

APP instruction

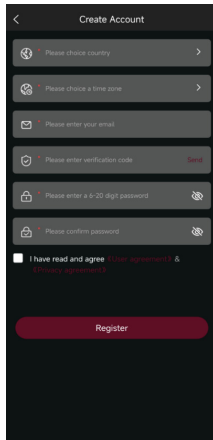
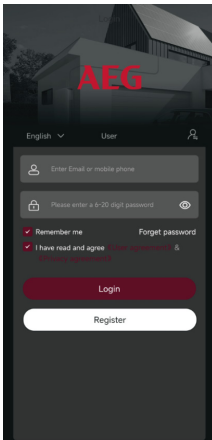
1. Download the App-Register and Log in:

- Android download: Google Play
- IOS download: APP Store
- QR code download:



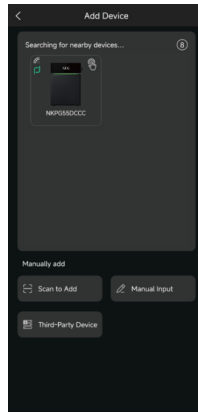
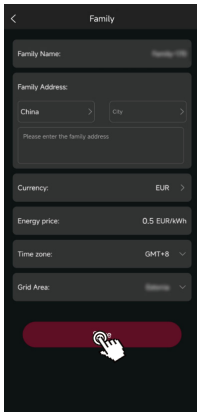
2. Register and log in

Once you've installed the app, sign up using your email. We'll send a verification code to that email. Just enter the code and create your password to finish registering. With your password, you are now able to log in to the app. (If you haven't received the verification code, please check your spam/junk mail folder.)



3. First-time login guide

- **Create a Family:** Navigate to the homepage and access the "Family" interface.
 - **First, adding a Battery:** Navigate to the homepage and access the "Add Device" interface.
- Please note:** When adding a device for the first time, you can **only select the battery**; you cannot add a smart meter or other accessories at this time.



4.Home

There are "Home", "Device", and "Profile" buttons at the bottom of the device control interface. Click "Home" to enter the Home control interface. Users can view the device's status and data and control it.

4.1.Energy Flow Diagram

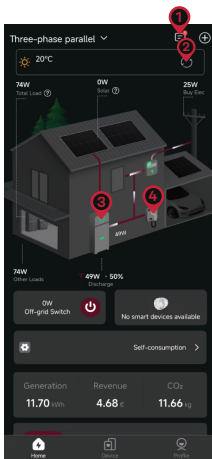
This energy flow diagram provides a clear, real-time visualization of how electricity moves through your home energy system. It helps users easily understand

- Where power is coming from
- How it is used
- Where it is stored

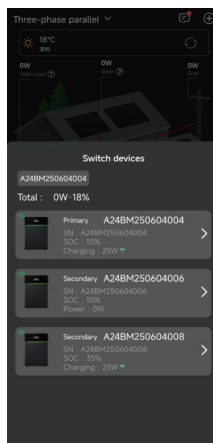
Device **malfunction information** (Fig. 1, marker 1) can be viewed in the upper right corner of the Home page.

The **refresh button** (Fig. 1, marker 2) allows you to view changes to device data quickly.

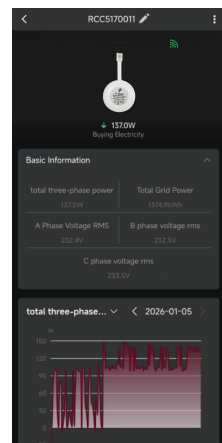
Clicking a device (battery, meter, etc.) on the energy flow diagram quickly takes you to the Battery list (Fig. 2) or the Smart meter details page (Fig. 3), where you can view detailed operating data.



(Fig. 1)



(Fig. 2)



(Fig. 3)

· Input

- Solar (PV Panels)

The rooftop solar panels generate clean electricity from sunlight. When solar production is available, it is prioritized as the primary energy source.

- Grid Connection

If solar and battery power are not enough, electricity is drawn from the grid. When allowed by settings and local regulations, excess energy may also be fed back to the grid.

· Battery

Excess solar energy is stored in the battery for later use. When solar generation is insufficient (e.g., at night), the battery automatically discharges to power your home.

· Load (output)

- Home Load (Total Load / Other Loads)

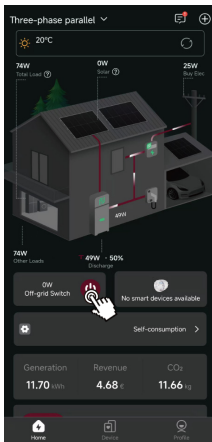
Household appliances such as lighting, air conditioning, and electronics consume energy in real time. The diagram shows how much power your home is currently using.

- EV Charger (if connected)

Electric vehicles can be charged using solar energy, stored energy, or grid power to optimize cost and sustainability.

