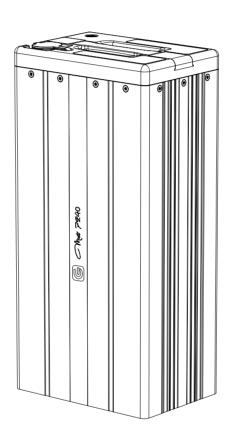
GREEN ESS



Mint 7240 BATTERY

User Manual



MOUNTING Disclaimer

Please read this User Manual and ensure you understand it fully before using the product. Please keep this User Manual properly for future reference. Any incorrect usage of this product may cause severe injury to the user or others, damage to the product, or loss of property. By using this product, the user will be deemed as having understood, recognized, and accepted all the terms and contents of this User Manual, and will be responsible for any incorrect usage and all consequences arising therefrom. GreenEss hereby disclaims any liability for any losses due to the user's failure to use the product according to the User Manual.

In compliance with laws and regulations, GreenEss shall have the final right to interpret this document and all related documents for this product. Any update, revision, or termination of the contents thereof, if necessary, shall be made without prior notice, and users may visit GreenEss official website for the latest information of the product.

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1. Safety Instructions

1.1 Warning

- i. It is strictly prohibited to place this battery near heat sources, such as fire or heating furnace.
- ii. It is strictly prohibited to allow this battery to contact with any liquid. Do not immerse this battery in water. Do not use this battery in rainy, damp, or wet environment.
- iii. It is prohibited to use this battery in strong static or strong magnetic field environment.
- iv. It is prohibited to disassemble this battery in any way or puncture this battery with sharp objects.
- v. It is prohibited to connect the positive and negative terminals of the battery directly with wires or any metal objects.
- vi. It is prohibited to dismantle or replace the battery cells.
- vii. It is prohibited to stack heavy objects on top of this battery.
- viii. It is prohibited to place this battery in an unventilated or dusty environment.

1.2 Caution in general

- i. Please visit authorized GreenEss channels for official components and accessories information.
- **ii.** If the battery is compromised or battery cells are exposed, do not attempt to repair it yourself. Please have it inspected and repaired by GreenEss technician or authorized technician.
- **iii.** In case of accidental leakage of chemicals inside this battery, do not touch or inhale. In case of accidental contact with skin or eyes, wash with plenty of clean water and seek medical treatment immediately.
- iv. Do not operate this battery while wearing metal objects such as watch, necklace, and bracelet to avoid causing accidental short circuits. If this battery catches fire, immediately use fire extinguisher or fire fighting equipment water or mist, sand, fire blanket, dry powder fire extinguisher, carbon dioxide fire extinguisher.
- v. When using this battery for the first time, if the battery appears broken or has abnormal smell, do not continue to use this battery and return it to sellers.
- **vi.** If this battery accidentally falls into water during use, place it in a safe, open area and stay away from this battery until it is completely dry, and this battery should not be reused and should be disposed properly in accordance with the disposal methods in Section 8.2 of this User Manual.
- vii. If the battery charging exceeds regular charging time, charging should be stopped. Overcharge may cause the battery to overheat, to smoke and deform, or to combust.
- viii. This battery should be kept out of the reach of children and pets.

1.3 Caution while handling

- i. When handling this battery, use the non-slip metal handles from this battery for proper handling.
- ii. When handling this battery, be sure to secure it properly and keep it in a flat position.
- iii. Please handle with care.

2. Privacy Policy

- 2.1 By using GreenEss Products, Applications and Services, you consent to the GreenEss Term
- 2.2 of Use and Privacy Policy, which you can access via the "Privacy Policy" page
- 2.3 on the GreenEss App or on the official GreenEss website at https://www.greeness.com.au



3. MOUNTING

3.1 What's in the Box

Main items				
	Emm. est 100 totale User Manual			
LFP Battery*1	User Manual*1	DC Breaker*1		

Installation kit bag				
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Nail*4	Bracket*1	Battery Positive & Negative Connector with Lead *2	Bracket Base*1	Grounding Point*1

