

User Manual

HiBattery 1920 AC

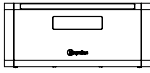
Contents

1. Packing List.....	1
2. Overview.....	1
2.1 Product Overview	1
2.2 Operating Screen Overview	1
3. Installation.....	3
3.1 Mechanical Installation	3
3.2 Electrical Connection	5
3.3 Connecting Two HiBattery ACs in One System	6
4. Using the HiBattery AC.....	7
4.1 Downloading the App.....	7
4.2 Creating an Account.....	7
4.3 Powering on the HiBattery AC.....	7
4.4 Connecting the HiBattery AC to Wi-Fi	8
4.5 Adding Two HiBattery ACs in One System	9
4.6 Upgrading the Firmware.....	9
4.7 Setting Up the Load Power Curve and Output Power.....	10
4.8 Adding Smart Devices	11
4.9 Setting the TOU Mode	11
4.10 Checking the HiBattery AC and Energy System Performance	13
5. Storage and Maintenance	13
6. Technical Specifications.....	14
7. Safety Information	15

1. Packing List



- Immediately contact your supplier or distributor upon noticing any damaged or missing parts.
- In these instructions, HiBattery 1920 AC is referred to as "HiBattery AC" for short.



HiBattery 1920 AC × 1



MS Plug-and-Play Cable × 1



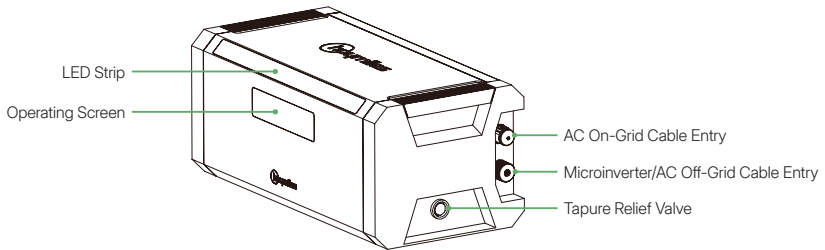
MS Off-Grid Cable × 1



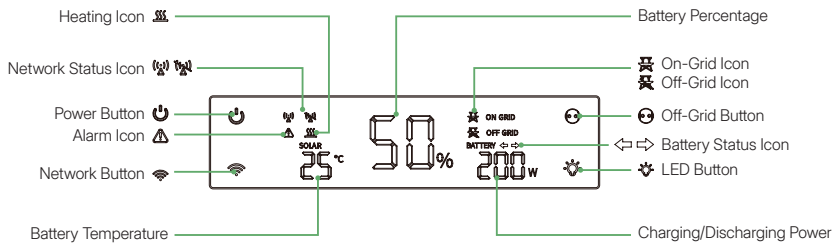
User Manual × 1

2. Overview

2.1 Product Overview



2.2 Operating Screen Overview



Button Quick Reference Guide			
Button	Action	Function	Display
	Touch and hold for 1 to 2s	Power on	The center LED lights up toward both sides, and the screen lights up
	Touch and hold for 1 to 2s	Power off	The LED on both sides fade toward the center, and the screen goes off
	Tap once	Pair via bluetooth	LED strip blinks when waiting for pairing LED strip stops blinking when paired
	Touch and hold for 10s	Restore network settings	LED strip blinks for 5 times
	Tap twice in succession, each for 0.5 to 1s	Restart bluetooth	LED strip blinks for 2 times
	Touch and hold for 1 to 2s	Enable off-grid status	 lights up
	Touch and hold for 1 to 2s	Disable off-grid status	 lights up
	Tap once	Switch LED color	LED strip cycles through white, green, blue, purple, and cyan with each tap

Device Status Quick Reference Guide		
Device Status		Display
Network Status	Not connected to router	 remains on
	Connected to router	 remains on
Off-Grid Status	Off-grid status enabled	 remains on
	Off-grid status disabled	 remains on
Battery Heating Enabled		 remains on
Firmware Updating		LED strip scrolls from left to right, and then reverses and cycles repeatedly
Sleep Status		LED strip goes off, and only the battery percentage remains on
Battery Status	Battery charging	LED strip scrolls from left to right, and  lights up
	Battery discharging	LED strip scrolls from right to left, and  lights up
Alarm Status		 remains on or blinks