· Off-grid switch

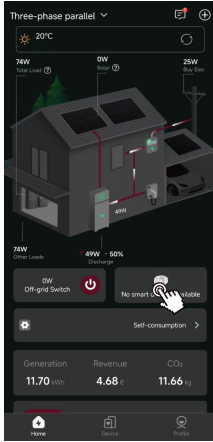
The off-grid port of the device can be remotely turned on or off via an **off-grid switch** (Fig. 4).



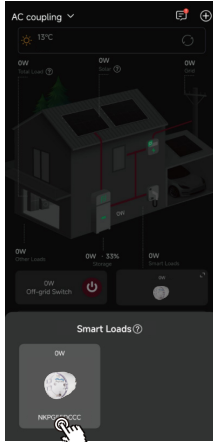
(Fig. 4)

• Smart plug

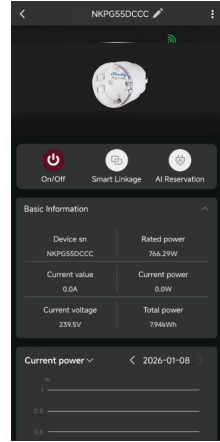
When the power station is connected to a smart plug, the smart plug can be quickly viewed in the smart load module (Fig. 5-7).



(Fig. 5)



(Fig. 6)

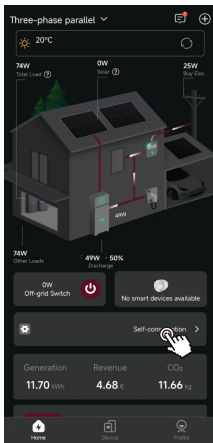


(Fig. 7)

4.2. Working mode

The SUNPURA APP currently offers four operating modes (Fig. 8): Self-Consumption Mode, AI Smart Mode, Customized Mode, and Smart Plug Mode.

Please note: When no working mode is selected, the device will automatically enter ECO mode after running continuously at below 60W for 5 minutes.



(Fig. 8)

• Self-Consumption

Please note: This mode requires a smart meter to function.

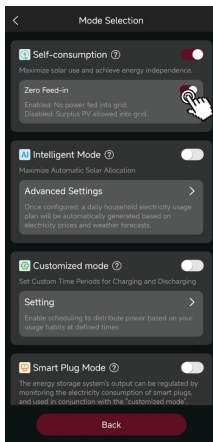
In this mode, the smart meter automatically reads the household's electricity demand. The energy storage system dynamically adjusts power output or storage in real time based on the household's load needs, maximizing solar energy utilization and minimizing PV energy waste.

In self-consumption mode (battery not fully charged), the **charging priority** after photovoltaic power generation is as follows:

1. If there is a load using electricity, the load is supplied with electricity first. If the photovoltaic power generation is insufficient to support the load's power consumption, the battery will also discharge to support the load's operation.
2. Next, the battery is charged (the charging power will not exceed the maximum DC charging power set by the system).
3. Finally, the grid is fed back (depending on whether the zero-feed-in function is enabled).

Zero-Feed-in (Fig. 9): When the energy storage system is connected to the grid, it strictly controls the reverse flow of power back to the grid (i.e., "grid feed").

Enabling Zero-Feed-in: The device dynamically adjusts battery power based on PV power and grid power. It also prohibits power from being fed back to the grid for sale.



(Fig. 9)

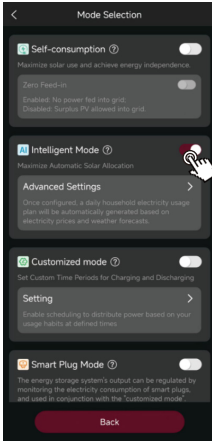
• AI Smart Mode

Please note: This mode requires a smart meter to function.

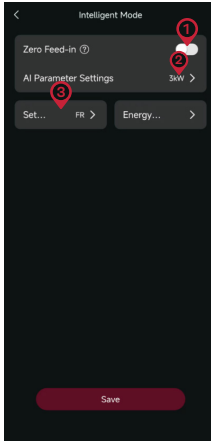
In AI smart mode, based on **electricity prices**, weather information, and other information, combined with smart meter data, it automatically generates a power consumption plan, dynamically controls device charging and discharging, and efficiently distributes power to loads, consuming green solar power.

- **Zero-Feed-in** (Fig. 11, marker 1): When the energy storage system is connected to the grid, it strictly controls the reverse flow of power back to the grid (i.e., "grid feed").

