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

## Setting Up Weather Optimisation on the inverter – Web-Portal

Infinity Innovations | HANCHU ESS

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# 1. Introduction

This guide will walk you through the process of setting up Weather Optimisation on your Hanchu ESS portal. By configuring charging during cheap tariff periods, you can maximize your savings and optimise your battery usage. The process involves accessing the portal, navigating to your inverter settings, and configuring your preferred charging times.

## 2. Step-by-Step Setup Instructions

### 2.1 Step 1: Log In to the Hanchu ESS Portal

1. Open your web browser and navigate to: https://iess3.hanchuess.com/login

2. Enter your username and password.

3. Click the Login button.

4. You will be taken to the Home page showing your system overview.

**Hanchu ESS Portal Login Page:**

Enter your account credentials and click Sign In to access the portal.
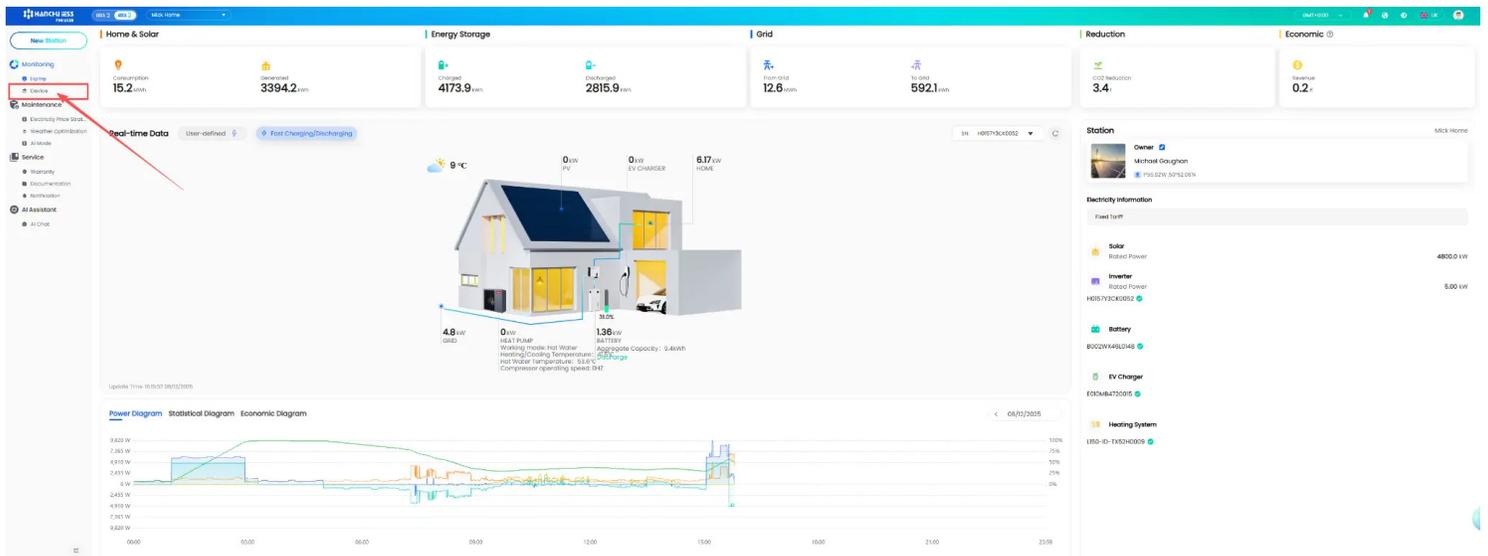
## 2. Step-by-Step Setup Instructions

**2.2 Step 2: Navigate to Devices**

1. On the left-hand sidebar menu, click "Device".

2. You will see a list of your system components:

- Inverter (top device) - Controls the energy flow

- Battery - Stores your energy

- EV Charger (if applicable) - Charges your electric vehicle

- Heating System (if applicable) - Controls your heat pump

**Devices List Page:**

The Devices page shows all connected equipment in your system with their current status and real-time energy flow.

