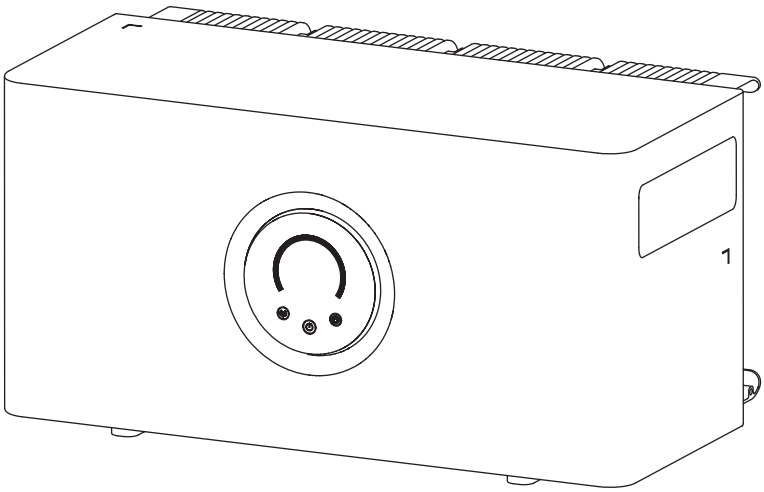
MOVA



LumeGret A2000

Instruction Manual

EN

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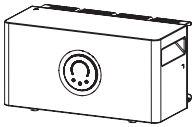
DISCLAIMER

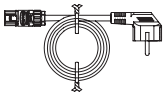
⚠ This product includes essential printed documentation required for setup and basic usage. Improper use may result in serious injury damage, or property loss. By using this product, you agree to and accept all terms outlined in the product documentation. MOVA is not liable for losses, damages, or injuries caused by misuse or non-compliance.

- Read this document and other related product documentation before any operation.
- The installation of this product must comply with all applicable local regulations, codes, or standards.
- An overcurrent circuit breaker must be installed between this product and the grid.
- When the photovoltaic (PV) array is exposed to light, it supplies direct current voltage to the power conversion equipment (PCE).
- Use insulation tools and wear personal protective equipment when installing, servicing, or maintaining this product.
- Install this product in a tidy, dry, and well-ventilated environment.
- Keep the product out of reach of children and pets. If the product is to be used near children, they should be closely supervised.
- Before making any electrical connections, ensure that any load to be connected (e.g. devices or equipment intended to be powered by this product) is powered off.
- Always pull the plug instead of the cord when disconnecting the product to reduce the risk of damage to the electric plug and cord.
- Do not put fingers or hands into the product.
- Do not expose this product to direct sunlight, rain, and snow.
- Do not expose this product to strong electromagnetic fields to avoid radio interference.
- Do not install or operate this product near flammable, explosive, corrosive,or caustic sources.
- Do not install or operate this product during extreme weather events such as lightning, heavy rain, or strong wind.
- Do not subject this product to severe impacts, vibrations, or drops to prevent physical damage.
- Do not drag, squeeze, step on this product, or throw it into the fire, as there is a risk of explosion.
- Do not use any damaged cords or cables with this product.
- Do not damage, deface, or remove any labels on this product.
- Do not disassemble, repair, or modify this product by yourself for any maintenance or service, contact MOVA Customer Service.
- Do not use any unofficial or unrecommended components and accessories.
- For any replacements, please contact MOVA for further assistance.
- Do not clean the product with flammable or toxic solvents. Wipe it with a dry soft cloth.
- Do not place heavy objects (>40 kg) on the product.