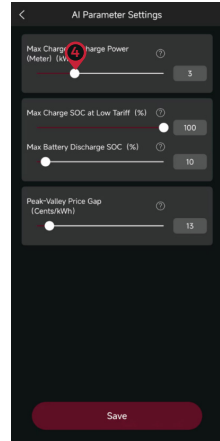
- **Max charge/discharge Power(Meter)(kW)**: Click on "AI parameter settings" (Fig. 11, marker 2) to access the page (Fig. 12). The total household electricity power (Fig. 12, marker 4) measured by the electricity meter can ensure household electrical safety. The Default value is 5.5 kW.



(Fig. 10)

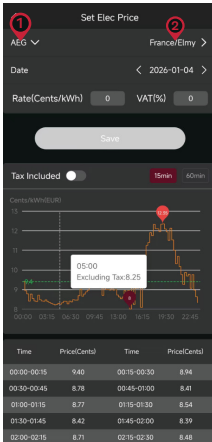


(Fig. 11)

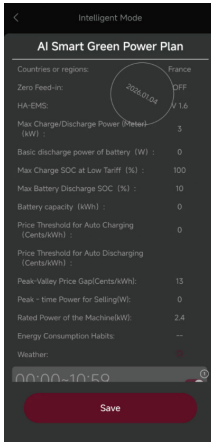


(Fig. 12)

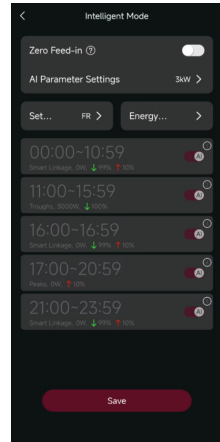
Click on "Set Electric Price" (Fig. 11, marker 3) to access the page. Select your country and power company (Fig. 13, marker 1-2), and AI will automatically generate the optimal charging and discharging plan (Fig. 14-15) for you.



(Fig. 13)



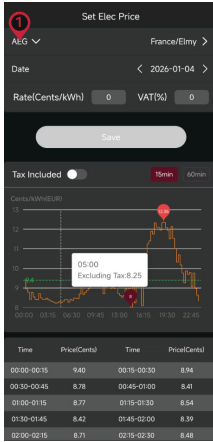
(Fig. 14)



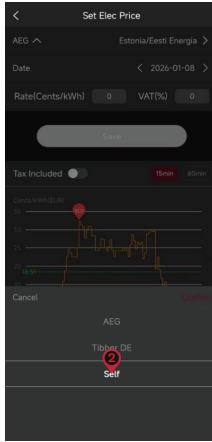
(Fig. 15)

- Custom settings in AI smart mode

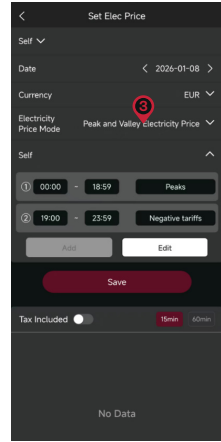
Users can also use the AI smart mode by customizing AI strategies. Simply select "self" (Fig. 16, marker 1 / Fig. 17, marker 2) where you would typically select the power company, then set your plan to use electricity price or peak/off-peak periods (Fig. 18, marker 3 / Fig. 19, marker 4 / Fig. 20, marker 6), and customize the time period (Fig. 20, marker 5). This way, you can combine customization with AI to generate a custom AI plan.



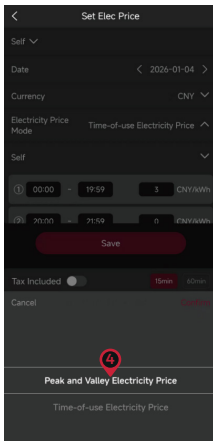
(Fig. 16)



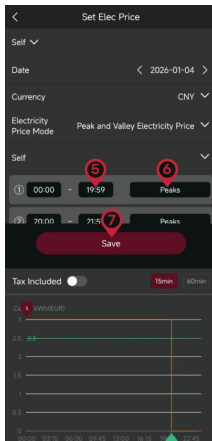
(Fig. 17)



(Fig. 18)



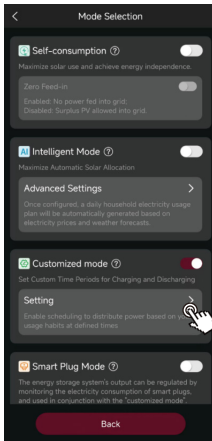
(Fig. 19)



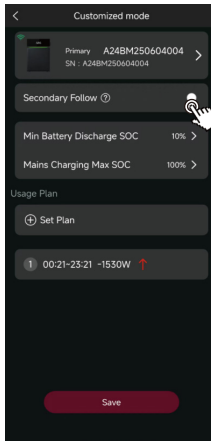
(Fig. 20)

- Customized mode

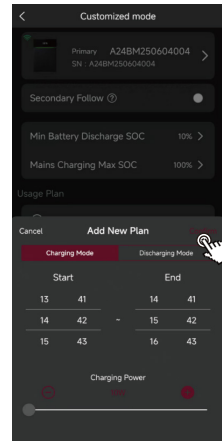
Users can customize the charging and discharging time and power to set the device's charging and discharging schedule. When three devices are connected in parallel in a three-phase configuration, the primary and secondary devices can maintain consistent charging and discharging plans by enabling the **Secondary Follow** option (Fig. 22).



