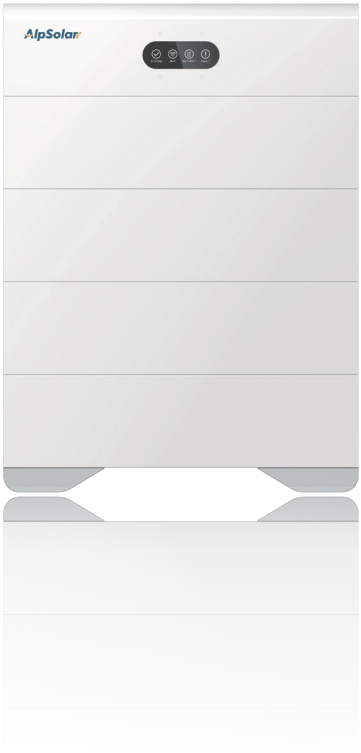
AlpSolarr

USER MANUAL

AlpSolarr COMO H2

8.0-21.3kWh



BETTER ENERGY FOR A BETTER WORLD

Table of Contents

Copyright Statement

Revision Record

Version	Date	Revision	Description
1.0	11/27/2023	Zhao Bolin/ Zhang Jili	First version
2.0	02/27/2024	Zhao Bolin/ Zhang Jili	1.Add handles in appearance. 2.Add check items before power-on. 3.Combine CAN & 485 interfaces into one.

1. Overview

AlpSolarr COMO H2 is a high-voltage residential energy storage system based on lithium iron phosphate batteries that work together with an inverter to charge and discharge as your needs.

1.1 Product composition

AlpSolarr COMO H2 is formed by a control box, a plurality of battery packs and a pair of bases.

During shipment, the control box, the bases and their accessories are placed in a packaging case; and each battery pack and its accessories are placed in a packaging case.

Details of the packing list for AlpSolarr COMO H2 are as follows:

Table 1. Packing list - control box case

Item	Quantity
Installation drawing	1
Documentation (packing list, user manual, quick installation guide and certificate)	1
Packing List	1
Base	2
Base connector	1
Plastic shell side cover	2
Output connector removal tool	1
Control box output connector P+/P-/PE (M4-SC-90°)	1
RJ45 waterproof kit	3
M4*10 cross-shaped round head three-in-one screw	12
M6*60 expansion screw	2
Desiccant-5 g	2

Table 2. Packing list - pack box

Item	Quantity
Documentation (packing list, certificate, performance sheet)	1
Packing List	1
Plastic shell	2
M6*60 expansion screw	2
Desiccant-5 g	2

1.2 Product appearance

1.2.1 Control box

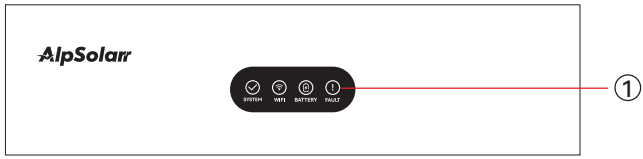


Figure 1. Front view

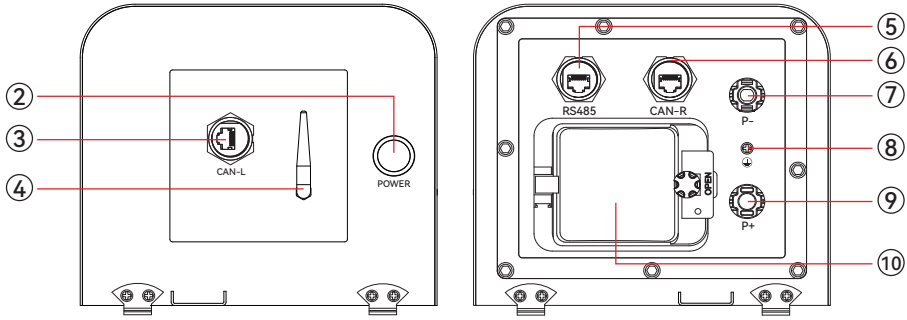


Figure 2. Side view

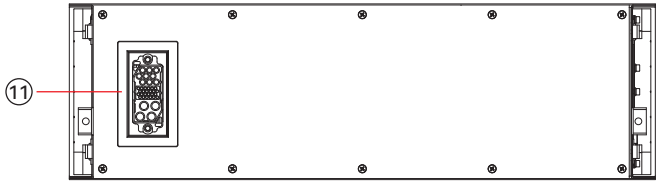


Figure 3. Bottom view

Table 3. Devices of control box

Serial number	Name
1	LED indicator light
2	POWER start switch
3	CAN-L interface
4	Wi-Fi antenna
5	RS485 Interface
6	CAN-R interface
7	Negative power terminal P-
8	Ground terminal
9	Positive power terminal P+
10	Breaker
11	Stacking connector

Table 4. LED indicator light

Name	Description
SYSTEM	Indicate the system operation state. The white light is on when the system is operating normally.
Wi-Fi	Indicate the state of Wi-Fi connection. The white light is on when Wi-Fi is connected, and the white light blinks when Wi-Fi is disconnected.
BATTERY	Indicate the state of the pack when charging and discharging are carried out. The white light is on when discharging is carried out, and the white light blinks when charging is carried out.
FAULT	Indicate whether a malfunction has occurred. The red light is on when a malfunction occurs.

Table 5. Start switch

Functions	Operation	Remarks
Startup	Press 2s and release	Before turning on the power, please make sure that the inverter is running, the battery cables are connected into the inverter, and the control box circuit breaker is closed.
Sleep	Press 5s and release	

1.2.2 Pack

Figure 4. Front view

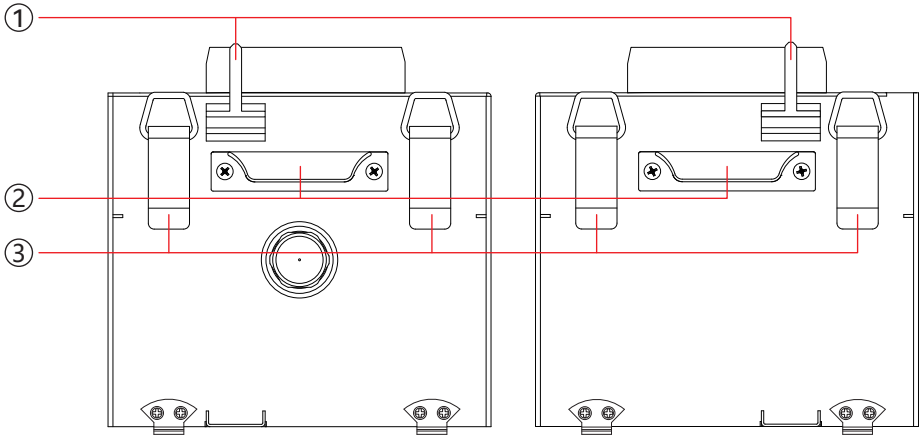


Figure 5. Side view

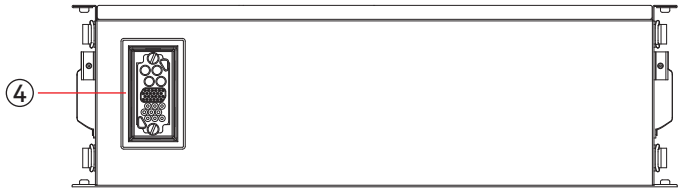


Figure 6. Top view

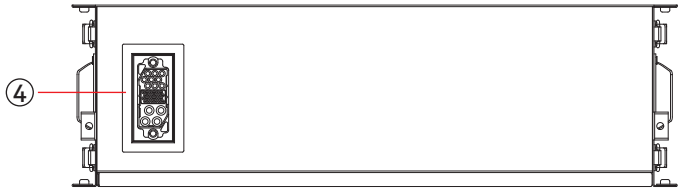


Figure 7. Bottom view

Table 6. Devices of pack

Serial number	Name
1	Registration mast
2	Tongs
3	Fastening buckle
4	Stacking connector