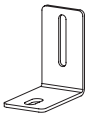
1 Product Introduction

1.1 LumeGret A2000 Package List


LumeGret A2000
×1


AC Power Cord
×1


MC4 Wrench
×1

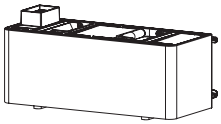

Locking Bracket
×2

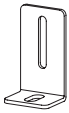

Expansion Bolts
×2


M4*10 Bolts
×2


Documents

1.2 LumeGret B2000G Package List (Sold Separately)


Battery
×1

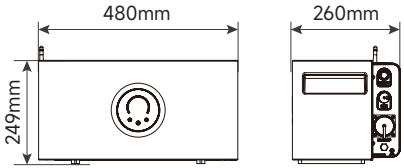

Locking Bracket
×2

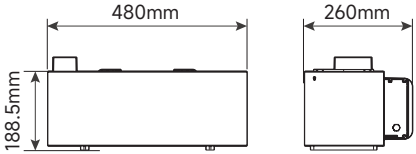

M4*10 bolts
×2

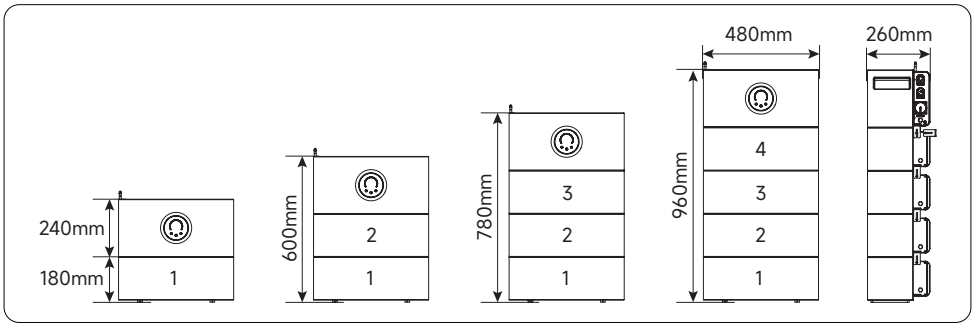

Documents

1.3 System Dimensions

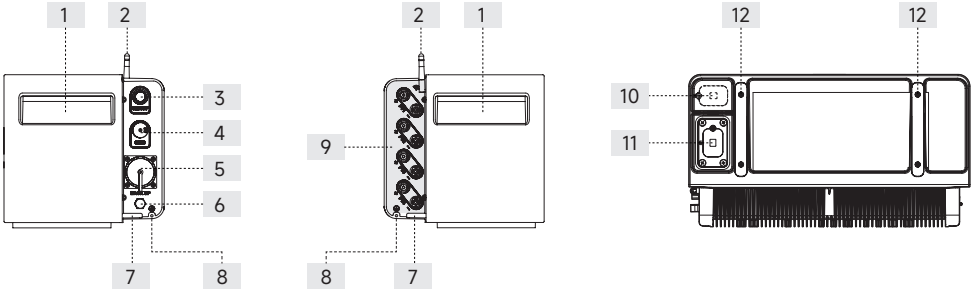
LumeGret A2000	LumeGret B2000G







1.4 Product Overview



1	Lifting Handle	5	Back-up Port	9	PV Input Terminal
2	Antenna	6	Ventilation Valve	10	Protection Cover
3	Power Button	7	Series Connection Mounting Holes	11	Battery Connection Port
4	Grid Port	8	Protective Grounding Terminal	12	Foot Pad

1.5 Button Controls

Button	Action	Status
	Long press for 6 seconds	Enter pairing mode
	Long press three times in 10 seconds	Reset Bluetooth and Wi-Fi and clear historical account data
	Long press for 2 seconds	Switch to backup mode
	Press and hold the two buttons for 3 seconds	Enable/ disable Child Lock Mode and disable/enable touch control

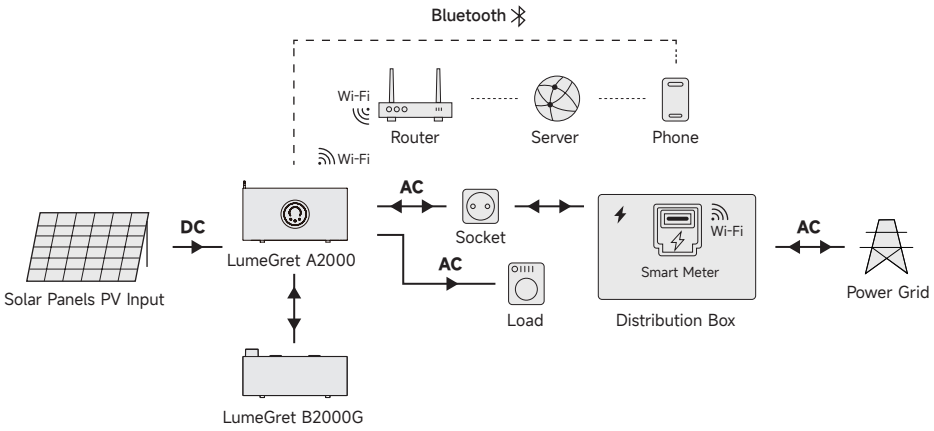
1.6 LED Indicator

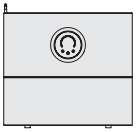
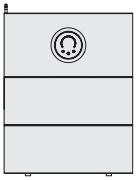
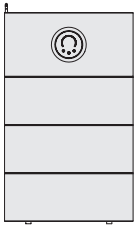
Light	Status	Description
	Power On	Blinking white
	The system is working normally	Solid white
	Power off	Off
	Ready to connect to Network and connectting	Breathing white
	Network connected	Solid white
	Reset	Flash white
	The system is in backup mode.	Solid white
	The system is not in backup mode	Off
	Battery level	The light bar changes according to battery level, each segment = 10% SOC
	The battery has no power or system powered off.	Off
	Battery charging	Solid green
	Battery discharging	Blinking green
Dynamic indicator light	The system is preparing	Flowing blue
	The system is working normally	Breathing blue
	System fault	Blinking red

⚠ Note

The duration of the dynamic indicator light can be adjusted via App according to actual needs.

