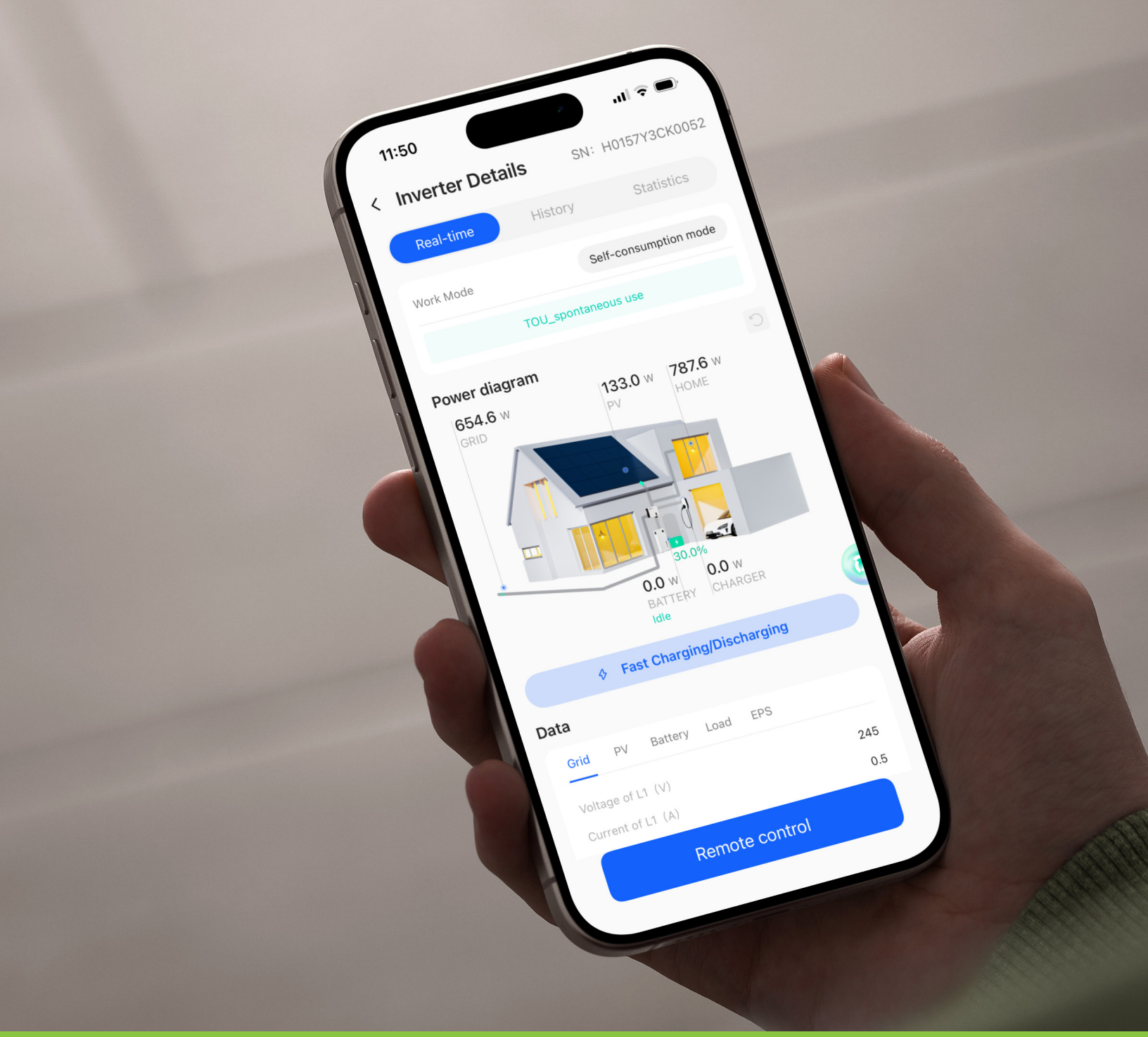


HANCHU ESS Battery Storage System - **User Guide**

Setting Up Weather Optimization on the inverter – Mobile App

Version 1.0

Infinity Innovations | HANCHU ESS

Table of Contents

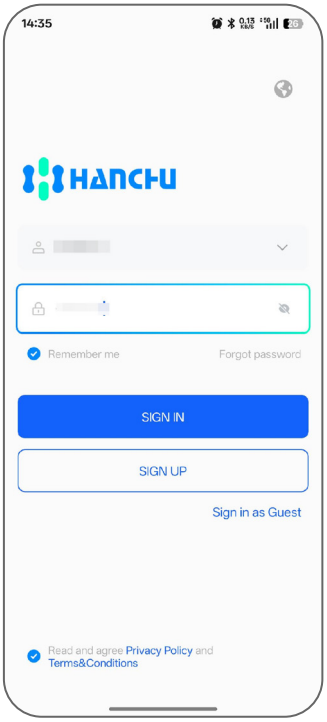
1. Introduction

This guide provides step-by-step instructions for configuring Weather Optimization on the Hanchu ESS Mobile App. This smart feature automatically adjusts your battery's charging behavior based on the local weather forecast. For example, on a sunny day, the system will charge less from the grid to leave "empty space" in the battery for free solar energy. On a rainy day, it will charge more from the grid to ensure you have enough power.

2. Step-by-Step Setup Instructions

2.1 Step 1: Log In to the App

1. Open the Hanchu ESS App on your smartphone.
