

EG4[®] CONNECT APP

OVERVIEW & CONFIGURATION GUIDE



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2. CHANGELOG

Revision	Date	Description of change
Version 1.0		Document published
Version 1.0.1	5-11-26	Updated verbiage throughout document for readability Separated Commissioning flow into Hybrid and Off-Grid Added Changelog Added figure captions Updated screenshots throughout the document Updated existing sections for clarity and accuracy Added new sections and procedures

3. APP OVERVIEW

The EG4[®] Connect App provides a centralized interface for monitoring, configuring, and commissioning EG4 equipment and systems. The application allows users to view real-time system performance, adjust operational settings, and manage connected devices through a mobile interface.

The EG4 Connect App supports communication with compatible EG4 equipment, including inverters, battery systems, and GridBOSS controllers. When connected to a system, users can access system data, modify configuration parameters, and perform commissioning tasks without requiring direct interaction with the equipment.

This guide provides an overview of the application layout and detailed instructions for system setup, device configuration, and advanced settings.

4. APP INSTALLATION AND LOGIN

4.1 DOWNLOAD AND INSTALLATION

The EG4 Connect app is available for Android and iOS mobile devices. Scan the appropriate QR code below or search for “EG4 Connect” in the Apple App Store or Google Play Store to download and install the application.

Connect App for Android



Connect App for iOS



To install the app:

1. Open the Apple App Store or Google Play Store on the mobile device.
2. Search for “EG4 Connect”.
3. Download and install the app.
4. Once the app is installed, open the app.

Once installed, the app allows users to view real-time and historical system data, configure system settings/working modes, and easily commission systems.

4.2 ACCOUNT LOGIN

The EG4® Connect app uses the same credentials as the EG4 Monitor Center platform. Users may log in using an existing account or select “**Create New Account**” and follow the steps provided in section 8 to register a new user account.

1. With the EG4 Connect app open, enter the username and password.
2. (Optional) Select “**Remember Me**” to store login credentials for future sessions.
3. Select “**Login**” to sign into the account.

If login credentials are forgotten or lost, select “**Forgot Password**” and follow the prompts to reset the account password.

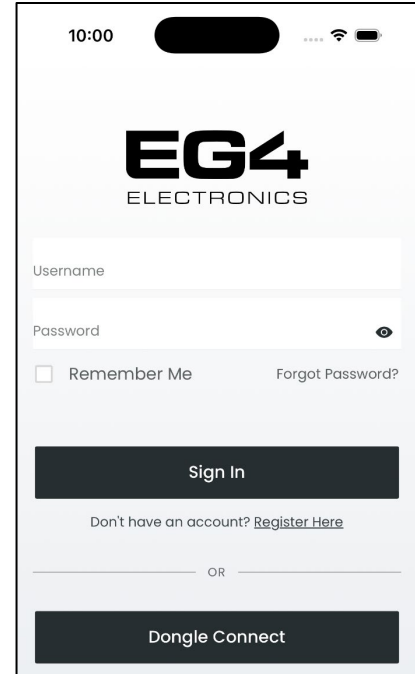


Figure 4.1 – Login

4.3 USER TYPE

The Connect app supports multiple user access levels that control system visibility and configuration permissions. User Type affects available features, settings, and interface layout throughout the application.

NOTE

Available features and settings depend on user type, account type, inverter model, and system type (Hybrid or Off-Grid).

CHANGING USER TYPE

To change the user type follow these steps:

1. From the Home screen, select “**Account Menu**” in the top-right corner.
2. Select “**Profile**”.
3. Select “**Edit**” in the top-right corner of the screen.
4. Select the desired user type (Simple or Advanced).
5. Select “**Save**” to apply the changes.

SIMPLE USER TYPE

The Simple user interface is designed to provide a streamlined view of the system while maintaining access to essential monitoring and configuration features, including:

- Viewing real-time system performance
- Accessing historical data and system status
- Configuring operating modes
- Performing system commissioning
- Managing connected devices

The Simple user interface presents a simplified layout with reduced configuration complexity for improved usability.

ADVANCED USER TYPE

The Advanced user interface provides expanded access to installer-level settings and additional configuration options, including:

- Access to expanded Advanced Settings menu
- Additional operating modes and configuration options
- Expanded system control and customization features



CAUTION

Advanced user access allows modification of system settings that may affect system performance, safety, and compliance. Only qualified personnel should modify advanced configuration settings.

5. HOME SCREEN

After signing in, the Home screen is displayed. The Home screen provides real-time system status, energy flow visualization, and quick access to system data and controls. The numbered callout on the image corresponds to the subsection containing the information for the menu item.

