **License No.**, **Date**, **Name**, and **Contact No.** to complete the registering process.

6. Annex

6.1 Datasheet – AlphaESS Storion-SMILE5

System	
Model	Storion-SMILE5
Battery	SMILE5-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	SMILE5-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 temperature is below 0°C or above 40°C, the performance will be limited.