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

What are the Different Working Modes Available? – Web-Portal

Infinity Innovations | HANCHU ESS

Version 1.0

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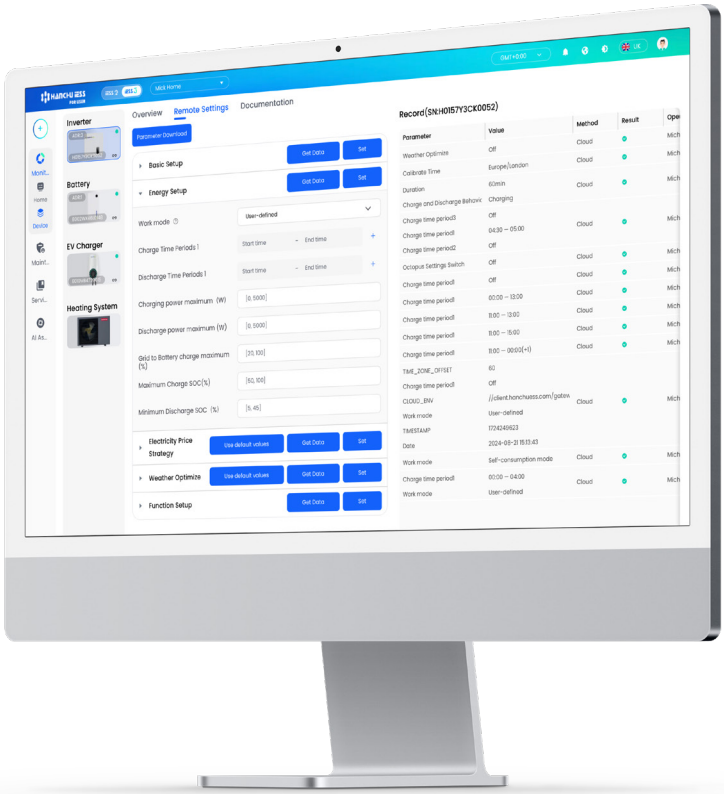
1. Introduction