1.2.3 Base

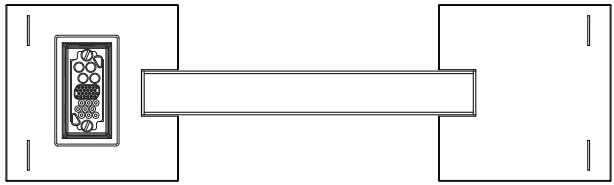


Figure 8. Top view

1.3 Technical specifications

Battery type	Lithium iron phosphate					
Rated energy (kWh)	8.0	10.7	13.4	16.0	18.7	21.3
Rated voltage (Vdc)	153.6	204.8	256	307.2	358.4	409.6
Voltage range (Vdc)	134.4 - 172.8	179.2 - 230.4	224.0 - 288.0	268.8 - 345.6	313.6 - 403.2	358.4 - 460.8
Rated capacity (Ah)	52(1C)					
Rated charging current (A)	25					
Rated discharging current (A)	25					
Maximum continuous charging current (A)	50					
Maximum continuous discharging current (A)	50					
Communication	RS485/CAN 2.0/WiFi					
Display	LED indicator light + mobile phone APP					
Cycle life	10 years or 6000 cycles (@90%DOD)					
Protection functions	Quadruple safety protection [BMS, fire-extinguishing capsule, system circuit protection, cloud monitoring], over-temperature protection, over-current protection, short-circuit protection, over-charging protection, over-discharging protection					
Intelligent heating	Support					
Warranty	5 years (standard)/10 years (optional)					
Physical specifications						
Dimensions [width × high × depth] (mm)	650*730*195	650*900*195	650*1070*195	650*1240*195	650*1410*195	650*1580*195
Weight (kg)	91.7	117.2	142.7	168.2	193.7	219.2
Environmental specifications						
Storage ambient temperature (℃)	-30 ~ +60					
Discharging temperature (℃)	-20 ~ +55					
Charging temperature (℃)	-10 ~ +50					
Relative humidity	5% ~ 95%					
Protection level	IP65					
Altitude (m)	≤ 3000					
Heat dissipation method	Natural cooling					
Installation mode	[Indoor/outdoor] floor installation, wall-mounted installation					
System certification						
Battery system	IEC 62619:2022, VDE-AR-E 2510-50:2017, IEC/EN 62040-1, ISO 13849					
CE certification	EN 300 328 V2.2.2:2019, EN 301 489-1 V2.2.3:2019, EN 301 489-17 V3.2.4:2020, EN 62311:2008, EN/IEC 62311:2020, EN 62479:2010, EN 50663:2017, EN/IEC 61000-6-1:2019, EN/IEC 61000-6-3:2021					
Other certification	UN 38.3, RoHS 2.0, REACH					
* Test conditions - temperature of 25° C, at the beginning of the product life cycle. * Product specifications are subject to changes without notice.						

2. Safety Requirements

Please strictly observe the following safety requirements as well as local laws and regulations. Ligoo shall disclaim all liability for damage, injury, or death resulting from a violation of requirements or laws and regulations.

⚠ DANGER

- Only qualified electricians are allowed to operate AlpSolarr COMO H2 equipment.
- Wear protective gloves and goggles before operating AlpSolarr COMO H2 equipment.
- The site where AlpSolarr COMO H2 is stored or installed must be able to support its weight.
- AlpSolarr COMO H2 must not be stored or installed on sites where flammable or explosive materials are stacked.
- AlpSolarr COMO H2 must not be stored or installed on sites exposed to sun and rain.
- AlpSolarr COMO H2 must not be stored or installed in damp and dusty sites.
- Before connecting the harness to AlpSolarr COMO H2, all switches on the circuit must be disconnected.

⚠ WARNING

- Please be careful when moving AlpSolarr COMO H2. Do not use the device if there is any damage to the equipment or any part thereof, including but not limited to impacts, drops, leaks, etc.
- The site surfaces where AlpSolarr COMO H2 is to be installed should be flat to ensure that the equipment does not tilt after installation.
- AlpSolarr COMO H2 must not be unpacked without authorization.
- No items may be placed on the top of AlpSolarr COMO H2.

3. Installation

AlpSolarr COMO H2 can be installed in a floor or wall-mounted mode. Both installation modes are simple with only slight difference.

3.1 Preparation for installation tools

Please prepare the following tools before installing AlpSolarr COMO H2:

- Impact drill
- Screwdriver
- Gradienter
- Ladder
- Protective gloves and goggles
- 10mm^ wire stripper
- 10mm^PV terminal crimping pliers
- RJ45 crimping pliers

3.2 Installation space

Plenty of room should be left around AlpSolarr COMO H2.

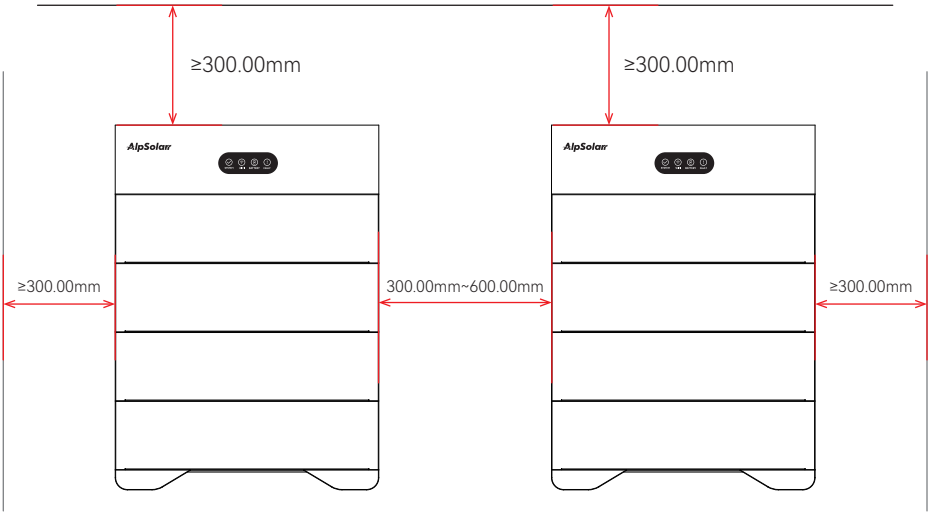


Figure 9. Installation space of AlpSolarr COMO H2

3.3 Installation method

3.3.1 Floor installation (preferred recommendation)

1. Lay the installation paper on the wall so that the horizontal line at the bottom is flush with the floor, and mark the hole locations on the wall.

The installation paper is specifically designed to aid in the installation of the AlpSolarr COMO H2. Please mark the hole locations correspondingly according to the number of battery packs you have purchased.