1.7 System Overview



System Overview					
LumeGret A2000	×1	×1	×1	×1	×1
LumeGret B2000G	/	×1	×2	×3	×4
System Capacity	1.92 kWh	3.84 kWh	5.76 kWh	7.68 kWh	9.6 kWh

2 Pre-Installation

2.1 Check the packaging

Before unpacking the unit, carefully inspect the packaging for any signs of damage, such as holes or cracks, and verify that the model number matches your order. If you notice any damage or an incorrect model, do not unpack the unit. Contact your dealer or point of purchase immediately.

2.2 Check the unit

- After unpacking the unit, check if it is intact and complete, and free from any obvious damage.
- If any item is missing or damaged, contact your dealer or source of purchase.

2.3 Installation Environment Requirements

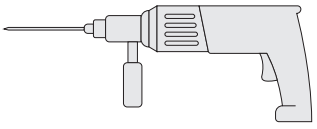
1. Do not install the equipment in a place near flammable, explosive, or corrosive materials.
2. The temperature and humidity at the installation site should be kept within the appropriate range.
3. Do not install the equipment in a place that is within children's easy reach.
4. Reserve enough space for operations and heat dissipation when installing the system.
5. The temperature inside the box is relatively high when the inverter is running, do not touch the box before it cools down to avoid getting burned.
6. Install the equipment in a sheltered place to avoid direct sunlight, rain and snow.
7. The place to install the equipment shall be well-ventilated for heat radiation and large enough for operations.
8. The installation height should be convenient for operation and maintenance, ensuring that the equipment indicator lights, all labels and the connection terminals are easy to view.
9. The altitude to install the equipment shall be lower than the maximum working altitude. The maximum operating altitude is 3,000 meters.

⚠ NOTICE

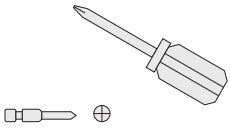
- Charging temperature range: -20<T< 55° C; Discharging temperature range:-20<T< 55° C.
- If installed in an environment below -20° C, the battery will not be able to continue charging to restore energy after being discharged, resulting in undervoltage protection.

3 Installation

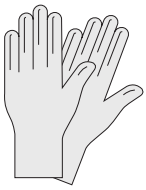
The following tools are not included in this package. Please make sure they are ready before installation and electrical connections.



Hammer drill
Ø 8mm



Screwdriver
(PH0, PH1, PH2)