1.1 Understanding Inverter Working Modes

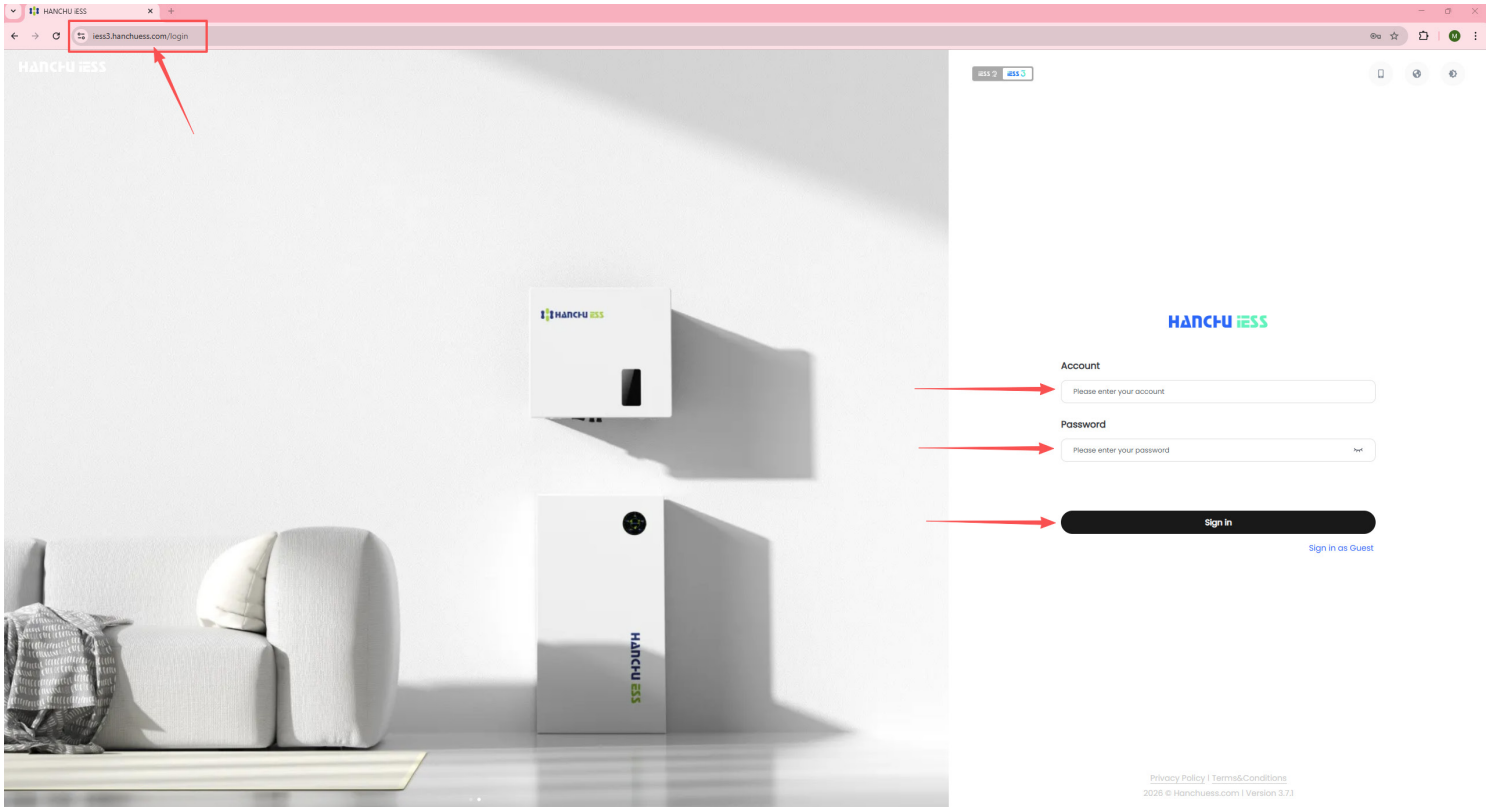
Your Hanchu ESS inverter is equipped with several Working Modes that allow you to control how your system manages energy. Each mode is designed for a specific purpose, whether it's maximizing your use of solar power, saving money on your electricity bills, or ensuring you have backup power during a grid outage. Understanding these modes will help you get the most out of your battery storage system. This guide provides a detailed overview of the different working modes available and explains how to select them through the Hanchu ESS web portal.



2. Step-by-Step Guide to Accessing Working Modes

2.1 Step 1: Log In to the Hanchu ESS Portal

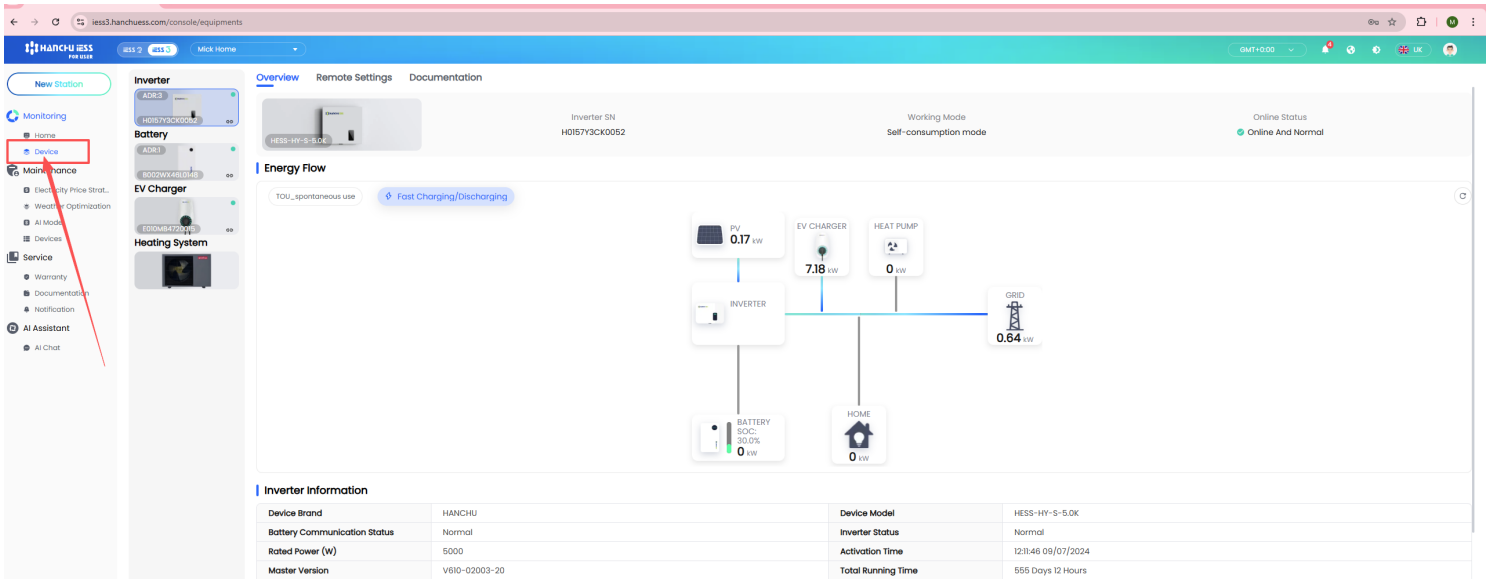
Begin by accessing the Hanchu ESS web portal. Open your web browser and navigate to the portal URL. You will be presented with the login screen. Enter your **Account** (username) and **Password**, then click the **Sign In** button.