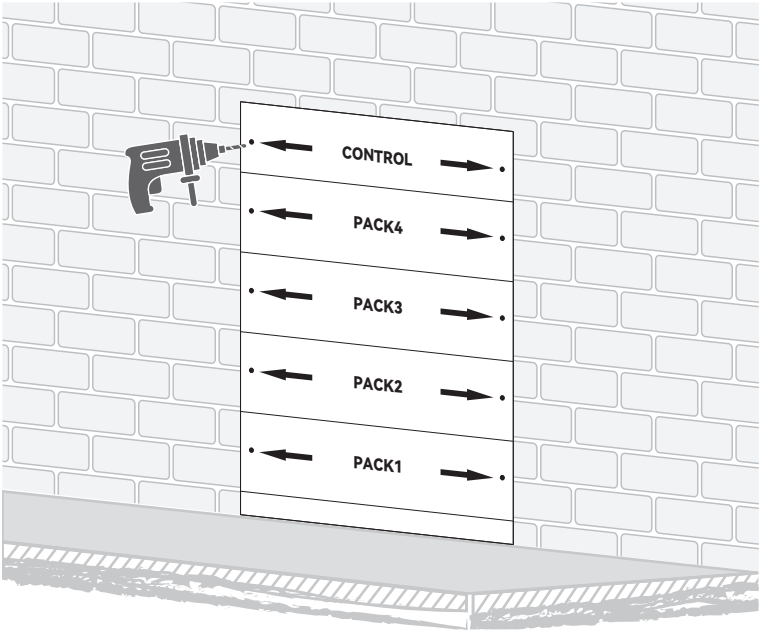


Figure 10. Secure the installation paper on the wall

2. Punch holes at the position where the installation paper marks.

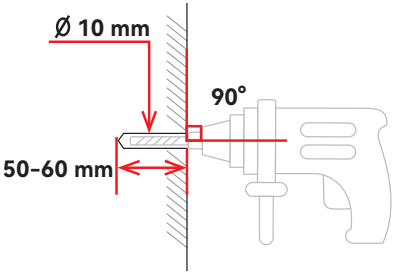


Figure 11. Punch holes in the wall

3. Remove the required accessories and screws of the base and install the base with 4 M4 (1.6N·m) screws according to schematic diagram 12.

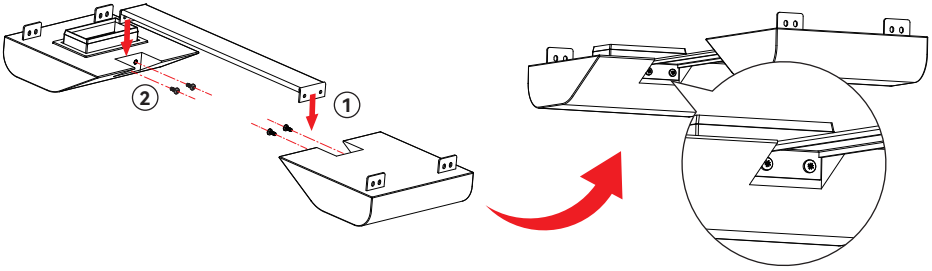


Figure 12. Schematic diagram of base installation

4. Remove the hook screws on both sides of one pack and remove 4 hooks.

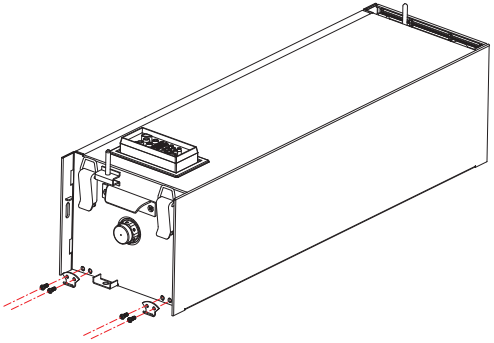


Figure 13. Schematic diagram of removing metal fittings from pack

5. Stack the pack on the base, then secure both sides of the pack to the base using the 4 M4 (1.6 N·m) screws removed.

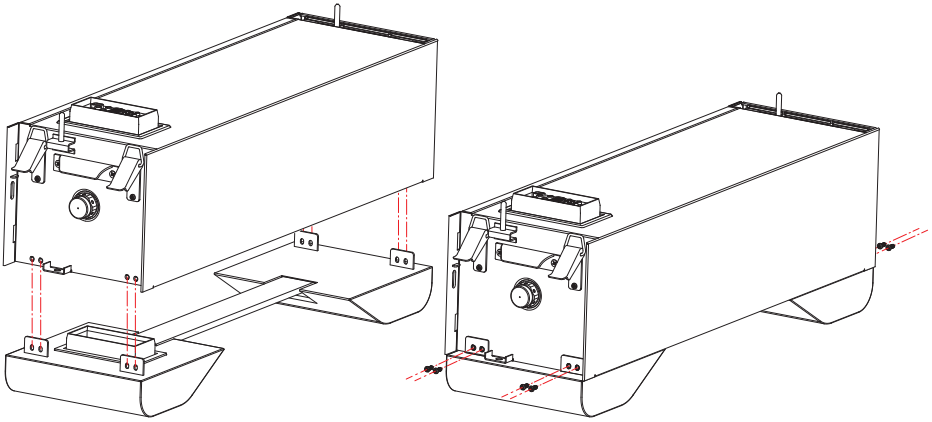


Figure 14. Schematic diagram of installation of base and pack

6. Install the second pack.

1) Stack the second pack on the top of the first pack so that the locating pins on both sides of the first pack are inserted into the locating holes of the second pack.

2) Snap the latch of the first pack to the metal fitting of the second pack.

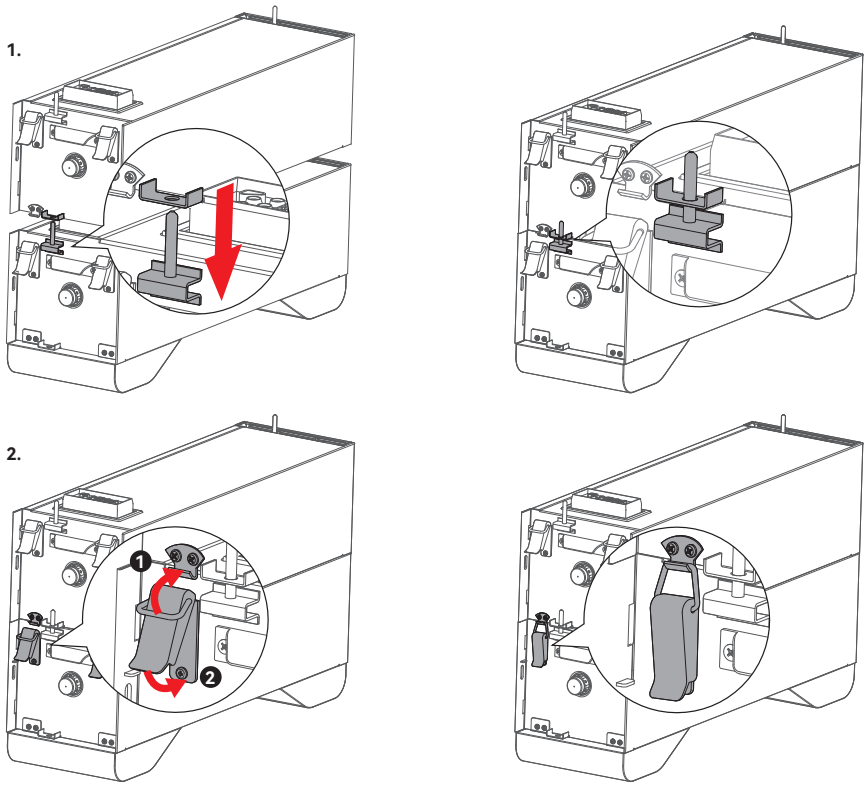


Figure 15. Schematic diagram of installation of second pack

7. Repeat the previous step to install the rest of the packs and the control box (the control box is installed at the top).