(Fig. 21)



(Fig. 22)



(Fig. 23)

Smart Plug Mode

Please note: This mode requires a smart plug to function.

In smart plug mode, the system monitors the power usage of connected smart plugs to regulate the energy storage system's output. This mode works in tandem with the customized mode.

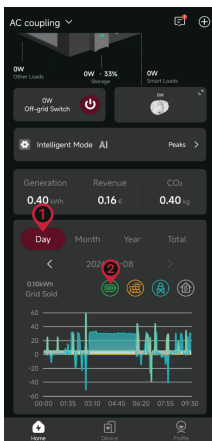
When custom mode and smart plug mode are both enabled:

machine discharge power = discharging power+ plug power + basic discharging power

4.3. Graph

You can switch the time interval of the chart display using the option box above the chart (Fig. 24, marker 1), and select which type of data to display in the chart using the icon in the upper right corner of the chart (Fig. 24, marker 2).

(from left to right: battery charging and discharging power, photovoltaic power generation, grid charging and discharging power, household power consumption).



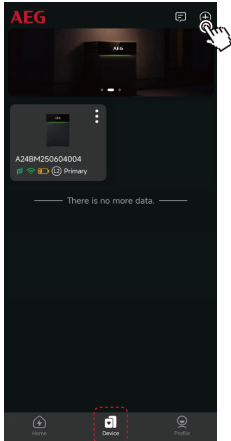
(Fig. 24)

5. Device

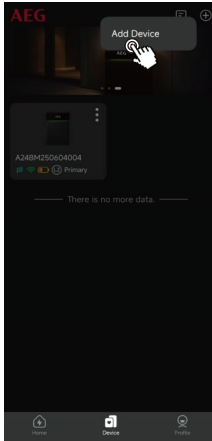
The "Device" page shows all devices bound to the user's account, including the energy storage unit and related accessories.

5.1. Battery

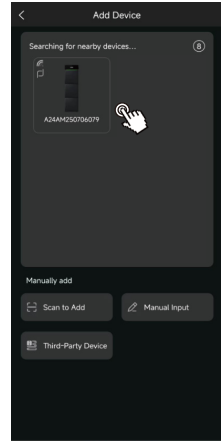
- Adding a battery: Click the "+" icon in the upper-right corner (Fig. 25-26).



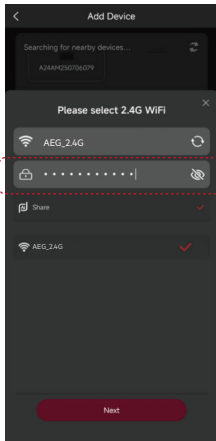
(Fig. 25)



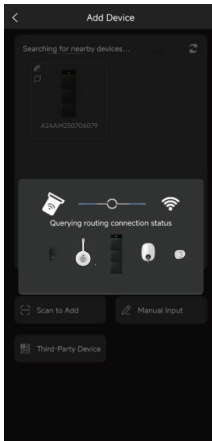
(Fig. 26)



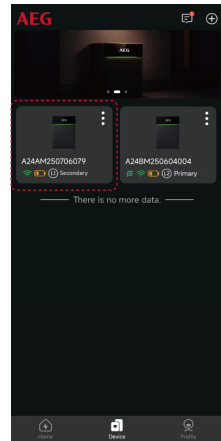
(Fig. 27)



(Fig. 28)



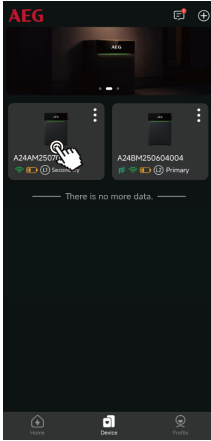
(Fig. 29)



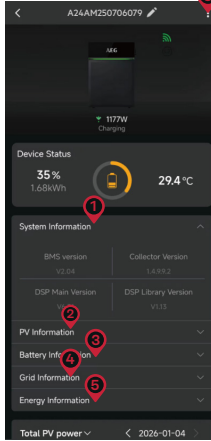
(Fig. 30)

Once the battery is successfully connected, click on the battery to enter the battery device details page (Fig. 32). This page consists of the system, photovoltaic panel, battery, power grid, and energy data. Each module (Fig. 32, marker 1-5) can be expanded individually to view specific information.