3.2 Preparing Tools and Instruments

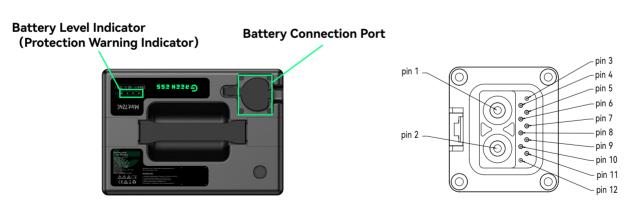
Tools				
		0000		
Hammer Drill	Phillips Screwdriver	Multimeter		



4. Specifications

Mint 7240 Battery			
Net weight	27.9kg (+/- 0.5 kg)		
Dimensions	226x157.5x470mm		
Nominal Capacity	2870.4Wh(39Ah)		
Usable Battery Capacity	2296.32Wh		
Configuration	23S2P		
Charging Cut-off Voltage	82.8V		
Discharging Cut-off Voltage	63V		
Max Continued Charging Current	39A		
Max Continued Discharge current	118A		
Battery Chemistry	LiFePO4		
	8000 cycles		
Cycle life	Condition: Max. 0.5C charge/discharge at 25±2°C		
	Depth of Discharge (DoD) :80%		
IP Rating	IP65		
Operating Temperature	-10°C~50°C		
Storage Temperature	-20~45°C, <3 months		
Storage remperature	0~20℃, <1 year		
Humidity Range	Max. 90%RH		

5. Battery Appearance

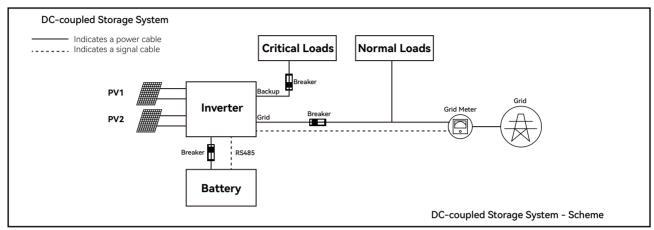


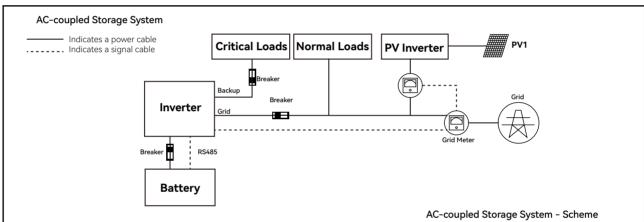
Pin definition

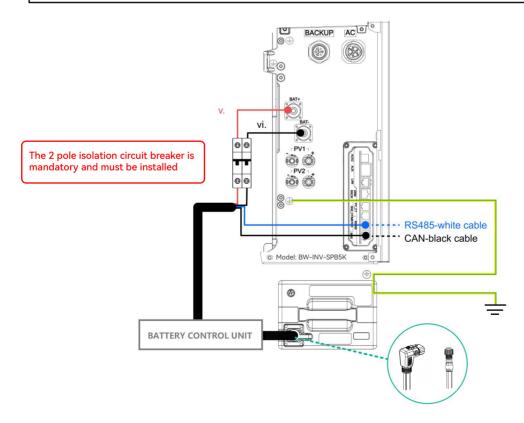
PIN 1 Positive electrode PIN 2 Negative electrode PIN 3 CAN L PIN 4 CAN H PIN 5 ID- PIN 6 ID+ PIN 10 12V input PIN 7 ACC PIN 4 CAN H PIN 8 No connection PIN 9 No connection PIN 10 12V input PIN 11 P2- PIN 12 P2-	ion
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6. Application Scenarios For a Storage System









6.1 Battery On and Off

- i. The battery stays on the status of Sleep Mode (no power output) until the connector is installed.
- ii. Once the connector is installed, the battery is electrically activated (Power on).
- iii. The battery can be electrically de-activated via Upper computer command or GreenVolt control.

6.2 System Shutdown

- i. Turn off the main DC battery isolator.
- ii. Turn off the Solar Array AC Main Switch located in the switchboard or next to the inverter.
- iii. Turn off the Solar Array DC Main Switch located next to the inverter.
- iv. Please also check the shutdown procedure on the main switchboard.