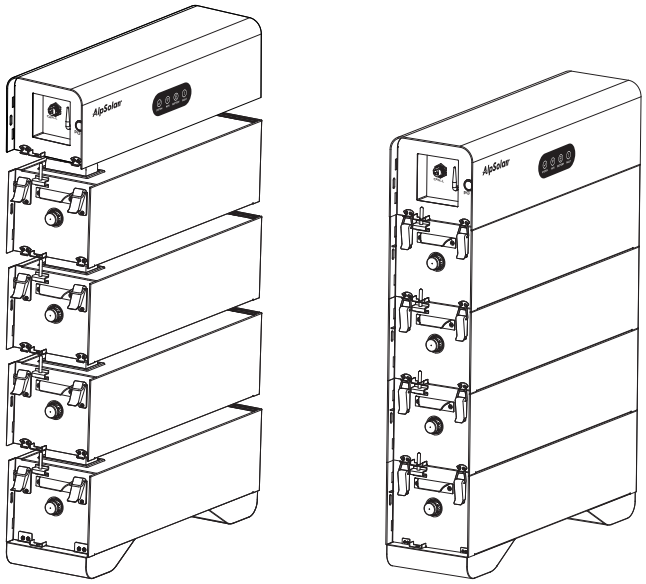


Figure 16. Schematic diagram of installation of remaining packs and control box

8. Secure all modules to the wall with M6 expansion screws (5 N·m).

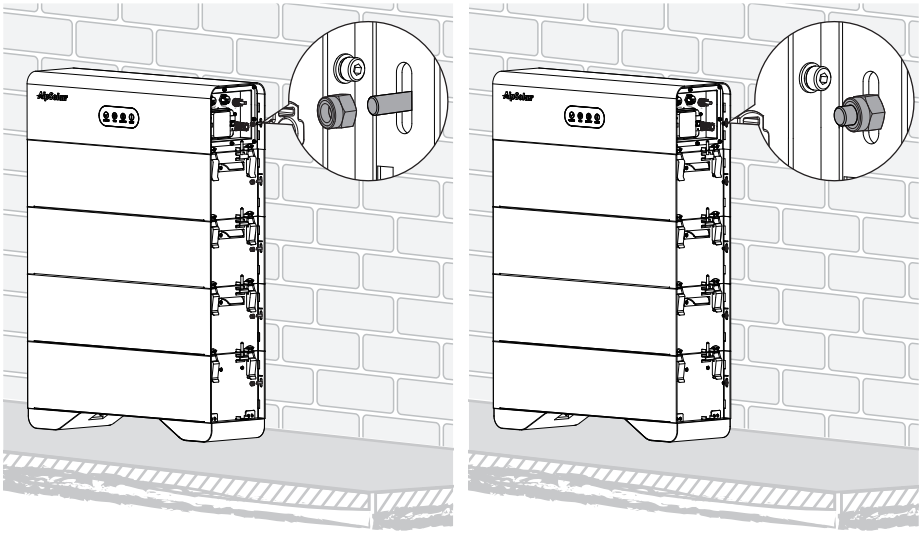


Figure 17. Secure the module to the wall in a floor mode

3.3.2 Wall-mounted installation

If you choose wall-mounted installation, it is best to hang AlpSolarr COMO H2 on a concrete wall. A maximum of 4 packs are recommended when stacking.

1. Lay the installation paper on the wall and raise it to the appropriate position for your needs, and ensure that it is level without tilting. Then mark the hole locations on the wall.

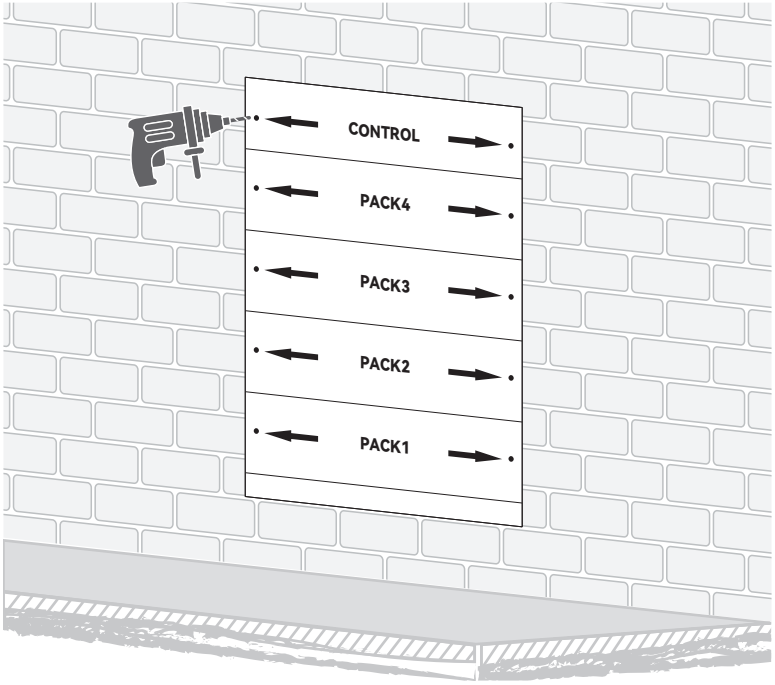


Figure 18. Lay the installation paper on the wall

2. Remove the required accessories and screws of the base and install the base with 4 M4 (1.6 N·m) screws according to schematic diagram 19.