3. Installation

3.1 Mechanical Installation

Method 1 Floor-Mounted



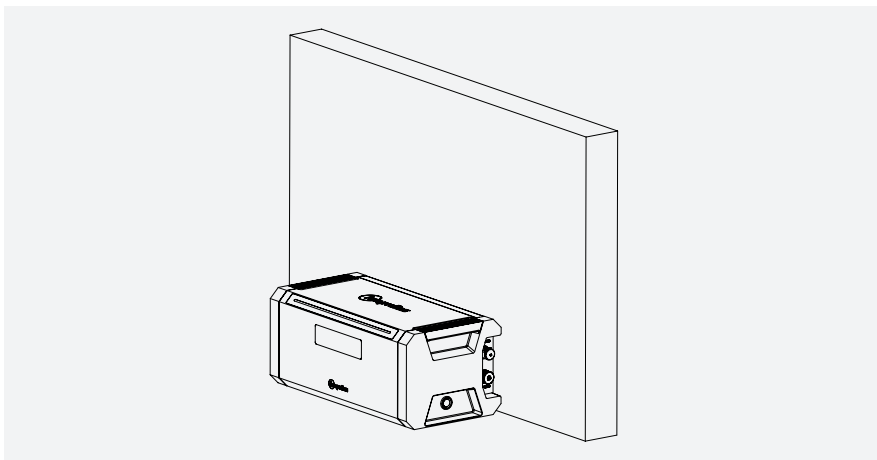
- All installations must adhere to local electrical standards and the national electrical code.
- Shield the HiBattery AC from direct sunlight and rainfall.



For safe operation and to avoid device damage, observe the following requirements when selecting the installation site.

- The installation site must be convenient for electrical connection, operation, and maintenance.
- The installation surface must be suitable for the weight (24 kg), dimensions, and cable length of the HiBattery AC.
- The installation site must have sufficient air clearances around the HiBattery AC. Clearances may vary depending on specific installations, and we suggest a general minimum guideline: maintain at least 3.5 mm clearance to the nearest adjacent sidewall on the up, bottom, left, and right sides.

Position the HiBattery AC on a flat and stable surface. The back of the device must be separated from the wall by at least 1 cm.



Method 2 Wall-Mounted



The mounting kit (brackets, screws, and expansion bolts) must be purchased separately. You can contact the distributor or email our sales team at sales@hoymiles.com to order the mounting kit.

A) Prepare installation tools.



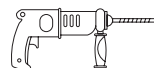
Rubber Mallet



Marker



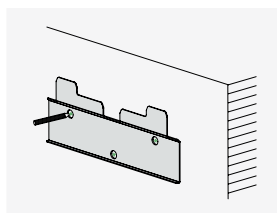
Electrical Screwdriver (M5, M6)



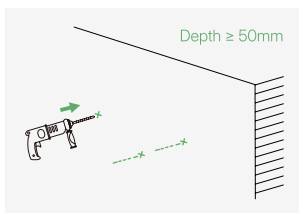
Hammer Drill (φ8)

B) Choose a location to mount the HiBattery AC.

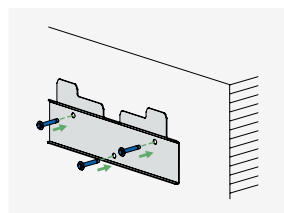
- C) Use a level to ensure the wall-mount bracket is completely level. Then mark drilling positions.
- D) Drill in the marked positions. (Depth ≥ 50 mm)
- E) Secure the wall-mount bracket to the wall with M6 $\times$ 50 expansion screws. (Torque: 9 N·m)



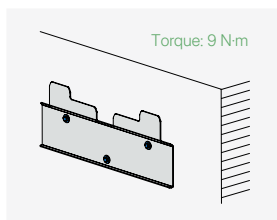
C).



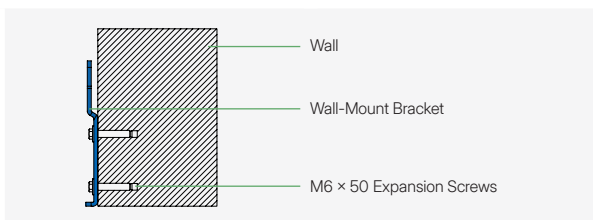
D).



E)-1.

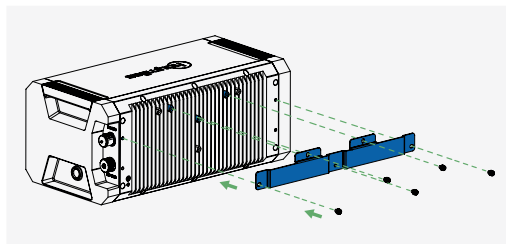


E)-2.

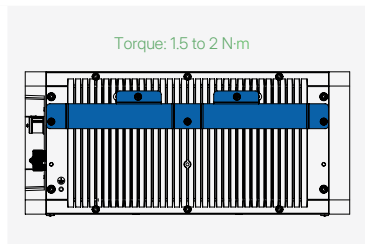


E)-3.

- F) Install the other mounting bracket to the HiBattery AC and secure them using M5 $\times$ 10 screws. (Torque: 1.5 to 2 N·m)

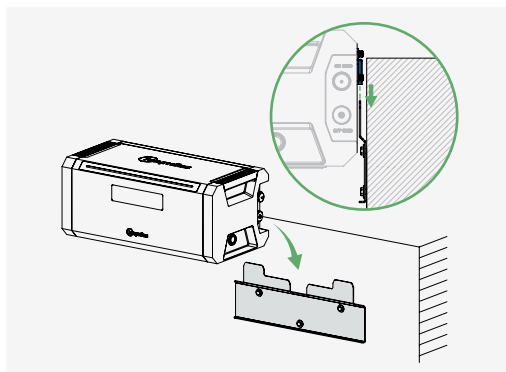


F)-1.