2. Step-by-Step Guide to Accessing Working Modes

2.2 Step 2: Navigate to Devices

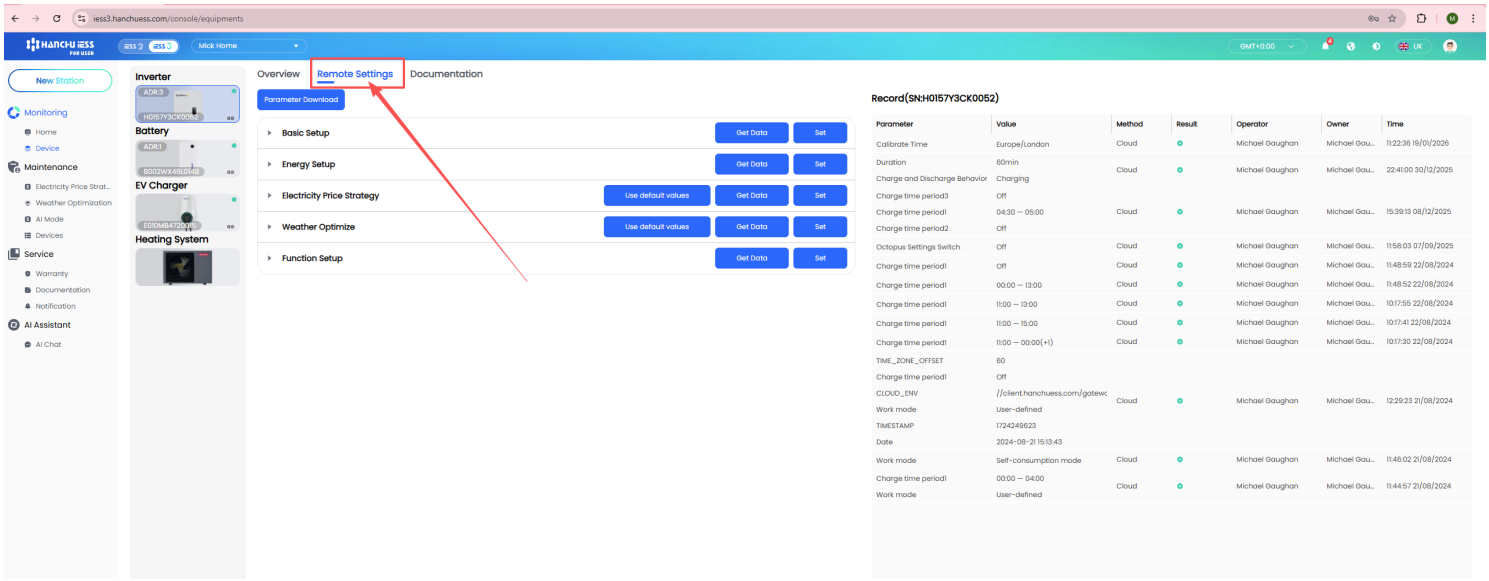
From the main dashboard, locate the **Device** option in the left-hand sidebar menu. Click on **Device** to view a list of all components in your Hanchu ESS system.