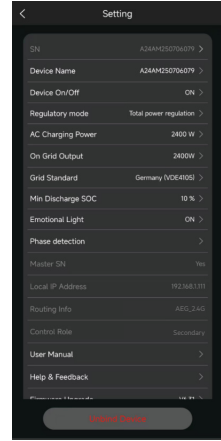
Click the "settings" button in the upper right corner (Fig. 32, marker 6) to enter the settings page (Fig. 33).



(Fig. 31)

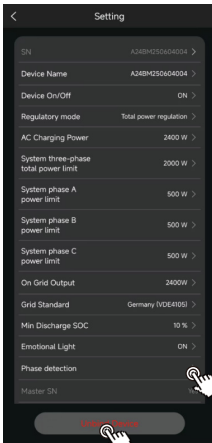


(Fig. 32)

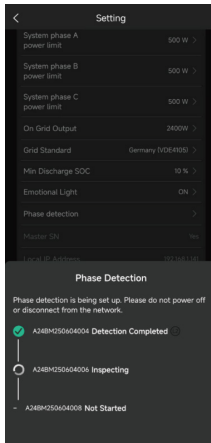


(Fig. 33)

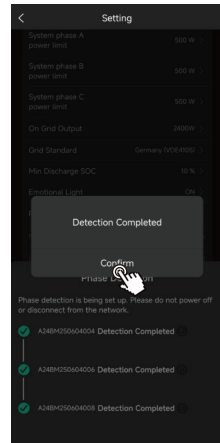
- **SN:** When your equipment malfunctions and you need to contact after-sales service for assistance, you must provide the equipment's SN code to after-sales personnel so they can view your data on the backend.
- **Device on/off:** This button allows the user to remotely control the device's on/off state.
- **Regulatory mode:** When multiple devices are connected in parallel, they should (ideally) be connected to different phases. When **total power regulation** is selected, devices on phase L1 can also monitor loads connected to phases L2 or L3, and energy storage devices connected to each phase will charge and discharge collectively. When **three-phase unbalance control** is selected, the battery connected to each phase will only discharge for the load on that phase. (This feature is only available on the host machine.)
- **AC charging Power:** The maximum charging power of the battery when it is connected to the power grid. The maximum value is 2400W.
- **On Grid Output:** The maximum discharge power that the battery can supply to the grid when connected to the grid. The maximum value is 2400W, but the specific value needs to be checked against the legal restrictions in the user's region.
- **Grid Standard:** Select the appropriate grid standard based on the user's country.
- **Min Discharge SOC:** Battery **SOC** (State of Charge) is the percentage of a battery's remaining charge relative to its total capacity. 0% means no charge, and 100% means fully charged. The **minimum (discharge) SOC** of a battery is the lowest percentage of remaining charge that a battery can discharge within a safe and healthy range. This setting prevents the battery from being over-discharged, thus protecting battery life and safety.
- **Emotional Light:** The battery indicator light can be controlled remotely via the emotional light's on/off switch.
- **Phase detection (Fig. 34-36):** When multiple devices are used in parallel at the same power station, phase detection is required for each device to ensure that the energy storage system is safely synchronized with the grid at the correct phase, thereby achieving compliant grid connection, precise power control, and stable operation. (This feature is only available on the host machine.)



(Fig. 34)



(Fig. 35)



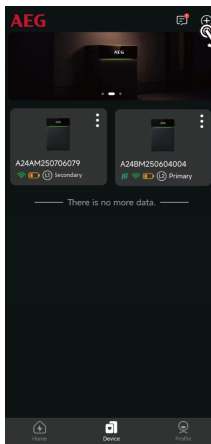
(Fig. 36)

5.2.Smart Meter

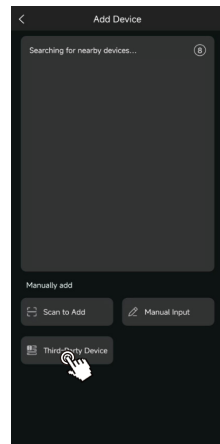
- **Adding smart meter:** Currently, only **Shelly 3EM** and **Homewizard P1** meters are supported. You can click the "+" icon in the upper right corner of the home page (Fig. 37, marker 1-2) or device page (Fig. 38). You can also, in the pop-up window that appears, select "Third-Party Device" to search for third-party products.