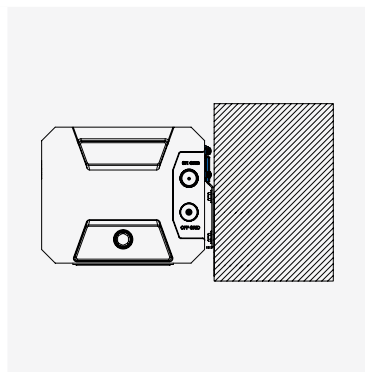


F)-2.

- G) Hang the HiBattery AC to the wall-mount bracket.



G)-1.



G)-2.

3.2 Electrical Connection



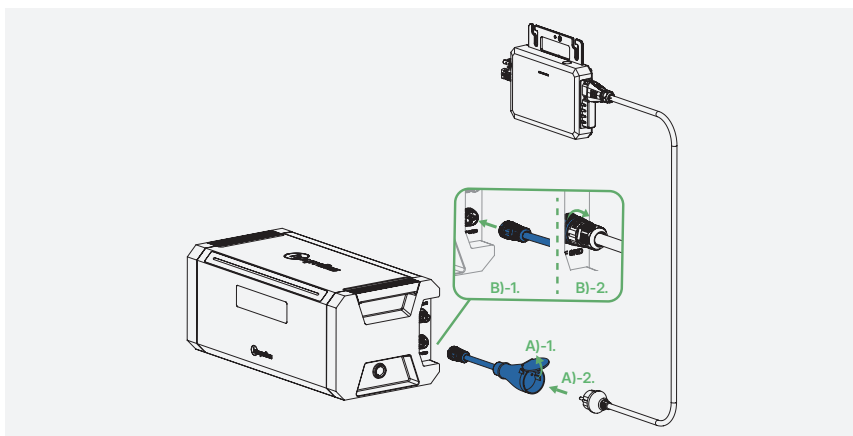
Before proceeding with the installation, make sure the microinverter system is disconnected from the power supply, the solar panels are shaded or isolated, and the HiBattery AC is turned off.

Step 1 Connecting the Microinverter System to the HiBattery AC

- A) Open the cover of one end of MS Off-Grid Cable, and insert the AC Cable of microinverter into the end. Listen for a click to ensure proper engagement.
- B) Align and insert the other end of MS Off-Grid Cable into the AC Off-Grid cable entry of the HiBattery AC. Then turn the lock ring clockwise.

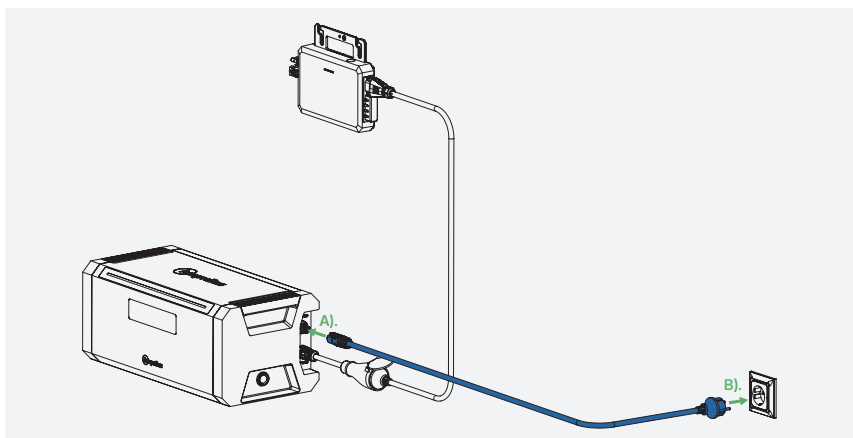


The Off-Grid cable entry features a foolproof design. If insertion is not possible, rotate the connector to adjust the alignment position and try again.



Step 2 Connecting the HiBattery AC to the Grid

- A) Insert one end of the MS Plug-and-Play Cable into the AC On-Grid cable entry of the HiBattery AC. Listen for a click to ensure proper engagement.
- B) Plug the other end of the MS Plug-and-Play Cable into the socket.



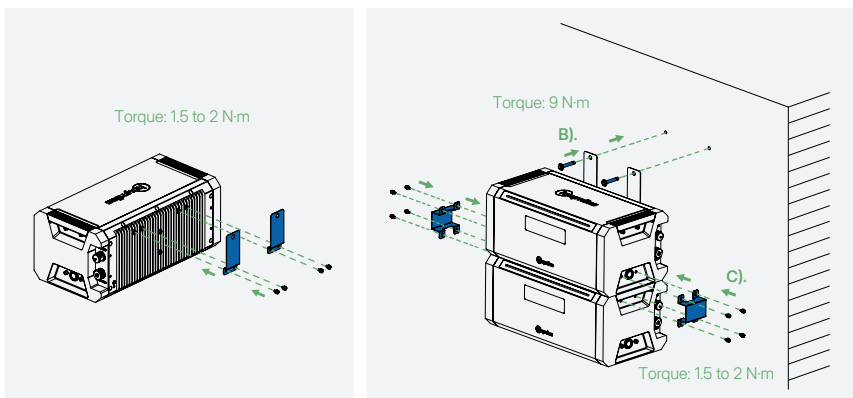
3.3 Connecting Two HiBattery ACs in One System



- The parallel connection cable and mounting kit must be purchased separately. You can contact the distributor or email our sales team at sales@hoyomiles.com to order.
- Up to four HiBattery ACs can be stacked.