## 2. Step-by-Step Setup Instructions

**2.3 Step 3: Access Remote Settings**

1. Click on the Inverter image (the top device in the list).

2. At the top of the page, you will see several tabs.

3. Click on the "Remote Settings" tab.

4. The page will display various configuration options.

**Remote Settings Tab:**

The Remote Settings page contains all the configuration options for your inverter, including Energy Setup, Electricity Price Strategy, and Weather Optimise.
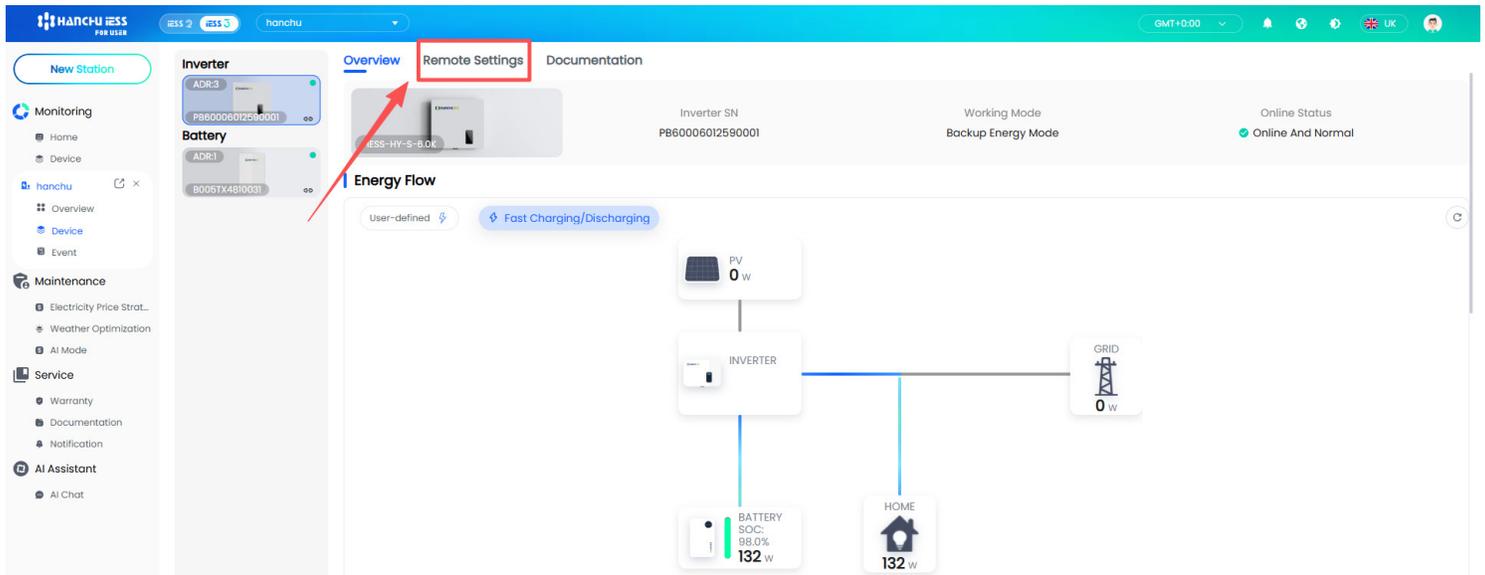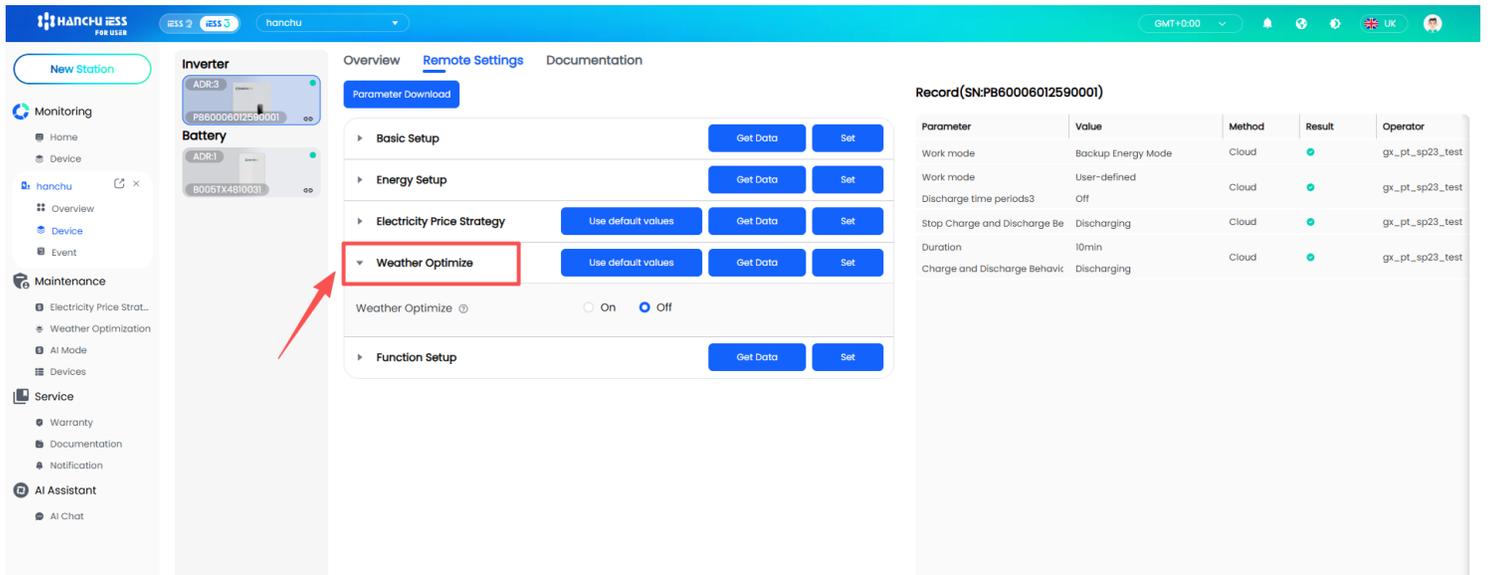
## 2. Step-by-Step Setup Instructions