2. Enter your username and password.
3. Tap the SIGN IN button.

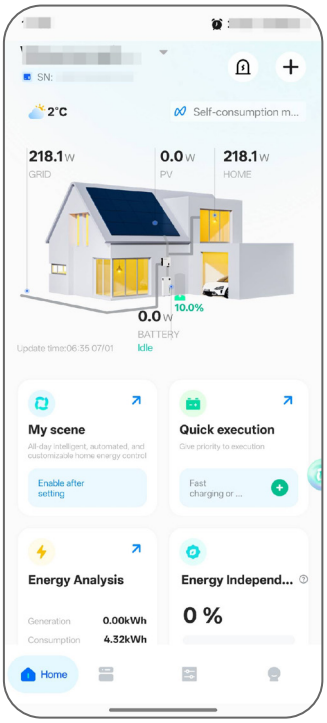


Hanchu ESS App Login Page:

Enter your account credentials and click Sign In to access the portal.

2.2 Step 2: Navigate to Device Settings

1. From the Home dashboard, tap the Device tab at the bottom.
2. Select your Inverter from the device list.
3. You will see the Inverter Details page.



Devices List Page:

In the device list, tap on your Inverter (usually indicated by the serial number starting with ‘H’ and the Inverter icon).

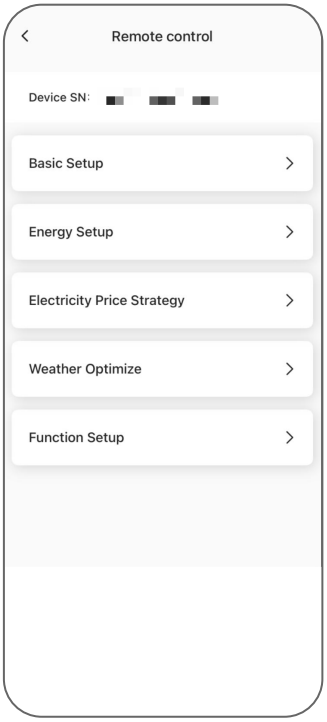
2. Step-by-Step Setup Instructions

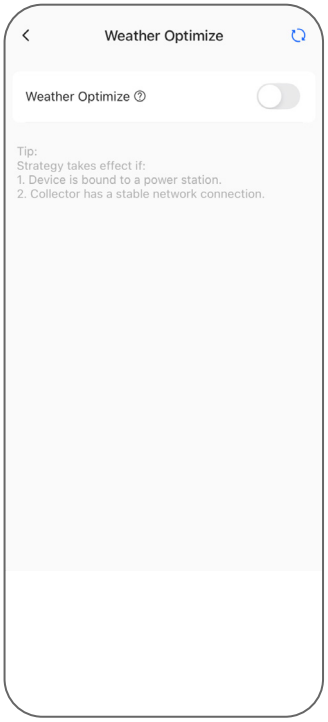
2.3 Step 3: Access Remote Control

1. On the Inverter Details page, tap the blue Remote control button at the bottom of the screen.
2. In the Remote control menu, locate and tap Weather Optimize.