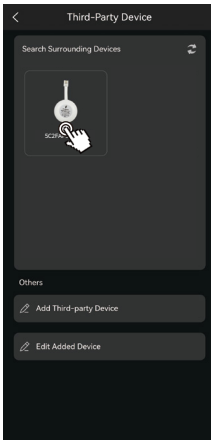
(Fig. 37)



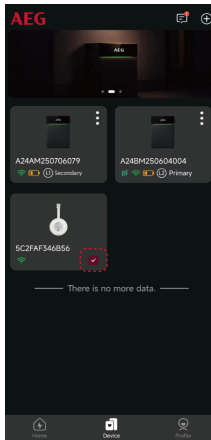
(Fig. 38)



(Fig. 39)



(Fig. 40)

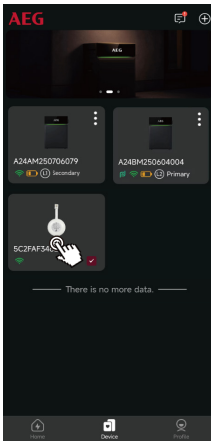


(Fig. 41)

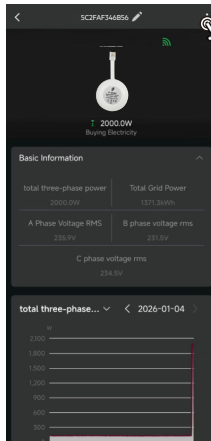
Please note:

1. When connected to a smart meter, the device can operate in **self-consumption** or **AI smart mode**.
2. When the electricity meter is successfully connected to the network, only the **selected meter** can be used at the power station.
3. Because Shelly 3EM and Homewizard P1 are third-party meters, you need to first configure the device network **via the third-party device's own app**, and then add the meter and use it normally via the AEG APP.

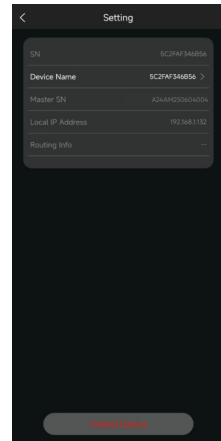
Clicking the meter on the device page (Fig. 42) opens the meter details page. Clicking the button in the upper right corner of the meter details page (Fig. 43) will take you to the meter settings page (Fig. 44).



(Fig. 42)



(Fig. 43)



(Fig. 44)

5.3. Device Upgrade (Firmware Update)

The APP supports remote firmware upgrades for your AEG energy storage system. Firmware updates are released to improve system stability, performance, compatibility, and to introduce new features.

1. Before You Start

Before starting a firmware upgrade, please ensure that:

- The device is powered on
- The device is online in the APP
- The network connection (Wi-Fi or LAN) is stable (**not be connected to the device's off-grid port**)
- The battery State of Charge (SOC) is above 20%
- The device is not in alarm or fault status

Important:

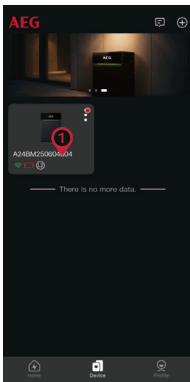
Do not power off the device, unplug any cables, or disconnect the network during the upgrade process.

2. How to Find a New Software Package

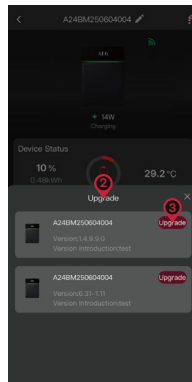
When a new software package is available, users can find and upgrade it via the APP in two ways.

· Method 1: Upgrade via Device Details Page

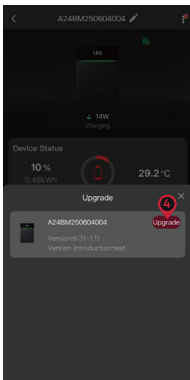
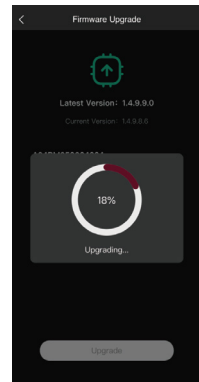
- (1) Open the APP and go to the Device Page (Fig. 45).
- (2) Tap the device to enter the Device Details page (Fig. 45, marker 1).
- (3) If a new software package is available, a pop-up notification (Fig. 46, marker 2) will appear automatically on this page.
- (4) Follow the on-screen instructions and tap Upgrade (Fig. 46, marker 3) to start the update.
- (5) Upgrade the available software packages one by one as prompted.



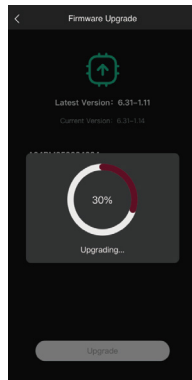
(Fig. 45)



(Fig. 46)



(Fig. 47)



3. Upgrade Types and Order

Please upgrade the firmware step by step in the specified order.

After completing one upgrade, user must **wait 30 second** before starting the next upgrade (Fig. 47, marker 4).

If the upgrade fails, it may be caused by network signal issues. Please try the upgrade several times.

4. During the Upgrade

- The upgrade process usually takes 3–15 minutes per software package.
- The device may restart automatically during the upgrade.

This behavior is normal. Please wait patiently.