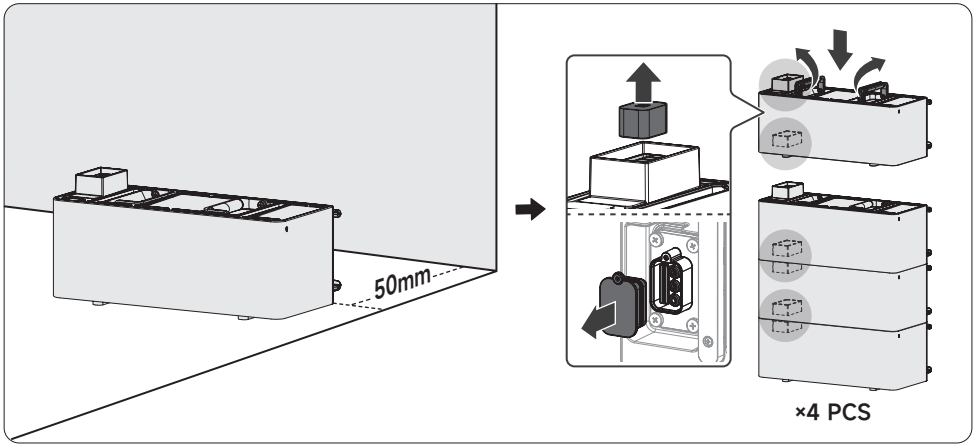


Safety gloves

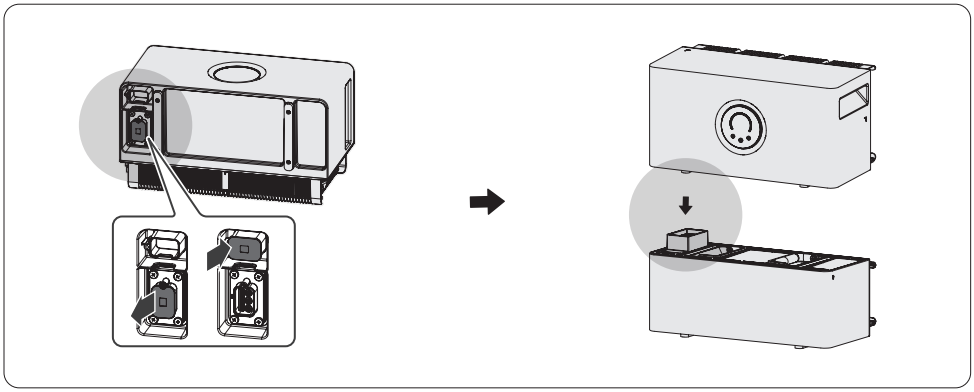
The following are applicable to scenarios where an expansion battery is used. If the expansion battery is not required, simply place the MOVA LumeGret A2000 in the appropriate installation location according to the actual needs.

Step 1: Place expansion battery (If you didn't purchase the extended battery separately, please skip this step)

- Place expansion battery on the bottom, and keep about 50 mm away from the wall.
- Remove the bottom protective covers of the expansion batteries. Stack all expansion batteries one by one. (Up to 4 expansion batteries can be stacked.)



Step 2: Remove the bottom rubber plugs of LumeGret A2000, and stack them at the top of expansion batteries



⚠ Warning

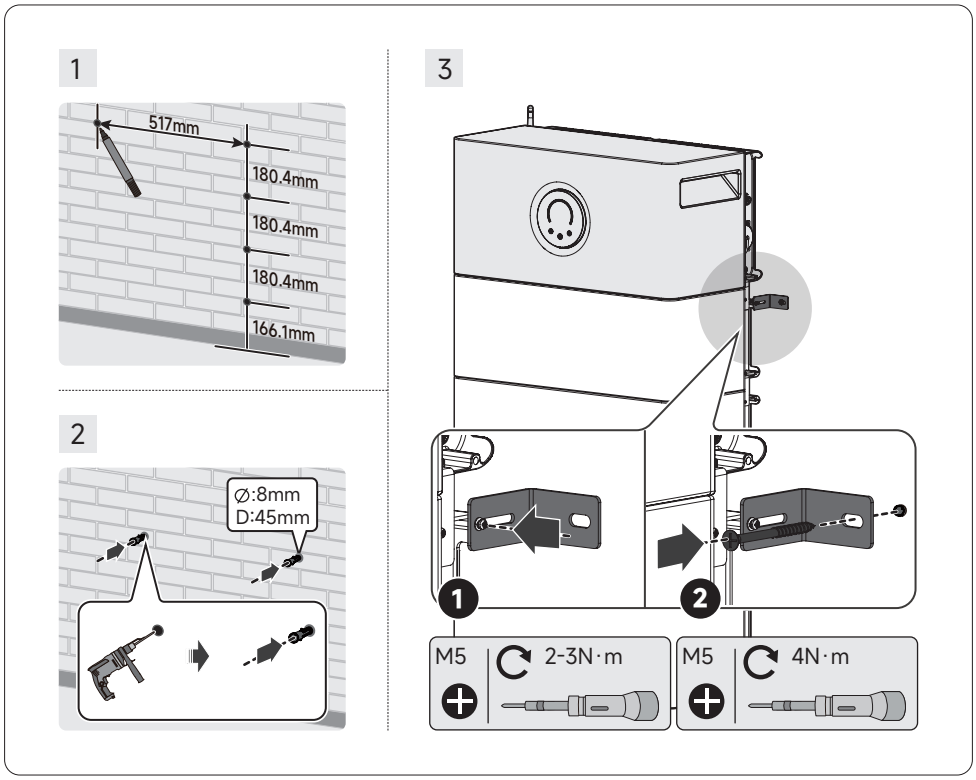
If you didn't buy the expansion batteries separately, you can place the MOVA LumeGret A2000 directly on the ground, but **make sure that the protective cover of the bottom device should not be removed!**