Remote Settings Tab:

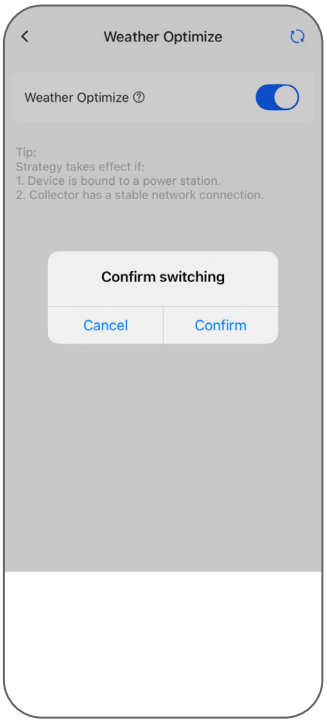
The Remote Settings page contains all the configuration options for your inverter, including Energy Setup, Electricity Price Strategy, and Weather Optimize.

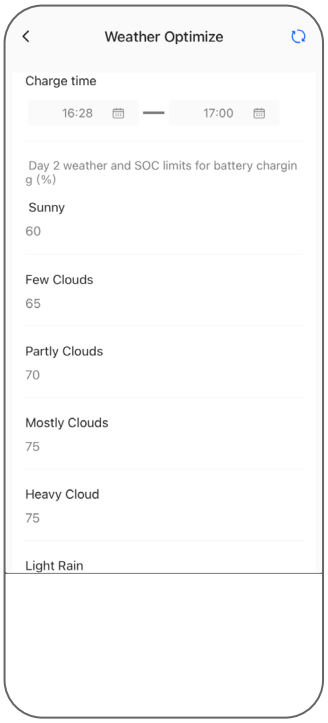




2.4 Step 4: Enable Weather Optimization

1. You will see the Weather Optimize toggle switch.
2. Tap the switch to turn it ON.
3. A pop-up titled “Confirm switching” will appear. Tap Confirm to activate the feature.





Work Mode Setup Section:

The Weather Optimize section shows whether you currently have this function turned on. Click “Get Data” to retrieve your current settings from the inverter.

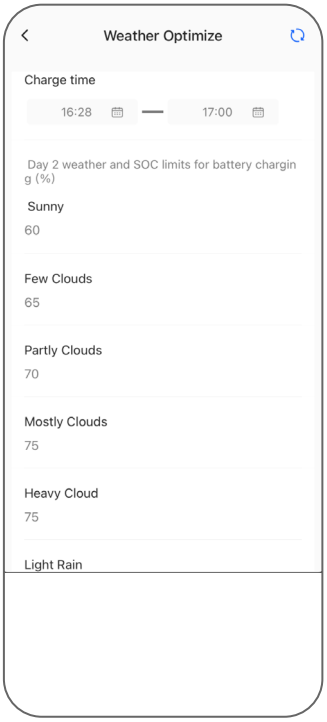
2. Step-by-Step Setup Instructions

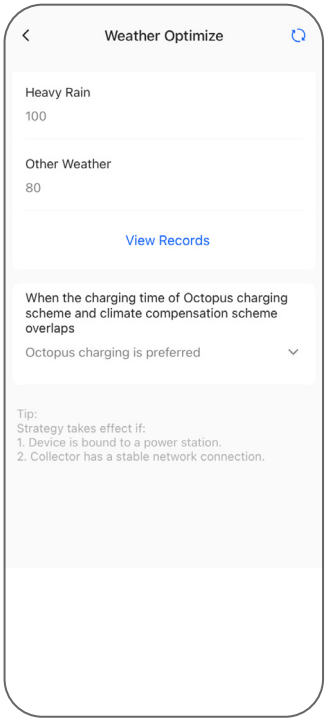
2.5 Step 5: Configure Charge Time

This defines the time window during which the system will prepare the battery based on the weather (usually your cheap overnight tariff period).

1. Locate the Charge time section.
2. Tap the calendar icons to set the Start and End times.
3. Example: Set this to your off-peak hours (e.g., 00:30 to 05:30).