Please note:

1. Do not close the APP, power off the device, or interrupt the network connection during the upgrade.

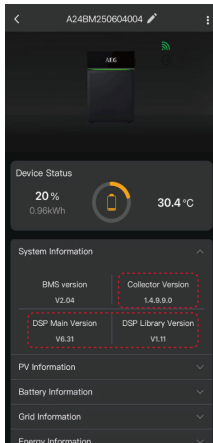
2. During the firmware upgrade, the router must not be connected to the device's off-grid port. During the upgrade process, the device will restart automatically.

If the router is connected to the off-grid port, the network connection may be interrupted during the restart, which may cause the firmware upgrade to fail.

3. If the meter or reading head goes offline after the upgrade, please try to unbind it and then reconnect it in the APP.

5. After the Upgrade

- Once the upgrade is completed, the device will reconnect automatically.
- You can check the current firmware version under Settings—System Information.



6. Upgrade Failed – What to Do

If the upgrade fails or is interrupted:

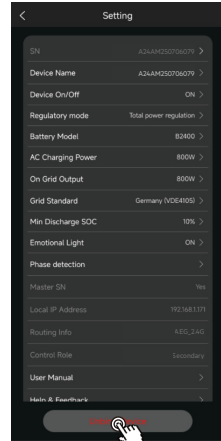
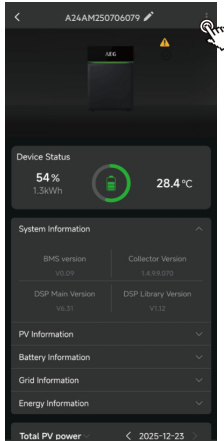
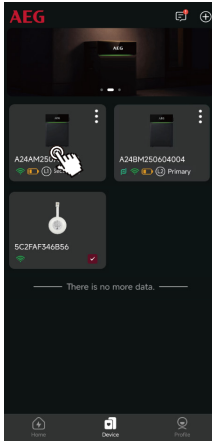
- Do not worry—the device is protected against incomplete upgrades.
- Keep the device powered on and online.
- Wait a few minutes and try the upgrade again.
- If the issue persists, please contact technical support and provide:
 - Device model
 - Serial Number (SN)
 - Screenshot of the error message (if available)

7. Notes

- Firmware updates are released in phases.
- If no update is displayed, your device may already be running the latest version.
- Some firmware updates may be mandatory to ensure system safety, stability, and compatibility.

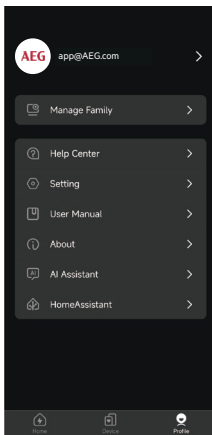
5.4. Unbinding device

Unbind settings on the device settings page



6. Profile

The **Profile** page (Fig. 48) provides access to user account information, support resources, and general app settings. It helps users manage their accounts, find assistance, and learn more about the system.



(Fig. 48)

6.1. Account Information

The Account page (Fig. 49) allows users to view and manage their personal account information and security settings.

- Profile Picture

Displays the current profile photo. Tap the camera icon to upload or change the profile picture.

- Email

Shows the email address used to register and log in to the account. This email cannot be edited directly.

- Phone

Allows the user to add or update a phone number for account contact or verification purposes.

- Country

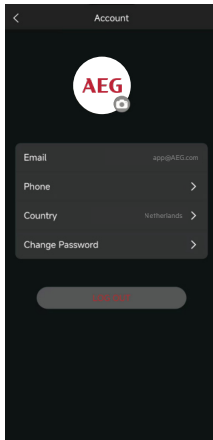
Displays the selected country or region. Tap to change the country setting if needed.

- Change Password

Enables the user to change the account password to improve account security.

- Log Out

Logs the user out of the current account and returns the app to the login screen.



(Fig. 49)

6.2. Manage Family

The Family Management page (Fig. 50) is used to manage multiple systems or installations under the same account and to control access permissions for each one.

- Family / System List

Displays all families or systems associated with the account. Each entry represents a separate installation or project (for example, a home system, test system, or demo system).

- Online Status Indicator

A green dot indicates that the system is currently online and connected. If no green dot is shown, the system may be offline.

- Role Information

The role (e.g., Owner) is shown on the right side of each family, indicating the user's permission level for that system.

- Enter a Family

Tap a family name to view and manage the devices, data, and settings for that specific system.

- Add Family

Tap the "+" icon in the top-right corner to create a new family or add a new system.

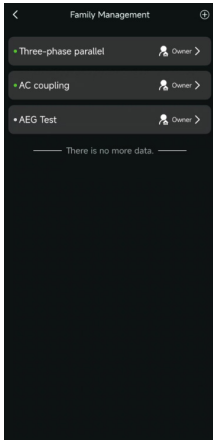
Clicking on a single Family or system will take you to that Family or system's sharing page.