Step 3: Install the Wall Mount Kit

⚠ Note

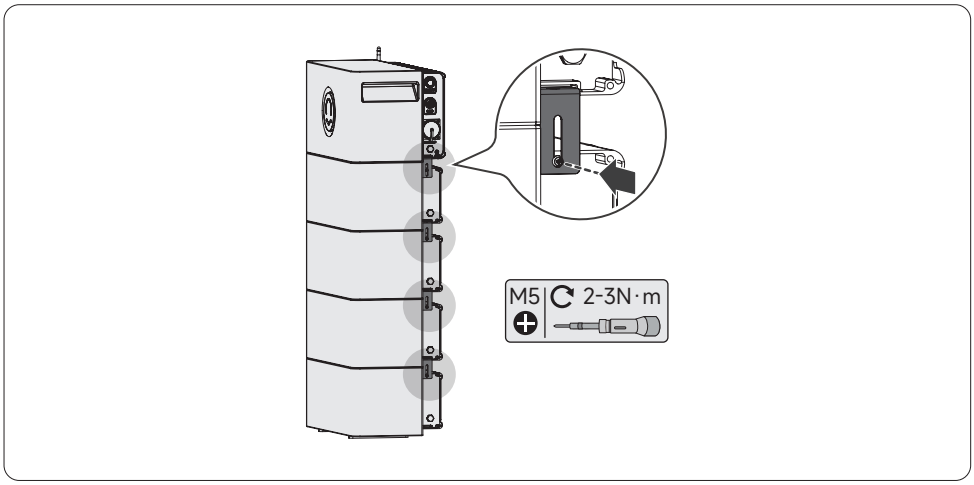
Install the bracket on the top battery **【NOT LumeGret A2000 main unit】** by partially tightening the short screw. The fitting can be mounted on either the front or the back.

1. Mark a pilot hole.
2. Drill the marked hole and insert the anchor.
3. Install the bracket:
   ① Tighten the long screw
   ② Tighten the short screw



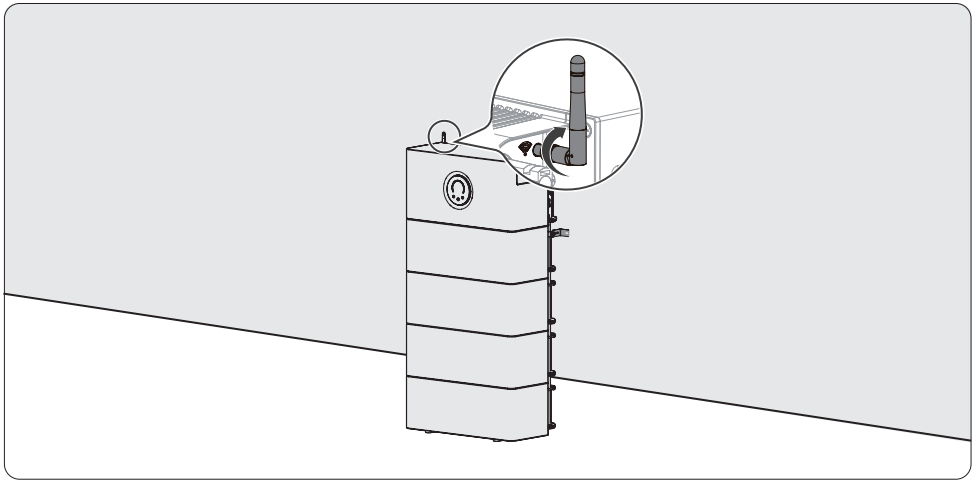
Step 4:

Insert the series of brackets into the bracket installation holes of the MOVA LumeGret A2000 and the battery one by one, and then tighten them with screws to complete the fixation between the MOVA LumeGret A2000 and the battery, as well as between the batteries.



Step 5:

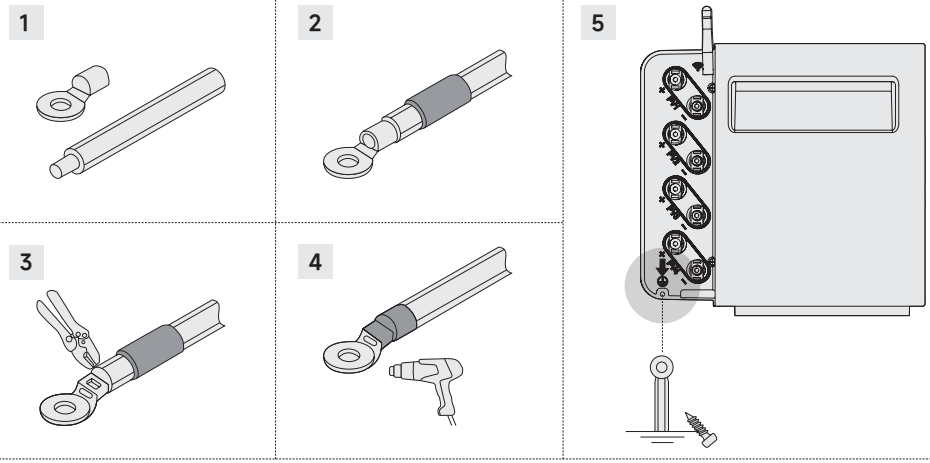
Tighten the antenna on the upper part of the MOVA LumeGret A2000.