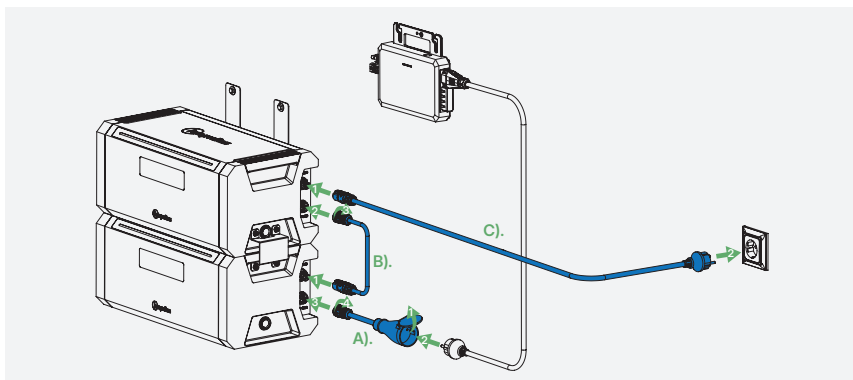
Step 1 Stack HiBattery ACs

- Install the wall bracket to the top HiBattery AC, and secure with M5 × 10 screws. (Torque: 1.5 to 2 N·m)
- Stack two HiBattery ACs together. Use a level to ensure the two devices are level and aligned vertically, and secure the wall bracket to the wall with M6 × 50 expansion screws. (Torque: 9 N·m)
- Secure the two stacked HiBattery ACs together using two stacking brackets, and secure the stacking brackets with M5 × 10 screws. (Torque: 1.5 to 2 N·m)



Step 2 Wire HiBattery ACs

- Open the cover of one end of MS Off-Grid Cable, and insert the AC Cable of microinverter into the end. Align and insert the other end of MS Off-Grid Cable into the AC Off-Grid cable entry of the bottom HiBattery AC, and turn the lock ring clockwise.
- Use parallel connection cable to connect the On-Grid cable entry of the bottom HiBattery AC and the Off-Grid cable entry of the top HiBattery AC, and turn the lock ring clockwise on the off-grid end.
- Insert one end of the MS Plug-and-Play Cable into the AC On-Grid cable entry of the top HiBattery AC. Plug the other end of the MS Plug-and-Play Cable into the socket.



4. Using the HiBattery AC



The screenshots provided here are for reference only. The actual screens may vary.

4.1 Downloading the App

There are two ways to download the S-Miles Home App:

- Scan the QR code on the right side.
- Search for "S-Miles Home" on the App Store (iOS) or Play Store (Android).

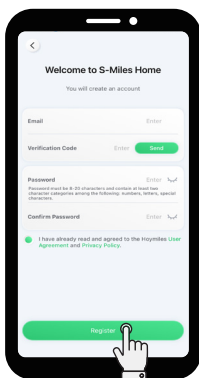


4.2 Creating an Account

- Open the app and tap **Register**.
- Enter your information and select the required checkbox. Then tap **Register** to complete registration.



A).



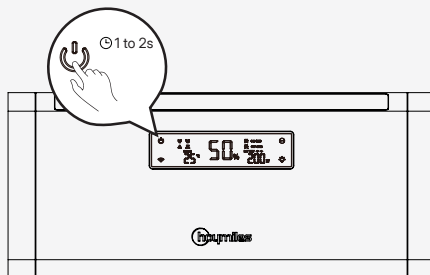
B).

4.3 Powering on the HiBattery AC



If the HiBattery AC is not connected to the grid, touch and hold the power button  for 8 seconds.

Touch and hold the Power Button  for 1 to 2 seconds, the center LED lights up toward both sides, and the screen lights up.

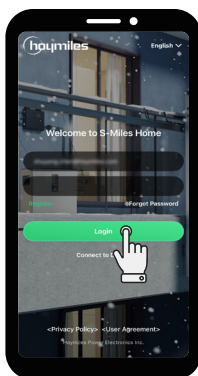


4.4 Connecting the HiBattery AC to Wi-Fi

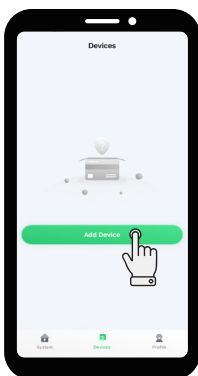


Make sure the Bluetooth is turned on, and the Wi-Fi network signal is stable. Do not place the HiBattery AC too far away from the router.