**2.4 Step 4: Access Weather Optimisation**

1. Scroll down to find the "Weather Optimise" section.

2. Click the "Get Data" button to retrieve your current settings from the inverter.

3. Wait for the system to load your current configuration.

4. You will now see the Weather Optimise form with various fields.

**Weather Optimise Section:**

The Weather Optimise section shows whether you currently have this function turned on. Click "GetData" to retrieve your current settings from the inverter.
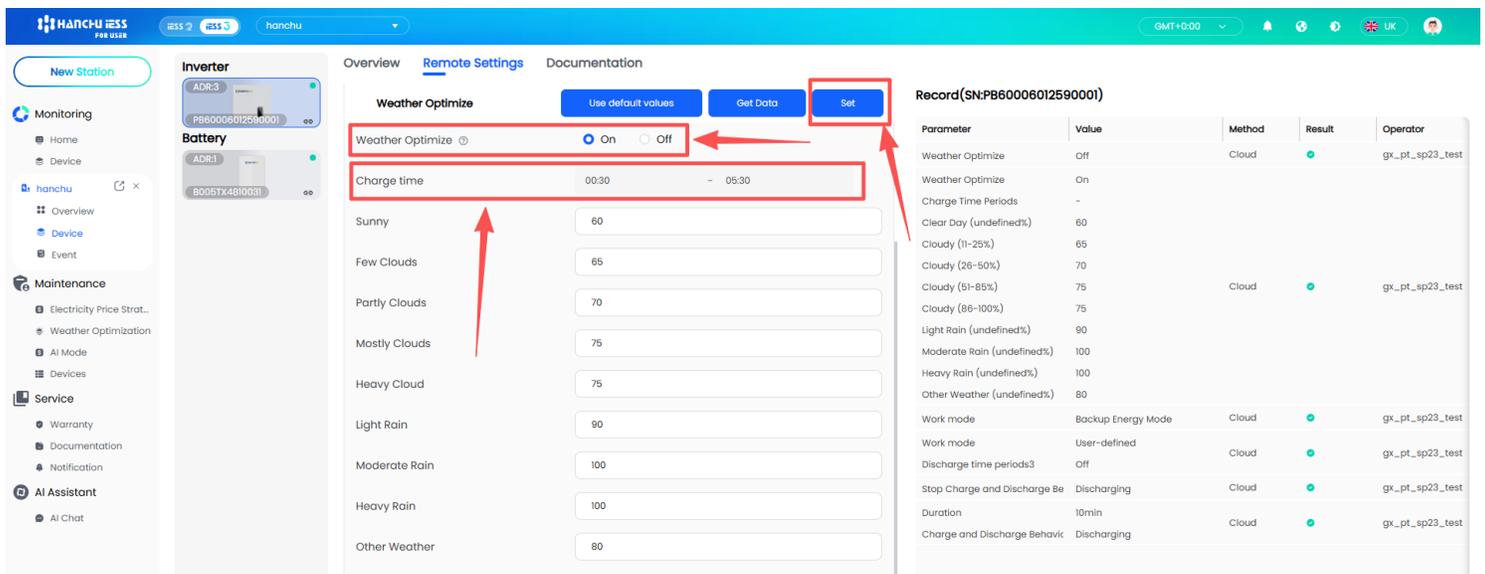
# 2. Step-by-Step Setup Instructions

**2.5 Step 5: Set Weather Optimisation**

1. Click the "On"button in the "Weather Optimise" section to enable this function.

2. Setting the "Charge time" confirms the start and end of battery charging.

3. Click the "Set" button to enable the function.

4. This mode automatically charges the battery based on the battery charge stop SOC values you set for different weather.

**Weather Optimise Setting:**

The weather optimisation function allows for more effective control of electricity costs and protection of battery performance.



**Example: Setting Times for Expensive Tariffs**

If your electricity provider offers expensive rates from 5:00 PM to 7:00 PM, you would set:

| Field | Value |
|---|---|
| Start time | 17:00 |
| End time | 19:00 |

## 2.   Step-by-Step Setup Instructions

**2.6  Step 6: Review Other Settings (Optional)**

**The following settings are typically pre-configured but you can adjust them if needed:**

Other Settings Review:

Customer can adjust the battery stop SOC according to their needs. If Octopus is enabled, Octopus priority charging can also be set according to needs.



**Example: Setting Times for Expensive Tariffs**

If your electricity provider offers expensive rates from 5:00 PM to 7:00 PM, you would set:

| Field | Value |
|---|---|
| Start time | 17:00 |
| End time | 19:00 |

# 3. Understanding Your Settings

### 3.1 What Happens After Setup

Once Weather Optimisation 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.

### 3.2 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 optimise 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

**5.1 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.

**5.2 Charging Not Starting at Scheduled Time**

If your battery does not start charging at the scheduled time, verify that: (1) Turn on weather optimisation, (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 optimisation charging time cannot be the same.

**5.3 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.

## 6.  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.