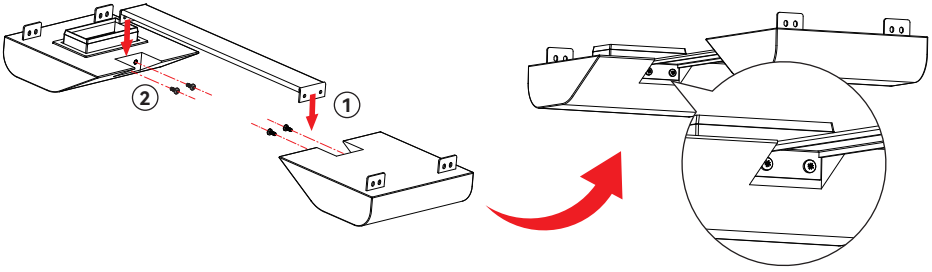


Figure 19. Schematic diagram of base installation

3. Remove the hook screws on both sides of one pack and remove 4 hooks.

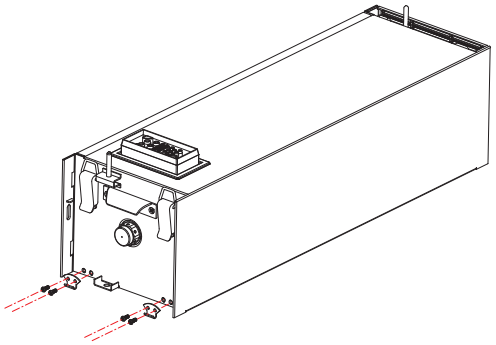


Figure 20. Schematic diagram of removing metal fittings from pack

4. Stack the pack on the base, then secure both sides of the pack to the base using the 4 M4 (1.6 N·m) screws removed.

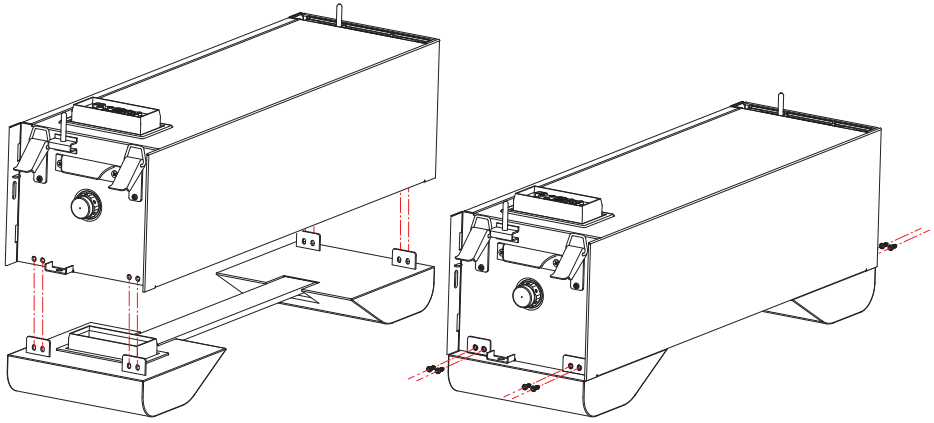


Figure 21. Schematic diagram of installation of base and pack

5. Secure the combination of the pack and the base to the wall marked in the installation paper.

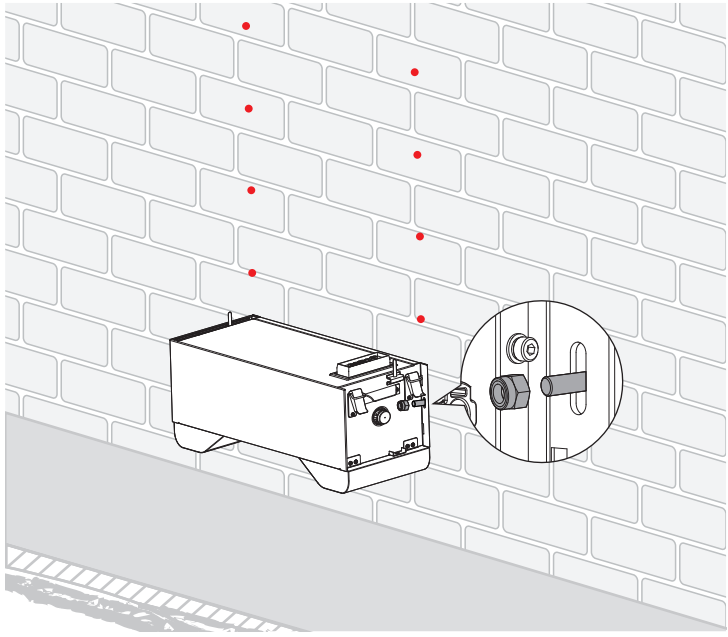


Figure 22. Schematic diagram of wall hanging of base and pack

6. Secure with M6 expansion screws (5 N·m) on the left and right sides of the pack.

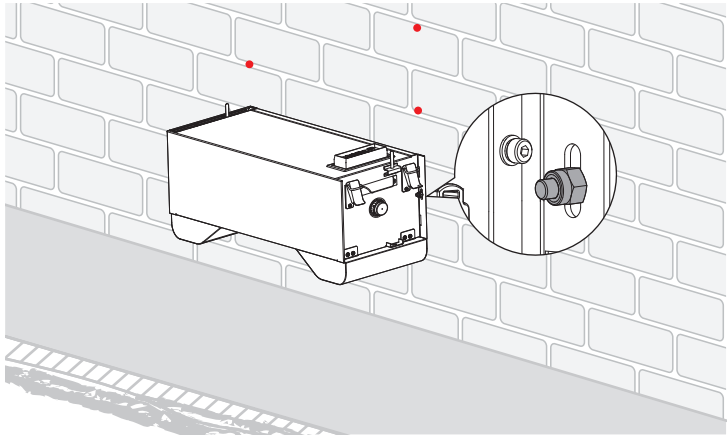


Figure 23. Schematic diagram of securing expansion screw

7. Stack the packs on one by one; and for each stack, use expansion screws to secure the packs before the next one is allowed to be stacked.

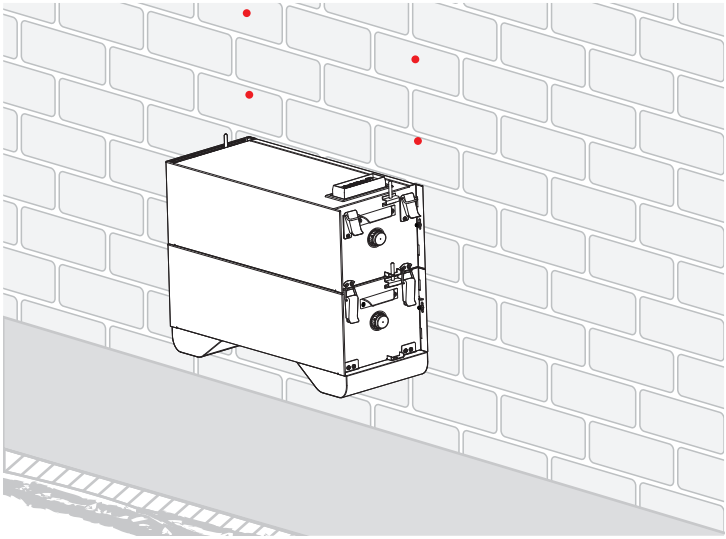


Figure 24. Schematic diagram of pack stacking

8. Stack the packs one by one, and stack the control box on the uppermost layer.

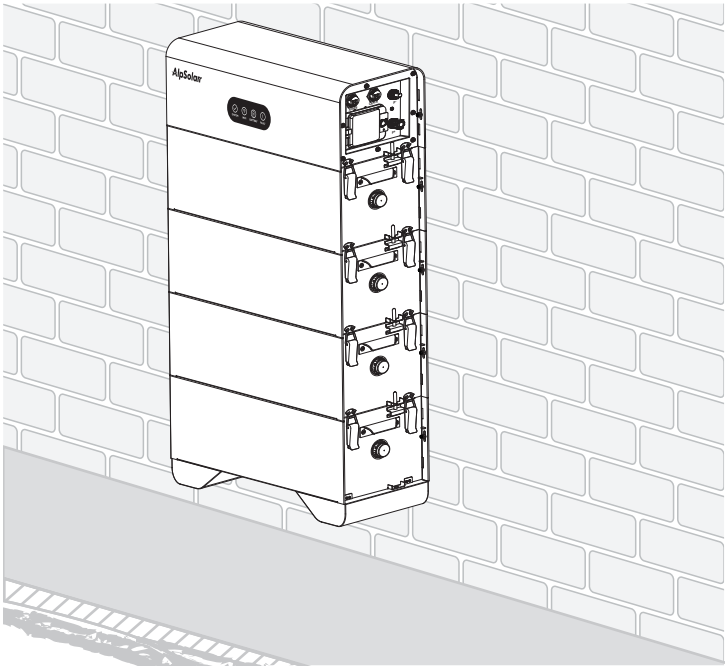


Figure 25. Schematic diagram of completion wall hanging of battery system

3.4 Wire harness connection

- Only qualified electricians are allowed to connecting harnesses to AlpSolarr COMO H2.
- Wear protective gloves and goggles.
- Disconnect all switches on the AlpSolarr COMO H2 circuit before connection.