Step 6: Grounding

The following tools and supplies are not included in the package. Ensure that you have them ready before proceeding with the electrical connections.

Required Supplies	Specifications
GND cable	1 mm2,yellow/green
Ring terminal	Suitable for the 1 mm2 GND cable and the M5 screw
Heat shrink tubing	Caliber: 8 mm; Length: 25 mm
Heat gun	/
Phillips screwdriver	PH2

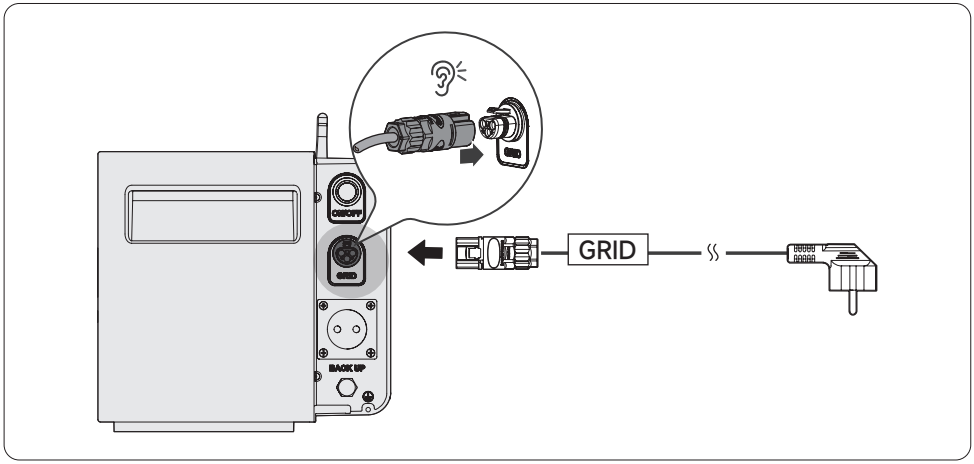


1. Strip the insulation layer of the GND cable.
2. Insert a heat shrink tubing and a ring terminal into the GND cable.
3. Crimp the ring terminal onto the GND cable using a crimper.
4. Wrap the wire crimping area with the heat shrink tubing using a heat gun.
5. Loosen the pre-installed screw and use it to secure the GND cable.

Step 7: Connect to Grid Power via a Home Outlet

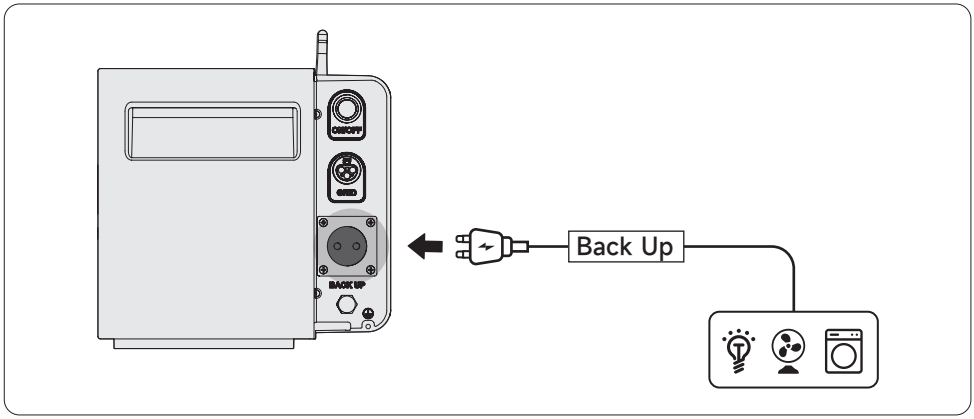
⚠ Warning

The grid connection must be connected to a grounded electrical outlet or grounding busbar. Additionally, grounding the product casing via its dedicated grounding terminal is recommended for enhanced safety. Ensure the device is powered off before installation.



Step 8: Connect to Your Device

Power your device directly using the backup port if needed.