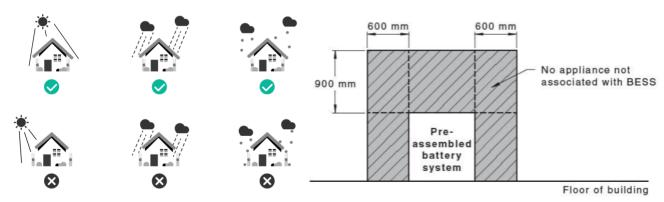
6.3 System Restart

- i. Turn on the Solar Array DC Main Switch located next to the inverter.
- ii. Turn on Solar Array AC Main Switch located in the switchboard and/or next to the inverter.
- iii. Turn on the main DC battery isolator

6.4 Battery Installation

Precautions

- **i.** After opening the battery package, first check the battery and accessories. If the battery is damaged or there is an occurrence of missing parts, please contact the vendor.
- ii. Ensure the battery is switched off before installation.
- iii. Make sure the electrical specifications of the battery are compatible with the relevant devices and systems.
- iv. The battery can be installed indoor and outdoor, To select a location for the battery, the following criteria should be considered:



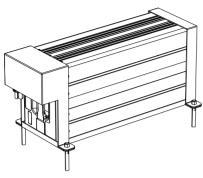
Recommended Installation Locations.
It is recommended to avoid installing the battery in direct sunlight.

Restricted zones for battery systems

- **V.** Batteries must not be installed in habitable rooms like living rooms or bedrooms. However, they can be installed in non-habitable spaces, such as garages, provided that ventilation requirements are met. This includes maintaining a minimum clearance of 900mm above the BESS and 600mm on both sides for proper ventilation.
- vi. It is recommended that the battery is installed in a cooler ambient which doesn't exceed 104°F/40°C. Keep the battery away from flame and liquid.

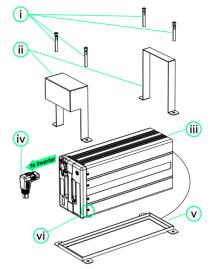


Fixing the battery with the rack and connecting to the inverter (as follows)



^{**} are provided in the installation kit bag.

- i. Nail
- ii. bracket
- iii. Battery
- iv. Cord
- v. Bracket Base
- vi. Grounding Point



7. Battery Maintenance and Disposal

7.1 Maintenance Instructions

It's recommended that user contacts GREEN ESS and follow the instruction to performs maintenance every six months.

- i. Check the battery module for damage or deformation.
- ii. Check the battery system for abnormal noise during operation.
- iii. Check whether the temperature inside the battery system is too high.
- iv. Check whether the internal humidity and dust of the battery module are within the nommal ranges. If necessary, clean the battery module.
- v. Check whether the warning sign and label are legible and dirty. If necessary, clean them.
- vi. Check whether the hybrid inverter are reliable connected.
- vii. Check the outside of the battery system for oxidation or rust.

7.2 Disposal

- i. If conditions permit, make sure that the battery is completely discharged before placing the battery in the designated battery recycling bin. The battery cells, which contain hazardous chemicals, are strictly prohibited from being placed in an ordinary garbage bin. For relevant details, please comply with the user's local laws and regulations regarding lithium battery recycling and disposal.
- ii. If the battery cannot be fully discharged due to the fault of the product itself, do not dispose the battery directly. Contact a specialized battery recycling company for further disposal.
- iii. An over-discharged battery cannot be switched on. Please dispose the battery according to local laws and regulations.

8. Troubleshooting

Description of Error	Error Type	Recovery Methods
0.5-second on-time and a 1.5-second off-time	Over-Discharge Protection	Battery charging, automatic recovery when SOC > 0%
1.5-second on-time and a 0.5-second off-time	Overvoltage Protection	Charging stops and recovers automatically after consumption of battery power
1-second on-time and a 1-second off-time	Over Current Protection	Remove the overloading device Professional inspection to eliminate the cause of the over-loading
1-second on-time and a 1-second off-time	Short-Circuit Protection	Professional inspection to eliminate the cause of the short circuit



OS Address

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