- A) Launch and log in to the app using your credentials.
- B) Tap **Devices** > **Add Device**.
- C) Tap the HiBattery AC to be added, and follow the prompts to pair your phone to the HiBattery AC.
- D) Select or enter your home Wi-Fi name and enter the password. Then tap **Next** to connect the HiBattery AC to Wi-Fi. When the connection is succeeded, tap **Next**.
- E) Fill in the required information, and tap **Confirm** to create a home energy system.
- F) If you only need to add one HiBattery AC, tap **Finish**.



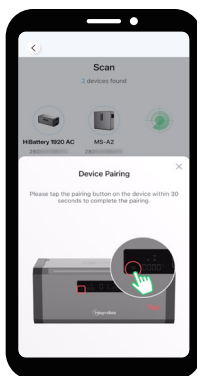
A).



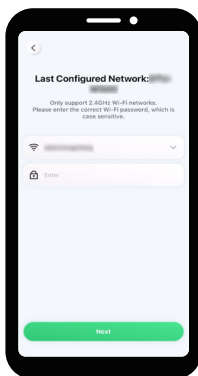
B).



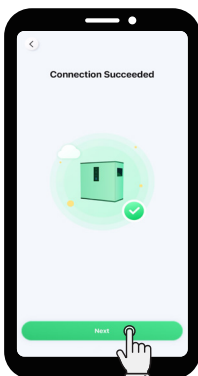
C)-1.



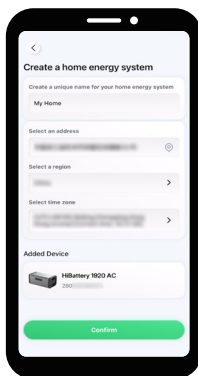
C)-2.



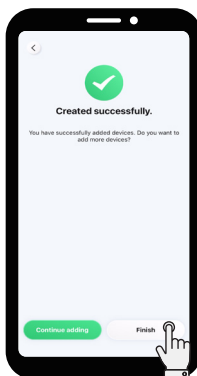
D)-1.



D)-2.



E).



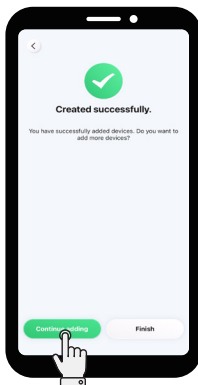
F).

4.5 Adding Two HiBattery ACs in One System



The two HiBattery ACs should be configured to the same Wi-Fi network.

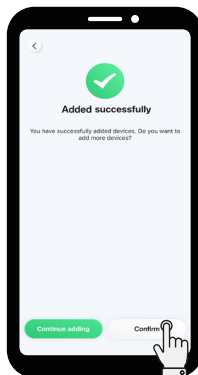
- If you need to add two HiBattery ACs in one system, tap **Continue adding** after system creation.
- Repeat steps C to D in [4.4](#) to connect the other HiBattery AC.
- Tap **Start** to establish communication between HiBattery ACs.
- Tap **Confirm** to finish adding.



A).



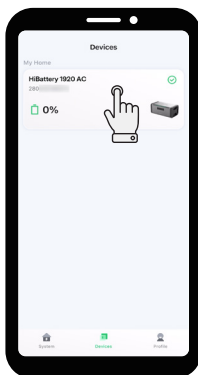
C).



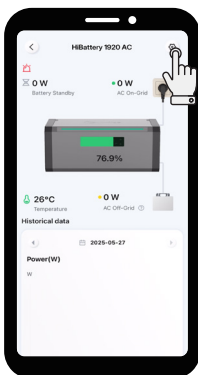
D).

4.6 Upgrading the Firmware

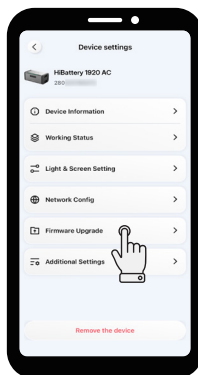
- Tap **Devices** > **HiBattery 1920 AC** > **Device settings** .
- Tap **Firmware Upgrade** to check the version, and upgrade the firmware if needed.



A)-1.



A)-2.



B).

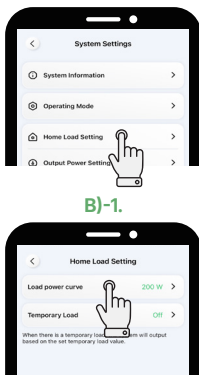
4.7 Setting Up the Load Power Curve and Output Power

Setting the Load Power Curve

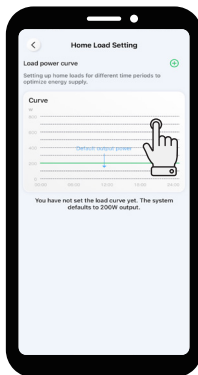
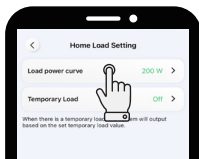
- Tap **System** > **System Settings** .
- Tap **Home Load Setting** > **Load power curve**.
- Tap the curve to be set.
- Choose the day for which you want to set up the load power curve. Divide the day into different periods and enter the load power value for each period. Then Tap **Confirm** to save your setting.