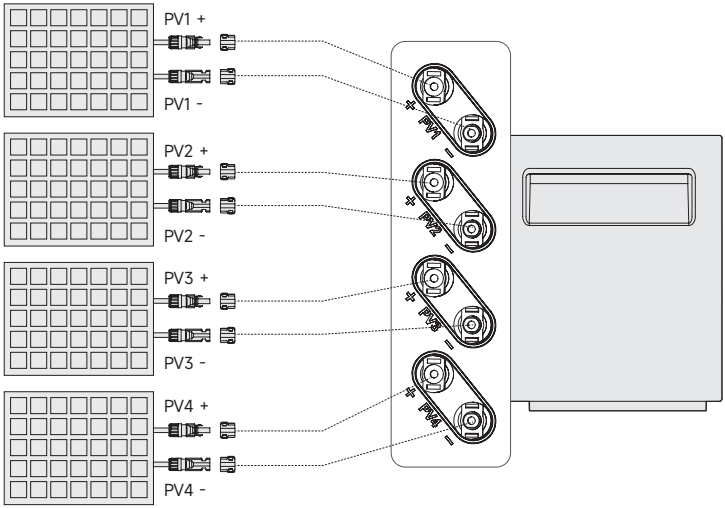


Step 9: Connect to Solar Panels

Solar Panel is not included in the package, it's an optional accessory.

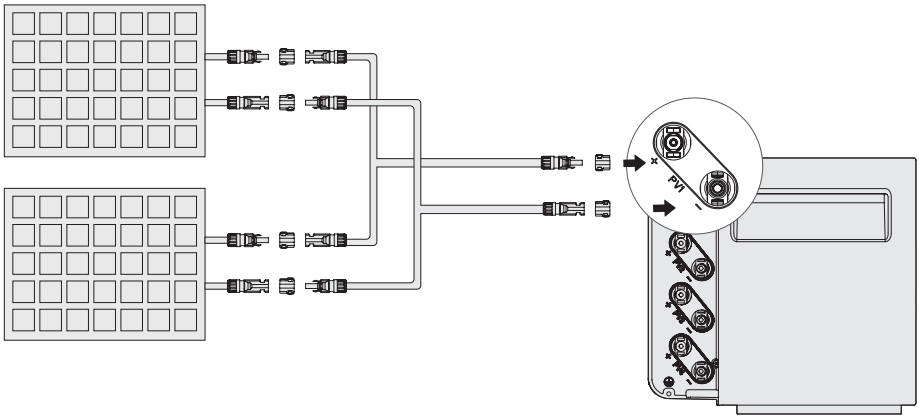
⚠ Caution

- Never connect the leads of a solar panel to different PV terminals (e.g., negtive to PV1-and positive to PV2+) to prevent short circuits.
- Install the PV tamper-proof covers onto PV connector of the cable, then connect to the PV Input Terminal of the LumeGret A2000.

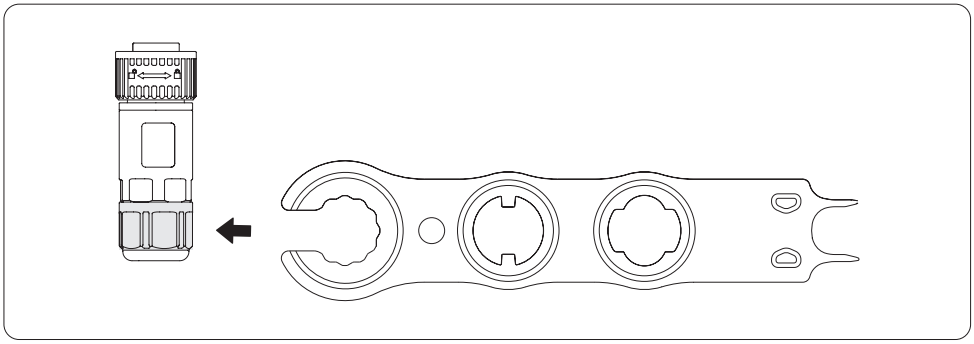


Parallel Connection (Up to 8 PV Modules)

Connect every two pv modules to the same set of pv input ports.



If you need to adjust the PV Connection, disconnect the solar connectors using the PV Wrench.



Step 10: Power On and Settings

- **Power On:** Press the power button to power on the device.

  ⚠ **Note:**

  When the LumeGret A2000 is powered on, the expansion batteries will automatically activate.

- **Download the MOVAhome App:**
  Scan the QR code or search for the MOVAhome app in your app store to download it.
  Then, register an account and log in.

Scan to download
the MOVAhome APP

Download on the
App Store

GET IT ON
Google Play

Search for the MOVAhome App
in your App store to download it.