3.4.1 Internal wiring

Internal wiring refers to the wire harness connection between the two packs and between the control box and the packs.

AlpSolarr COMO H2 has been designed to simplify internal wire harness connection. When the components of the equipment are stacked, the internal wiring harnesses are connected.

3.4.2 External wiring

External wiring refers to wire harness connection for battery grounding and between the battery and the inverter.

- **Production and connection of ground wire**

The ground terminal interface (⏚) is reserved for the control box of AlpSolarr COMO H2.

The packing box of the control box is internally equipped with one 10mm^2-M4-90 SC terminal, which is used for grounding the pack. Please use 10mm^2 or cables that meet local regulations for crimping.

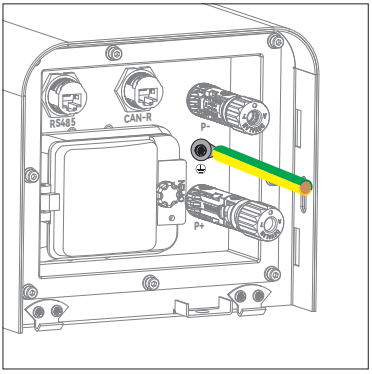


Figure 26. Schematic diagram of ground wire connection

- Wiring with inverter and production of its connecting wire

AlpSolarr COMO H2 has power cable terminals P+ and P- on the right side of the control box, and also has a RS-485 communication terminal and a CAN communication terminal (communication terminals are optional depending on the inverter type). These are used for harness connection with the inverter.

The schematic diagram of external wiring is shown below:

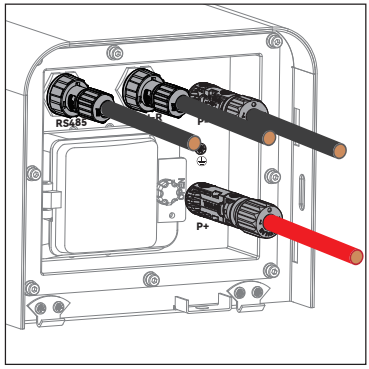


Figure 27. Schematic diagram of external wiring

- Production and connection of external communication cable

The packing box of the pack is equipped with 3 RJ45 waterproof plugs, which can be used for parallel and external communication.

Schematic diagram of assembly of RJ45 waterproof kit:

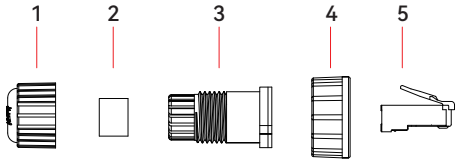


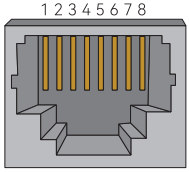
Figure 28. Waterproof kit

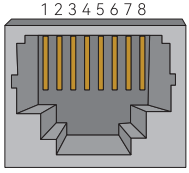
1)Crimp the RJ45 crystal head (5) after the network cable passes through the four components (1)-(4).

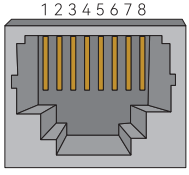
2)Tighten the tail of the plug (1).

3)After the signal cable is produced, insert it into the CAN/485 connector, rotate the latch cover (4), and stop after you hear a "pata" sound.

The PIN sequence for CAN and RS485 is as follows:

RJ45-RS485	PIN	Definition	Remarks
	1	485A	
	2	485B	
	3		
	4		
	5		
	6		
	7		
	8		

RJ45-R-CAN	PIN	Definition	Remarks
	1		
	2		
	3		
	4	R-CAN-H	By default, there is no 120Ω resistor short circuit
	5	R-CAN-L	
	6		
	7		
	8		

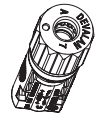
RJ45-L-CAN	PIN	Definition	Remarks
	1		
	2		
	3		
	4	L-CAN-H	Debugging use, no wiring required
	5	L-CAN-L	
	6		
	7	R-CAN-H	When the 7&8 is shorted together, the R-CAN has 120Ω resistor short circuits
	8	R-CAN-L-120Ω	

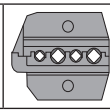
NOTE

When you use a CAN communication connector inverter and this communication link is only between the battery and the inverter, short RJ45-L-CAN's 7&8.

● Production and connection of power cable

2 power terminals are configured in the packing box of the pack. Specialized hydraulic/ pneumatic/ratchet gear are required to crimp power copper cables. Please use wire that meets local laws and regulations.

P+			P-		
					
Recommended cables					
Cross-sectional area of copper conductor	Color	Heat resistance	Operating voltage	External diameter	Remarks
8AWG	Red/black	≥ 105℃	≥ 600V	7.8-8.8 mm	Please select wires that meet the local laws and regulations, and the cables are allowed to be used in scenes where the ambient temperature is 40℃ or less.
10mm^2	Red/black	≥ 90℃	≥ 600V		

Crimping tool recommendation and parameter requirements				
Recommended tool		Recommended tool bit		Pulling-out force
C&F 10.0		UTXTD0005-C2		> 401 N

1）Wire stripping: wire stripping length of 7.0±0.5mm, without damaging or cutting the wire harness.

Figure 29. Schematic diagram of wire stripping

2）Conductor assembly: the cable copper conductor is inserted into the PIN crimping area, and the copper conductor is seen in the peephole.

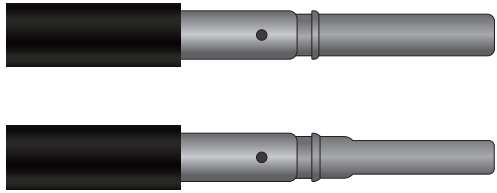
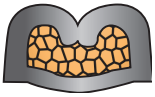
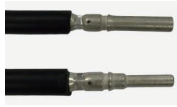


Figure 30. Schematic diagram of assembly of cable copper conductor and PIN

3) Crimping

- Close the handles of the crimping tool until they open automatically.
- The crimped form needs to meet the requirements in the figure below, with a compression ratio of 70%-90%.

	
Schematic diagram of crimping shape	Schematic diagram of PIN appearance after completion of crimping

4) Plastic shell assembly

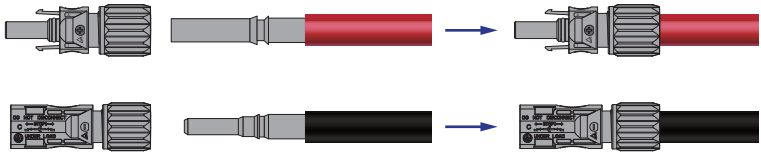


Figure 31. Schematic diagram of assembly of PIN and plastic shell

NOTE

If you want to remove the harness after completing the wire harness connection, use a tool (control box accessory) to remove it after disconnecting the circuit breaker.