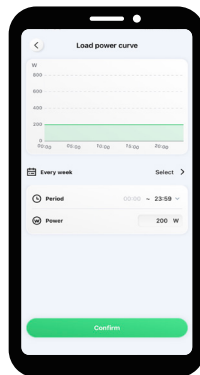
A).



B)-1.



C).



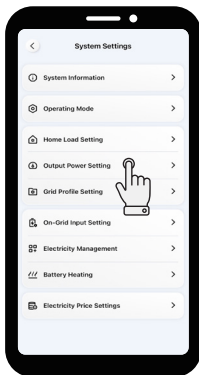
D).

Setting the Output Power

- Tap **System** > **System Settings** .
- Tap **Output Power Setting**.
- Drag the slider to set the desired output power, and tap **Confirm** to save your setting.



A).



B).



C).



Load power curve setting provides more detailed control over power delivery throughout the day. You can configure up to seven load power curves but only one curve can be applied per day. We recommend configuring load power curves to maximize the use of solar energy generated by PV modules.

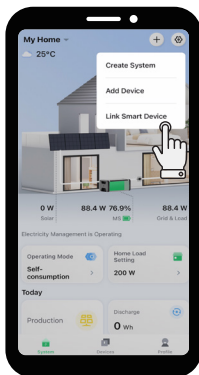
4.8 Adding Smart Devices



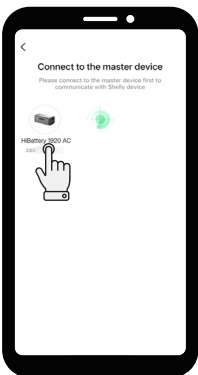
NOTICE

- The Shelly device should be configured to the same Wi-Fi network as the HiBattery AC.
- A system can add up to five Shelly devices, and only one smart meter can be added, which is added by default on the grid side.

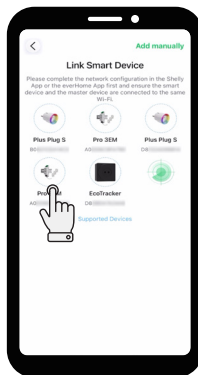
- Tap **System** > **+** > **Link Smart Device**.
- Tap the HiBattery AC.
- Tap the smart device.
- When all smart devices are added, tap **Finish**.



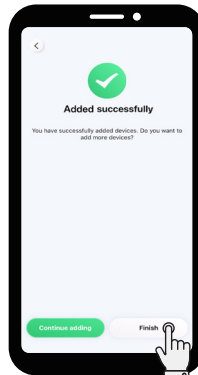
A).



B).



C).



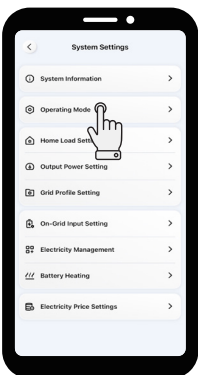
D).

4.9 Setting the TOU Mode

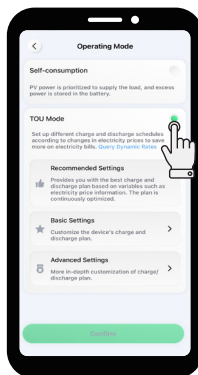
- Tap **System** > **System Settings** .
- Tap **Operating Mode**.
- Select the TOU mode.



A).



B).



C).

D) Select one setting mode.

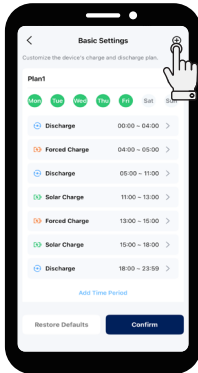
- **Recommended Settings**

It can provide you with the best charge and discharge plan based on different variables and you don't need to set anything.

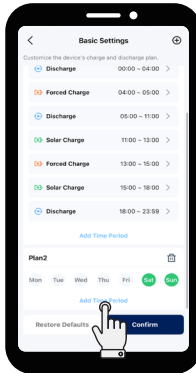
- **Basic Settings**

a) Tap  to add a new plan, or edit the default plan.

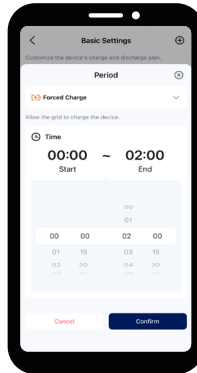
b) Tap **Add Time Period** to set charge and discharge periods, and tap **Confirm** to save your settings.



a).



b)-1.



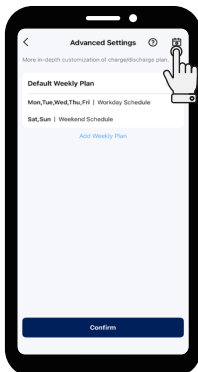
b)-2.