- **Bind the Device and Set Up the Internet:**
  Follow the in-app instructions to bind the device and enjoy smart control from your phone.

4 Specifications

LumeGret A2000

PV Terminal
Max. PV Input Voltage: 60V
Operating Voltage Range: 13-60V
Max. PV Input Current: 4*20A
Max. PV Short-Circuit Current (Isc): 4*26A
Max. PV Input Power: 2400W

Battery Data
Rechargeable Battery: LFP
Rated Voltage: 19.2V
Rated Power (Single Device): 1.6kW
Rated Power (With Expandable Battery): 2.4kW
Rated Capacity: 1920Wh

General Parameters
Communication: Wi-Fi & Bluetooth
Protective Class: IP65
Ingress Protection: Class II
Inverter Topology: Isolated
Operating Temperature Range: -20°C ~ +55°C
Max Altitude: 3000m
Warranty: 10 Years
Dimensions: 480*249*260mm
Net Weight: 26kg

AC Output (On-Grid Terminal)
Max AC Output Power: 0.8kW
Rated Voltage: 230V
Rated Current: 3.5A

AC Input (On-Grid Terminal)
AC Input Power: 1.5kW
Rated AC Input Voltage: 230V
Rated Current: 6.8A

AC Output (Off-Grid Terminal)
Max AC Output Power: 1.5kW
AC Output Voltage: 230V
Max AC Output Current: 6.8A

5 EU Declaration of Conformity

Equipment with Wireless Communication Modules

The equipment with wireless communication modules sold in the European market meets the requirements of the following directives:

- Radio Equipment Directive 2014/53/EU (RED)
- Restrictions of Hazardous Substances Directive 2011/65/EU and (EU) 2015/863 (RoHS)
- Waste Electrical and Electronic Equipment 2012/19/EU
- Registration, Evaluation, Authorization and Restriction of Chemicals (EC) No1907/2006 (REACH)

Battery

The batteries sold in the European market meets the requirements of the following directives:

- Electromagnetic compatibility Directive 2014/30/EU (EMC)
- Battery Directive 2006/66/EC and Amending Directive 2013/56/EU
- Waste Electrical and Electronic Equipment 2012/19/EU
- Registration, Evaluation, Authorization and Restriction of Chemicals (EC) No1907/2006 (REACH)

6 Warranty Exclusions

In the event of damage related to the causes listed below, no warranty claims will be acknowledged or accepted. Claims that relate to defects that are caused by the following factors are not covered by MOVA's warranty obligations.

1. Can not provide proof of purchase.
2. Force majeure (storm damage, lightning strike, over voltage, fire, thunderstorm, flooding; social causes such as war, turmoil, government intervention, strikes, embargoes, market conditions, etc.).
3. Accidental damage, misuse, abuse, non-compliant use, normal wear and tear, theft, loss, or confiscation.
4. Improper application of electrical supply voltage, current and/or frequency.
5. Improper installation, commissioning, start-up, configuration, or operation (contrary to the guidance detailed in the installation manual supplied with each product).
6. Inadequate ventilation and circulation resulting in insufficient cooling and natural airflow.
7. Modifications to any part of the product.
8. Unauthorized repair attempts.
9. Products whose serial number sticker or imprint has been removed, defaced or tampered with.
10. Products purchased from unauthorized dealers/resellers.
11. Free products/rewards/gifts.
12. Products used outside of the purchasing region, and products that are shipped to areas that are not easily accessible by courier or freight services, such as overseas or remote islands.
13. Cosmetic or superficial defects, dents, marks or scratches, which do not influence the proper functioning of the product.
14. This limited warranty does not cover any battery cell or product containing a battery cell unless you fully charge the battery cell within thirty (30) days of receiving the product and subsequently charge it at least once every 3 months. Failure to do so will void the warranty for the battery cell and coverage for any associated damage or malfunctions. It is preferable to fully charge it within seven (7) days of receiving the product.
15. Our warranties are non-transferable from end user to end user.

Furthermore, this limited warranty and related service will not exceed the original cost of the MOVA product. Please note that these warranty terms and conditions are subject to change without prior notice. The MOVA Support Team reserves the right to make a final determination regarding warranty service eligibility, and to determine the appropriate solution, which may include replacement, repair, or refund, at its sole discretion.

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Exporter: Automax Technologies (Hong Kong) Co. , Limited
Address: UNIT 1104A 11/F KAI TAK COMM BLDG NO 317-319 DES VOEUX RD CENTRAL SHEUNG WAN HONG KONG
https://www.mova.tech/

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