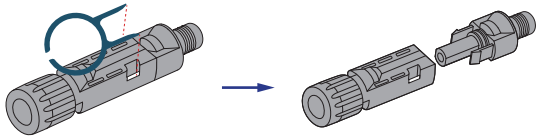


Figure 32. Schematic diagram of power cable disassembly

After connecting the wiring harness with the inverter, install the right side cover to the control box. For convenience, it is recommended to pass the wiring harness through the reserved harness hole in the right side cover before connection.

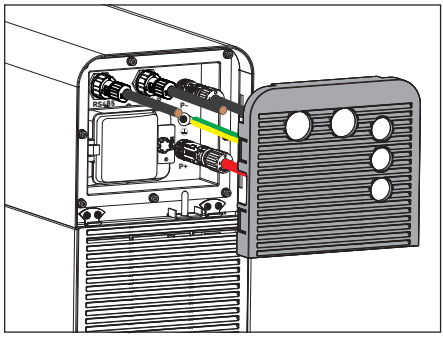


Figure 33. Schematic diagram of external wiring harness passing through panel

4. Power-up

Once the equipment is installed and the wiring harness is connected, start the inverter, close the circuit breaker for the batteries, press the start switch, and AlpSolarr COMO H2 is ready to power up for operation.

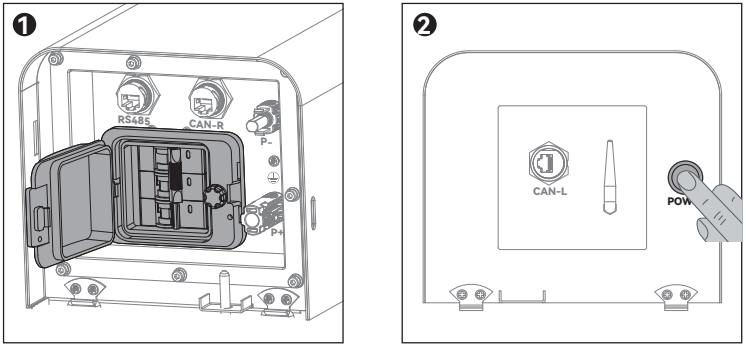


Figure 34. Schematic diagram of circuit breaker & start switch

⚠ DANGER

Before powering up the equipment, it is strongly recommended that you double-check it to ensure that there are no problems with the installation and wiring harness connections of the equipment. Ligoo shall disclaim liability for damage, injury, or death resulting from improper or incorrect installation of equipment and wire harness connections.

Wear protective gloves and goggles before operating AlpSolarr COMO H2.

Make sure to start the inverter before starting the battery.

5. Transportation and Storage

5.1 Transportation

AlpSolarr COMO batteries are suitable for transportation by cars, boats and airplanes. Products should be shaded, protected from the sun, and waterproofed during transportation. Batteries should be handled gently during loading and unloading to prevent falling, rolling and heavy pressure. Direct rain, snow and mechanical shock should be avoided during transportation.

The following are recommendations for initial pre-shipment SOCs for different modes of transportation:

- Air transportation: 5%
- Sea transportation: 30%-50%
- Land transportation: 30%-50%

5.2 Storage

If the battery system is not to be used immediately, storage of the equipment shall meet the following requirements:

1) Outer packages should be maintained;

2) Batteries should be stored in a clean, dry and ventilated room;

3) Do not place the battery in direct sunlight or heat sources, relative humidity is not greater than 75%, fire and heat resistance should be performed, and contact with corrosive elements should be avoided;

4) Regular checks are required. If damage caused by insects or rodents is found, or if damage to the packages is found, the packaging material must be replaced in a timely manner;

5) After long-term storage of the equipment, it must be inspected and tested before use.

Table 8. Storage requirements

Storage temperature (℃)	Charging interval	SOC	Charging maintenance
-30 - 35	Once per 3 months	30% - 50%	1) 0.5C charge to 100% SOC, leave for 30 min; 2) 0.5C discharge to 0% SOC, leave for 30 min; 3) 0.5C charge to 40%-50% SOC.
35 - 60	Once a month	40% - 60%	

6. Maintenance

ATTENTION

- Engineers performing the following operations must be professionally trained. Before operating and maintaining the battery, wear anti-static work clothes, anti-static gloves and wrist straps, and remove jewelry, watches and other conductive objects to avoid electric shocks or burns.
- Internal battery maintenance work requires insulated tools and should be performed by personnel authorized by AlpSolarr and authorized dealers.
- When installation, maintenance and other operations involve only the battery, the battery should be turned off by pressing the start button of the battery. When an inverter is involved, the battery switch of the inverter should remain disconnected.

6.1 Monthly maintenance

The user should visually inspect the battery once a month. Please refer to the table below for monthly maintenance.

Table 9. Monthly maintenance

Item	Reference standard	Recommendations on exception handling
Battery appearance	Neat and clean appearance without stains. Intact battery terminal Intact battery case without dents, damage, cracks, etc. around it. Battery appearance without liquid leakage. Case without deformation or bulging.	If there is dirt on the surface, clean the exterior of the battery module with a cotton cloth. If there is damage, liquid leakage and deformation on appearance, take a picture and replace the battery module with problems. For other exceptions, please contact AlpSolarr.
Running Environment	The operating environment is 0℃ -55℃ . Range of operating humidity: ≤ 95%RH.	If the temperature and humidity are abnormal, check the status of the cooling system.

6.2 Quarterly maintenance

Please refer to the table below for quarterly maintenance of batteries.

Table 10. Quarterly maintenance

Item	Reference standard	Recommendations on exception handling
Wire harness	Connecting wires without aging, and insulation layers without cracks. Bolts at the harness connections without looseness.	Replace faulty cables. Tighten screws.

6.3 Annual maintenance

Trend analysis of recorded data (battery and environmental) is recommended.

7. Warranty Statement

Except in the following circumstances and as stipulated in the contract, you may visit AlpSolarr and authorized dealers for reasonable warranty and maintenance.

1) Battery failure caused by disassembly, repair or other operations not authorized by AlpSolarr and authorized dealers is not covered by the warranty.

2) Battery damage caused by negligence during storage and transportation is not covered by the warranty.

3) Battery damage caused by overloading and continuous operation outside the electrical parameters of the battery is not covered by the warranty.

4) Adverse consequences caused by private testing of batteries without authorization from AlpSolarr and authorized dealers are not covered by the warranty.

5) Adverse consequences caused by the battery itself or improper operation and matching are not covered by the warranty.

6) Battery damage caused by natural forces, force majeure and uncontrollable factors, such as earthquakes, typhoons, tornadoes, volcanic eruptions, floods, lightning strikes, heavy snowfalls, wars, etc., is not covered by the warranty.

7) Those with product serial numbers being altered, blurred or torn are not covered by the warranty.

8. Disclaimer

The products and features purchased are regulated by a commercial contract between AlpSolarr and the customer. All or some of the products, services and features described in this document may not be within the purchase scope or use scope. Unless otherwise contractually agreed, all statements, information and recommendation in this document are provided “as is” without any form of express or implied warranty, guarantee or representation.