- **Advanced Settings**

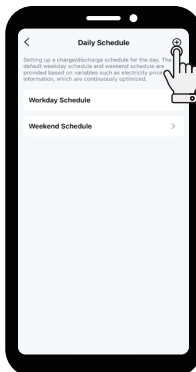
a) Tap Daily Schedule .

b) Tap  to add a new schedule.

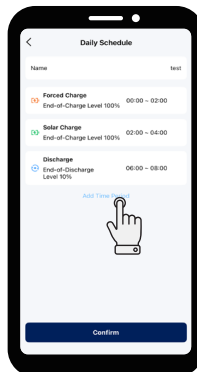
c) Tap **Add Time Period** to set charge and discharge periods, and tap **Confirm** to save your settings.



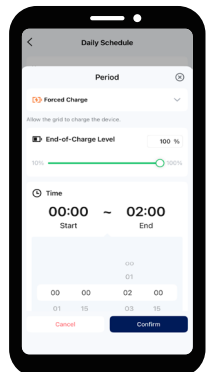
a).



b).

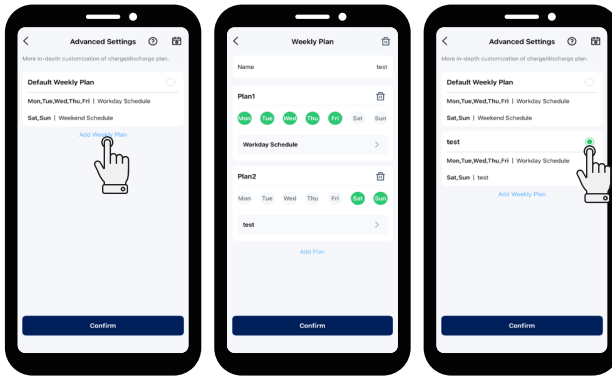


c)-1.



c)-2.

- d) Go back to **Advanced Settings**, and tap **Add Weekly Plan** to select the schedule. Then tap **Confirm** to save your settings.
- e) Select one plan and tap **Confirm**.



d)-1.

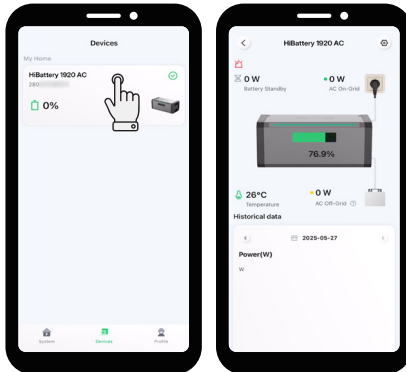
d)-2.

e

4.10 Checking the HiBattery AC and Energy System Performance

- Checking the HiBattery AC Performance

Tap **Devices** > **HiBattery 1920 AC**.



- Checking the Energy System Performance

Tap **System**.



5. Storage and Maintenance

The following requirements should be met if the HiBattery AC is not put into use directly:

- Keep the HiBattery AC on a flat surface when storing it.
- Clean the HiBattery AC and its components only with a cloth or a soft brush moistened with clean water.
- For the best preservation of battery life, charge it regularly. Even if you're not using the battery, periodically charge it every few months.
- Check the battery enclosure and connectors for damage or corrosion regularly to ensure they work properly.
- If you're storing the battery for a long time, charge the HiBattery AC to 40%-50% at room temperature before storing it.

6. Technical Specifications

Model	HB-1920-AC-SV
AC Output (On-Grid Port)	
Nominal output apparent power (VA)	800
Maximum output apparent power (VA)	800 ^[1]
Grid type	Single-phase
Nominal AC voltage/range (V)	230/180 to 270 ^[2]
Nominal AC frequency/range (Hz)	50/45 to 55 ^[2]
Nominal output current (A)	3.48
Maximum output current (A)	3.48 ^[3]
Adjustable power factor (@nominal load)	> 0.99 0.8 leading ... 0.8 lagging
AC Input and Output (Off-Grid Port)	
Maximum output apparent power (VA)	800
Peak output apparent power (VA)	1200, 10s
Grid type	Single-phase
Connector type	Schuko socket
Nominal AC voltage (V)	230
Nominal AC frequency (Hz)	50
Maximum output current (A)	3.48
Total harmonic distortion (@linear load)	< 3%
Maximum input power (VA)	1800
Maximum input current (A)	7.83
Battery	
Capacity (kWh)	1.92
Cell type	LiFePO4
Life cycles	≥ 6000
Charging temperature (°C)	-20 to 55
Discharging temperature (°C)	-20 to 55
Nominal apparent power (VA)	1000 (charge and discharge)
Maximum apparent power (VA)	1000 (charge and discharge)
General	
Weight (kg)	24
Dimensions (L × W × H [mm])	460 × 240 × 203
Protection degree	IP66
Mounting	Wall-mounted or floor-mounted (sold separately)
Cooling	Natural convection – No fans
Wireless type	Bluetooth, 2.4 GHz Wi-Fi
Interface	LED & App
Warranty	10 years
Standards	
Grid compliance	VDE-AR-N 4105: 2018, TOR Erzeuger Type A, EN 50549-1: 2019, EN 50549-10: 2022
Safety	IEC 62477-1, IEC 62619, IEC 63056, UN 38.3
EMC	EN 61000-6-1/-2/-3/-4, EN 61000-3-2/-3

[1] It can be customized by using the S-Miles Home App and can be adjusted up to 2000 VA.