2. Step-by-Step Guide to Accessing Working Modes

2.3 Step 3: Select Your Inverter

The inverter is the default device selected at the top of the devices page. You can confirm it is selected by ensuring the inverter image is highlighted.



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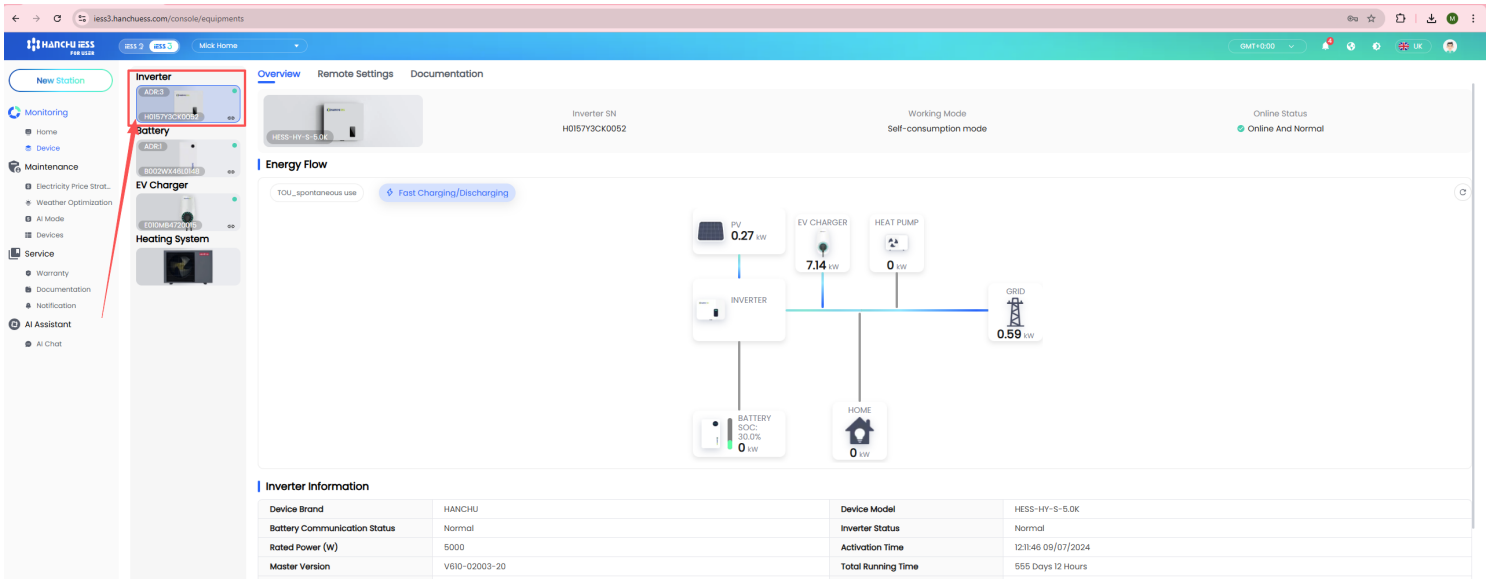
2.4 Step 4: Access Remote Settings