Weather Optimize Setting:





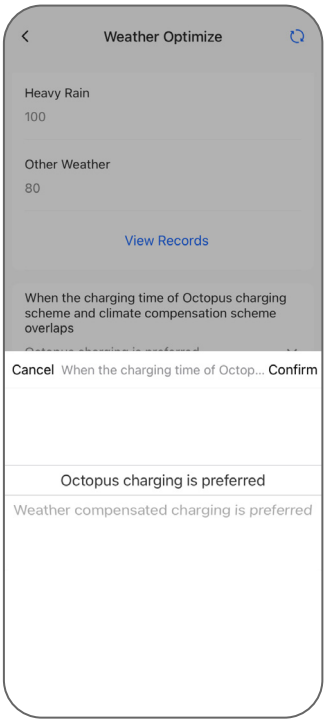
2.6 Step 6: Set Weather SOC Limits

This is where you tell the battery how much to charge from the grid based on tomorrow's forecast.

1. Review the list of weather conditions (Sunny, Few Clouds, Heavy Rain, etc.).
2. Tap the number below each weather type to adjust the Target SOC (%).

Sunny / Few Clouds: Set a lower percentage (e.g., 60%). This prevents the battery from filling up on grid power, leaving room for solar generation the next day.

Heavy Rain / Overcast: Set a higher percentage (e.g., 100%). Since solar generation will be low, you need a full battery from the grid.



Other Settings Review:

Field	Value
Start time	00:01
End time	04:30

2. Step-by-Step Setup Instructions

2.7 Step 7: Handle Conflict Settings (Optional)

If you also use Octopus Intelligent tariffs or similar schemes, you may need to set a priority.

1. Scroll to the bottom to find the conflict setting: "When the charging time of Octopus... overlaps".
2. Tap the dropdown to select your preference:

Octopus charging is preferred: The system prioritizes the Octopus schedule over weather optimization.

Weather compensated charging is preferred: The system prioritizes the weather forecast limits.

3. Tap Confirm to save.

Setting	Description
Charging power maximum (W)	The maximum power at which your battery will charge (default: 5000W)
Maximum Charge SOC (%)	The maximum state of charge your battery will reach (default: 100%)
Minimum Discharge SOC (%)	The minimum state of charge before your battery stops discharging (default: 5%)

Once all settings are correct, look for the **Save** or **Confirm** button (usually at the top right or bottom of the screen) to send these settings to the inverter.

3. Understanding Your Settings

What Happens After Setup

Once Weather Optimization is turned on and charging time and battery charging stop SOC are configured. The Hanchu system will charge the battery for a specified period of time depending on the weather. Charging stops when it reaches the set SOC. The system communicates with your inverter via the cloud, ensuring your settings are always up to date. You can monitor the charging process in real-time on the home page of the portal.

Monitoring Your Charging

Visit the Home page regularly to monitor your battery charging and discharging. The real-time data shows you how much energy is being stored, used, and exported. This helps you understand your energy usage patterns and optimize your settings further.

4. Tips for Maximum Savings

To get the most out of your Hanchu battery system, consider the following tips:

- Align your charging times with your electricity provider's cheapest tariff periods.
- Check your tariff schedule regularly, as rates may change seasonally.
- Use the "Maximum Charge SOC" setting to prevent overcharging during low-demand periods.
- Monitor your energy consumption patterns to identify opportunities for further savings.
- Consider setting up multiple charging periods if your tariff has different cheap rates throughout the day.
- Ensure your battery has sufficient capacity to store energy during cheap periods for use during expensive periods.
- Enable weekly forced charges if relying primarily on solar power to maintain battery calibration and extend battery life.

5. Troubleshooting

Settings Not Saving

If your settings do not save after clicking “Set”, check the following: (1) Ensure your internet connection is stable, (2) Verify that your inverter is online, (3) Try clicking “Get Data” again before applying your settings.

Charging Not Starting at Scheduled Time

If your battery does not start charging at the scheduled time, verify that: (1) Turn on weather optimization, (2) Setting charge time, (3) Setting charge stop SOC, (4) Your battery is not already fully charged (check the SOC percentage). (5)If the inverter is set to “User Defined” mode, the charging time and the weather optimization charging time cannot be the same.

Portal Not Accessible

If you cannot access the Hanchu ESS portal, ensure that: (1) Your internet connection is working, (2) You are using the correct login credentials, (3) Your browser is up to date and JavaScript is enabled.

Need Further Help?

If you encounter any issues not covered in this guide, please contact Hanchu support or your system installer. They can provide additional assistance and ensure your system is operating optimally.