[2] The nominal voltage/frequency range may vary based on local requirements.

[3] It is the ratio of maximum output apparent power to nominal AC voltage.

7. Safety Information

Please read all instructions carefully before using this product.

DANGER

- PV modules produce DC electricity when exposed to light and can cause an electrical shock. Be aware of this.
- Do not exceed the HiBattery AC's output rating to prevent fire or injury. Overloading outputs above the rating may lead to fire or injury.
- Do not use the HiBattery AC or any attachments if they are damaged or modified, as this may result in unpredictable behavior and pose a risk of fire, explosion, or injury.
- Do not operate the HiBattery AC with a damaged cord, plug, or output cable.
- Keep the HiBattery AC away from fire or high temperatures.
- Do not throw batteries into the fire. Batteries may explode in fire.

WARNING

- Only use attachments recommended or sold by Hoymiles to prevent the risk of fire, electric shock, or injury.
- Do not attempt to disassemble the HiBattery AC. Seek help from a qualified service person for servicing or repairs to prevent the risk of fire or electric shock.
- Before performing any service, disconnect the power supply to reduce the risk of electric shock.
- Do not open or damage batteries, as released electrolytes may be toxic and harmful to skin and eyes.
- Do not use this product around strong static electricity or magnetic fields.
- Disconnect the entire system from the power source during installation.
- Do not put your fingers or hands into the HiBattery AC.
- Avoid misuse, dropping, or applying excessive force to prevent damage to the HiBattery AC.
- Shield the HiBattery AC from direct sunlight to prevent rapid temperature increase.
- Keep the HiBattery AC away from flammable, explosive gases, or smoke.
- The HiBattery AC has an IP65 protection level and should not be submerged in liquids. If the HiBattery AC accidentally falls into water, place it in a safe and open area to dry completely. Do not reuse the dried product.

CAUTION

- The HiBattery AC is a Class 1 product and is required to be grounded for safety. But, since the MS plug-and-play cable already has a protective earth wire, you can simply use this cable for grounding without any additional steps.
- It is recommended to use a residual current-operated protective device (RCD) or a residual current monitor (RCM) of type B on the power supply side of this product.
- Before use, check the HiBattery AC for any signs of damage, such as cracks, leaks, heat, or cable damage. If any abnormalities are detected, discontinue use immediately and contact our Technical Support Team.
- Battery servicing should be performed or supervised by a competent electrician who is knowledgeable about batteries and safety precautions.
- When replacing batteries, use the same type and number as the original. Follow these precautions:
 - Remove watches, rings, and other metal objects.
 - Use tools with insulated handles.
 - Wear rubber gloves and boots.
 - Keep tools and metal parts away from the batteries.
 - Disconnect the charging source before connecting or disconnecting battery terminals.
- Make sure the battery isn't accidentally grounded. If it is, disconnect the ground source. A grounded battery can cause electrical shock. To reduce this risk, remove any grounds during installation and maintenance. This rule applies to both equipment and remote battery supplies that don't have a grounded supply circuit.
- Ensure battery terminals and connectors are accessible for maintenance with the proper tools.
- Place batteries with liquid electrolytes so that the cell caps are accessible for testing and adjusting electrolyte levels.
- To minimize the risk of injury, closely supervise the HiBattery AC when in use near children. Keep it out of reach of children and pets.
- Do not stand on the HiBattery AC.
- The HiBattery AC must not be disposed of with other waste, and instead must be taken to the waste collection points for treatment, collection, recycling, and disposal.

① NOTE

- The

CE Declaration of Conformity



Hoymiles micro storage (Model: HB-1920-AC-SV) is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures. OPERATING FREQUENCY (the maximum transmitted power): 2.4 to 2.48 GHz, ERP $\leq$ 20 dBm.

EU Declaration of Conformity

Hoymiles micro storage (Model: HB-1920-AC-SV) is in compliance with the essential requirements and other relevant provisions of directives 2014/53/EU, 2011/65/EU, (EU) 2015/863 and (EU) 2023/1542.

The original EU Declaration of Conformity may be found at https://www.hoymiles.com/resources/download/?_sft_document_type=declaration.



Hoymiles Power Electronics Inc.



Headquarters

Floor 6, Building 5, Housheng 99 Road,
Gongshu District, Hangzhou 310015 P. R. China

Europe Sales and Support Center

High Tech Campus 9, Unit BK3.28, 5656AE
Eindhoven, the Netherlands



+31 852736388 (English, German, French, Polish,
and Dutch Support)



hoymiles.com



Germany

service.de@hoymiles.com

Spain

service.es@hoymiles.com

Italy

service.it@hoymiles.com

France

service.fr@hoymiles.com

Netherlands

service.nl@hoymiles.com

Rest of the EU

service.eg@hoymiles.com