- Shared Accounts List

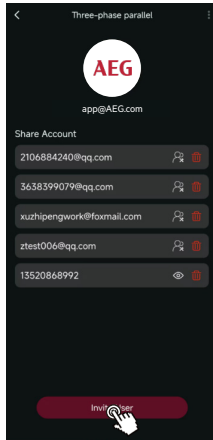
Below the holder's email, a list of currently shared accounts is shown.

- Invite User

At the bottom of the page, an "Invite User" button (Fig. 51) is provided. Tap to enter a new email address or phone number and send an invitation to share your account. This feature enables collaborative access to your app account while tracking all shared users.



(Fig. 50)



(Fig. 51)

6.3. Help Center

Provides access to help articles, FAQs, and support resources to address common questions and issues.

6.4. Setting

The "Settings" page allows you to customize app preferences and manage your account. Here you can adjust units, language, and account-related options.

- Temperature Unit

Tap to choose your preferred temperature unit (e.g., Celsius or Fahrenheit).

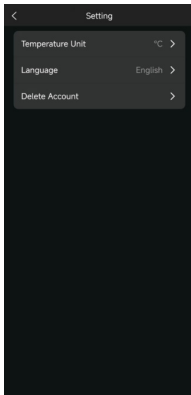
- Language

Tap to select the app's display language.

- Delete Account

Tap if you wish to permanently delete your account and all associated data.

Note: This action is irreversible.



6.5. User Manual

The "User Manual" page provides quick access to important product documentation and instructional resources. The content is organized into two tabs for easy navigation: **Documents** and **Video**.

- **Documents Tab**

Displays a list of product documents.

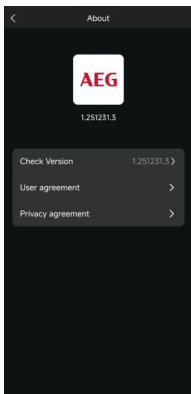
- **Video Tab**

Contains instructional and support videos related to product setup, usage, and troubleshooting.

Note: Video content may vary based on product and region.

6.6. About

Displays information about the application, such as version details, legal information, and company details.



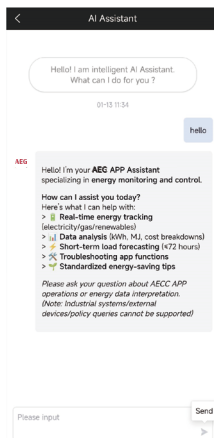
6.7. AI Assistant

The **AI Assistant** is an intelligent support feature built into the app. It helps users better understand the system status and provides basic guidance during daily use.

Main functions include:

- Explaining system data such as power flow, battery status, and operating modes
- Answering common questions about system operation and settings
- Providing basic troubleshooting suggestions and usage tips

The AI Assistant does **not** control the device directly. It is designed as an information and support tool to help users operate the system more easily and safely.



6.8. Home Assistant

The **Home Assistant** feature allows the energy storage system to be integrated with a Home Assistant smart home environment.

Through this integration, system data can be displayed and used for monitoring or automation within Home Assistant.

Home Assistant Access Steps:

1. Preparation Before Access

Before enabling the Home Assistant function, please ensure the following conditions are met:

- A Home Assistant hardware environment is already installed and running
- A computer or device is available and can access the Home Assistant runtime environment
- A valid GitHub account
- A valid Home Assistant account for Sunpura integration

2. Compressed Package Directory Contents

After downloading the Home Assistant access package, the directory includes the following files:

- **Access Instruction Manual:** step-by-step guidance for installation and configuration
- **HA-EMS-panel.mjs:** EMS display panel for visualizing system data
- **HA-EMS-local.zip:** local communication plugin for connecting the system within a local network
- **HA-EMS.zip:** cloud communication plugin for remote data access

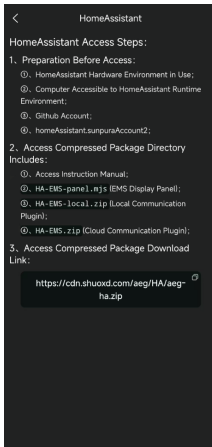
Users should select and install the appropriate plugin according to their Home Assistant setup and network environment.

3. Download Link

The Home Assistant access package can be downloaded from the following link:
<https://cdn.shuoxd.com/aeg/HA/aeg-ha.zip>

Notes:

- This feature is intended for advanced users familiar with Home Assistant.
- The Home Assistant integration is used for data monitoring and automation only and does not change the core operating logic of the energy storage system.
- Installation and configuration should be performed according to the provided instruction manual.



If you have any further questions, please don't hesitate to let us know. Our contact information is:
plug-in-service@aeg-solar.com