The information in this document is subject to changes without notice. We have made every effort to ensure the accuracy of the content in the preparation of this document, but all statements, information and recommendations in this document do not constitute any kind of express or implied warranties.

9. Limited Warranty

This limited warranty ("Warranty") specified below applies to AlpSolarr COMO Series Product manufactured by Shenzhen Ligoo New Energy Technologies Co., Ltd. (hereinafter referred to as "AlpSolarr",which is a brand owned by the manufacturer), purchased by an end user ("Buyer") through an authorized sales channel ("Reseller") and installed by a "Certified Installer".

The primary purpose of this Warranty is to clearly define the matters related to the warranty policy of the Product.

General Guidelines

The Warranty shall apply under the following conditions:

- Buyer shall comply with all precautions specified in documentation provided by AlpSolarr.
- Product shall be connected to an approved AlpSolarr Inverter and the AlpSolarr Online Monitoring Platform for the entire duration of the Warranty Period.
- Product shall be used solely for standard energy use in one of the following modes: solar selfconsumption, time of use, backup applications or AlpSolarr-managed grid services.
- Product shall be used, installed and handled in accordance with the provisions of the Product datasheet and the Product installation manual available on the AlpSolarr website (jointly the "Documentation").
- Any person performing installation and maintenance of the Product must have the appropriate electrical qualifications and licenses for energy storage system installation required by the country, and the state in addition to being a "Certified Installer".

Product Performance Warranty

AlpSolarr offers standard factory warranty which is valid 5 years from the date of installation and no more than 5 and a half years from the deliver date from AlpSolarr. ("Warranty Period").

The Product shall have an energy capacity based on the selected configuration options listed below ("Energy Capacity"):

Application	Depth of Discharge	Energy Capacity	Operating Limitation
Solar self-consumption /backup only	90%	70% SOH at the end of 5 years following the initial installation date	6000 cycles

General Exclusions

This Warranty does not apply to any defects or performance failures comprising or resulting from any of the following.

- Normal wear and tear (including, without limitation, wear and tear of batteries).
- Misuse, abuse, or negligence.
- Failure to maintain, operate, store, ship, install or handle the Product in strict conformance with the Documentation, including without limitation, failure to maintain the Product under proper environmental conditions or in any manner which is contrary to the Documentation.
- Vandalism, engraving, labels, irreversible marking or contamination, or theft.
- Modifications, alterations, repair, attachments, opening or disassembling the Product, which were not pre-authorized in writing by AlpSolarr.

- Removal and reinstallation of the Product at a location other than the original installation site, without the express written consent of AlpSolarr.
- Use of the Product in combination with equipment, items or materials not permitted by the Documentation or in violation of local codes and standards, connecting the Product to software, interfacing, parts, supplies or other products not supplied by AlpSolarr.
- Improper site preparation or maintenance or improper installation.
- Accidents or other force majeure events such as (but not limited to) flood, earthquake, fire, power surges, lightning, pest damage, corrosion, actions of third parties, direct exposure to water or other substances or other events beyond AlpSolarr's reasonable control or not arising from normal operating conditions.
- Shipping or transport to or from Buyer where Buyer arranges such shipping or transport.
- Product failure is not reported to AlpSolarr within 30 days of appearance.

This Warranty does not cover cosmetic or superficial defects, dents, marks or scratches, which do not influence the proper functioning of the Product.

Failure to Connect the Product to the AlpSolarr Online Monitoring Portal

In order to provide this Warranty for the Warranty Period, AlpSolarr requires the ability to update the Product through remote firmware upgrades. Buyer acknowledges that remote upgrades may temporarily interrupt the operation of the Product. By installing the Product and connecting it to the AlpSolarr Monitoring Portal, Buyer consents to AlpSolarr updating the Product from time to time, without prior notice. If the Product is not connected to AlpSolarr Monitoring Portal, AlpSolarr will not be able to honor this Warranty.

Remedies

If a claim is received within the Warranty Period and a fault with the Product is discovered that is covered under the Warranty, AlpSolarr may, at its sole discretion, elect to:

1. Fix the issue by changing configurations or updating software.
2. Repair the Product by replacing spare parts.
3. Exchange the Product for a Product that is brand new or refurbished but at least functionally equivalent to the original Product, or an upgraded model which is either functionally equivalent or functionally superior to the original Product. If the device is replaced within the Warranty Period, the remaining Warranty Period will be automatically transferred to the replacement unit. If the remaining Warranty Period is less than one year after the replacement, it will be extended to a full one-year warranty. For every single inverter exchange case, the claimant must gather the necessary information and send the RMA report (by following AlpSolarr's RMA template) to AlpSolarr to confirm the RMA request, prior to the inverter being exchanged.
4. If it's proven that the problem was caused by faulty installation, AlpSolarr reserves the right to contact the original Certified Installer and request that they provide a solution to fix the issue before AlpSolarr's intervention and may charge the subsequent cost to the original Certified Installer if they fail to provide a proper solution to fix this issue.

All parts of the Product or other equipment that AlpSolarr replace shall become AlpSolarr's property. If the Product is found not to be covered by this Warranty, AlpSolarr reserves the right to charge a handling fee. When repairing or replacing the Product, AlpSolarr may use Products that are new, equivalent to new or refurbished.

Limitation of Liability

The Warranty set out herein are in lieu of any other warranties with respect to the Product purchased by Buyer from AlpSolarr, whether express or implied, written or oral (including any warranties of merchantability or fitness for a particular purpose), all of which are expressly excluded to the fullest extent permitted by applicable law. AlpSolarr shall not be liable for any consequential, incidental, indirect, special, exemplary, or Better Energy for a Better World Shenzhen Ligoo New Energy Technologies Co., Ltd www.alpsolarr.com punitive damages arising out of or related to this Warranty, regardless of the form of action and regardless of whether AlpSolarr has been informed of, or otherwise might have anticipated, the possibility of such damages. AlpSolarr's liability arising out of a claim under this Warranty shall not exceed the amount paid for the Product underlying Buyer's warranty claim.

Limitation on Use

The Product is not intended for use as a primary or backup power source for life support systems, medical equipment, or any other use where the Product's failure could lead to injury to persons or loss of life or catastrophic property damage. AlpSolarr disclaims any and all liability arising out of any such use of the Product. Additionally, AlpSolarr reserves the right to refuse to service Products used for these purposes and disclaims any and all liability arising out of AlpSolarr's service or refusal to service the Products in such circumstances.

Claims by Buyer that go beyond the warranty terms set out herein, including claims for compensation or damages, are not covered by the Warranty, insofar as AlpSolarr is not subject to statutory liability. Eventualclaims in accordance with the law on Product liability remain unaffected.

Coverage under the Warranty is subject to Buyer complying with the foregoing notification requirements and cooperating with AlpSolarr's directions. AlpSolarr's sole obligation and Buyer's exclusive remedy for any defect warranted hereunder is limited to those actions expressly stated above. Such actions are final and do not grant any further rights, in particular with respect to any claims for compensation.

Unless otherwise specified in an executed Agreement with AlpSolarr, the Warranty and related provisions set out herein are subject to AlpSolarr's General Terms and Conditions, including, without limitation, the provisions thereof, which relate to disclaimer of warranties, limitation of liability and governing law and jurisdiction.

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