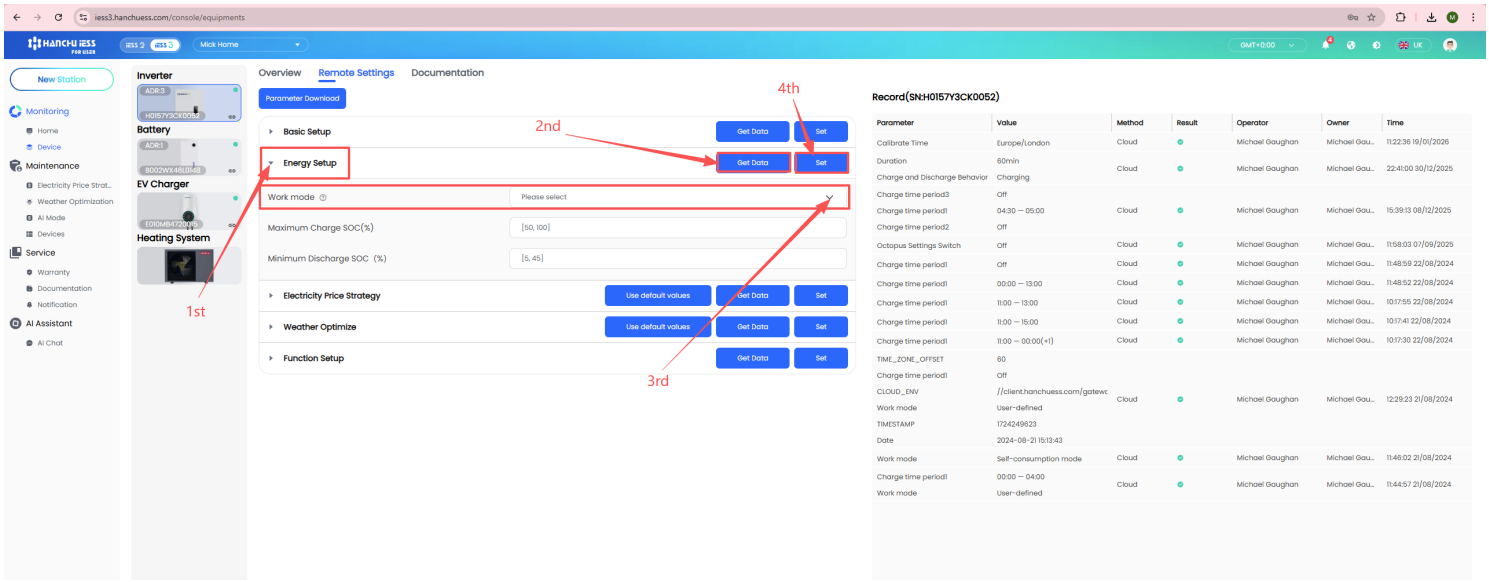
At the top of the inverter detail page, click on the **Remote Settings** tab. This will take you to the remote configuration interface for your inverter.



2. Step-by-Step Guide to Accessing Working Modes

2.5 Step 5: Locate the Energy Setup Section

On the Remote Settings page, scroll down to find the **Energy Setup** section. This is where the **Work mode** selection is located. Here you will find a dropdown menu labeled **Work mode**. Clicking this menu will reveal the different modes available for your system.



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. Detailed Descriptions of Working Modes

Below is a description of the common working modes available on the Hanchu ESS platform. The exact modes available to you may vary depending on your system's specific model and configuration.

Working Mode	Primary Goal	Best For	How It Works
Self-Consumptio n	Maximize use of your own solar energy.	Homes with solar panels looking to reduce reliance on the grid.	Prioritizes powering your home with solar energy. Excess solar power charges the battery. The battery is used when solar is not available.
Time-of-Use (TOU)	Reduce electricity costs.	Homes on a Time-of-Use electricity tariff with peak and off-peak rates.	Charges the battery from the grid during cheap off-peak hours. Discharges the battery to power your home during expensive peak hours.
Backup Power	Ensure power during a grid outage.	Homes in areas with unreliable grid power or that require uninterrupted power.	Keeps the battery charged to a high level. In the event of a grid failure, the system automatically switches to battery power.
Export Mode	Sell excess energy back to the grid.	Homes participating in feed-in tariff (FiT) or grid export programs.	Prioritizes exporting excess solar and battery power to the grid to maximize financial returns.
Battery Priority	Keep the battery fully charged.	Preparing for an expected power outage or ensuring maximum backup capacity.	Prioritizes charging the battery from all available sources (solar and grid) and minimizes battery discharge.
Smart / AI Mode	Automatic, hands-off optimization.	Users who want the system to manage itself for the best economic outcome.	Uses AI to analyze weather forecasts, your usage patterns, and electricity tariffs to automatically select the best working mode.

4. Important Notes

Availability: Not all working modes may be available on your system. This depends on your inverter model, battery type, and regional grid regulations.

Configuration: Some modes, like Time-of-Use, require additional setup (e.g., defining peak and off-peak hours) to function correctly.

Applying Changes: After selecting a new work mode, you must click the **Get Data** button first, then select your mode, and finally click the **Set** button to apply the change to your inverter.

5. Need Help?

If you are unsure which working mode is best for you or need help configuring a specific mode, please contact your installation company for technical support.