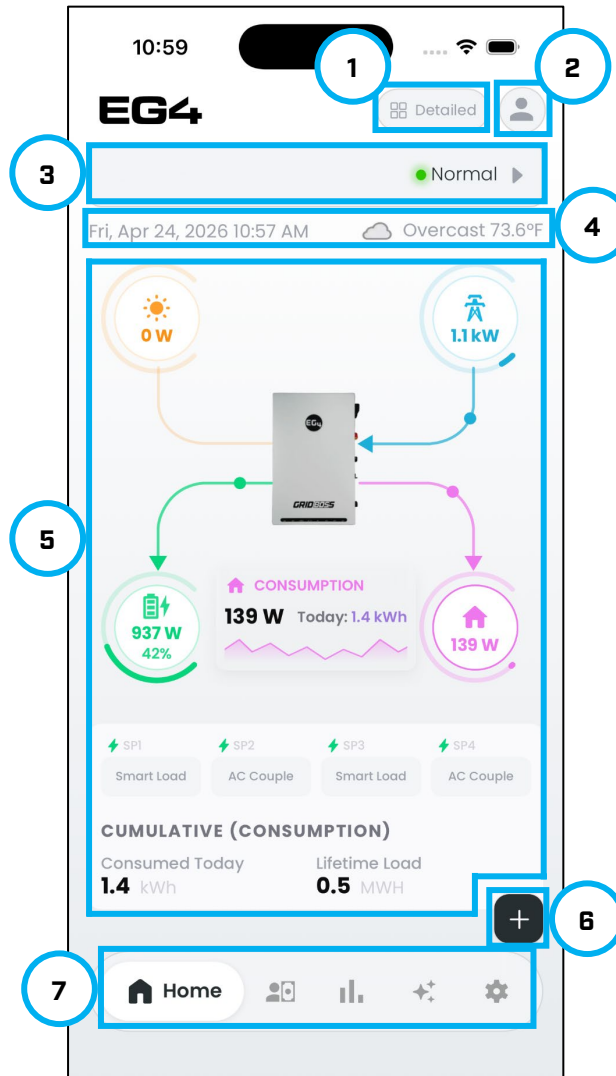


Figure 5.1 – Home Screen

5.1 DETAILED VIEW

The **Detailed View** provides expanded system information beyond the default Home screen display. When enabled, additional system metrics and device-level data are shown to support advanced monitoring and troubleshooting.

When enabled, the following additional information will be displayed:

- Expanded system power metrics (PV, Grid, Battery, Load)
- Additional device-level data
- Enhanced system status indicators
- More real-time operating values

Available data will vary depending on system configuration, connected devices, and user access level.

5.2 ACCOUNT MENU

The **Account Menu** provides access to system events, user profile settings, commissioning tools, and application preferences.

1. **Events** - Displays a log of system-reported messages, including errors, warnings, and status notifications. Each entry includes the event type, timestamp, and resolution status.
2. **Profile** - Displays user account information and allows modification of profile details and user access level.
3. **Commission** - Navigates to the Commissioning Menu for system setup, dongle management, firmware updates, and configuration.
4. **Theme** - Adjusts the application appearance. Options include Light, Dark, and Auto (follows device settings).
5. **Report a Bug!** – Redirects the user to a feedback form to submit issues, errors, or unexpected behavior while using the app.
6. **Logout** - Signs out of the account and returns to the Login screen.

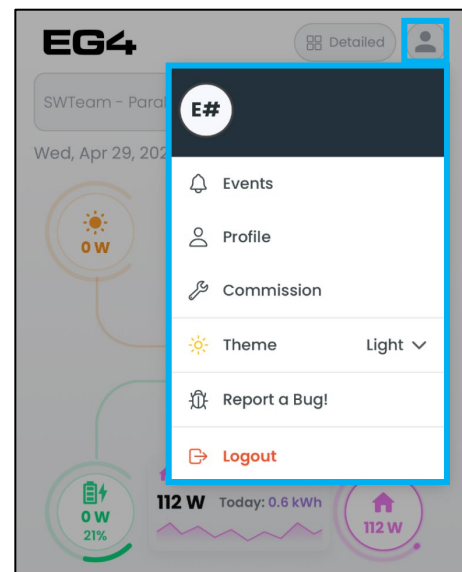


Figure 5.2 – Account Menu

5.3 STATION AND OPERATING STATUS

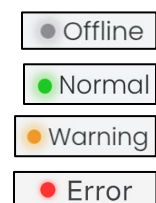
This area displays the selected station name and associated device information. Selecting this area allows the user to view available stations or search for a specific device by serial number.



Figure 5.3 – Operating Status

The inverter operating status is indicated by color:

- **Grey color:** System is offline and not producing or consuming power.
- **Green color:** System is operating normally.
- **Orange color:** System has active warnings or non-critical events.
- **Red color:** System has active faults or errors.



5.4 DATE, TIME, & WEATHER

This area displays the current date, time, and local weather conditions for the selected station. Selecting the area shown below opens the **Station Details** page, where location information (such as ZIP code) can be configured to display accurate weather data.

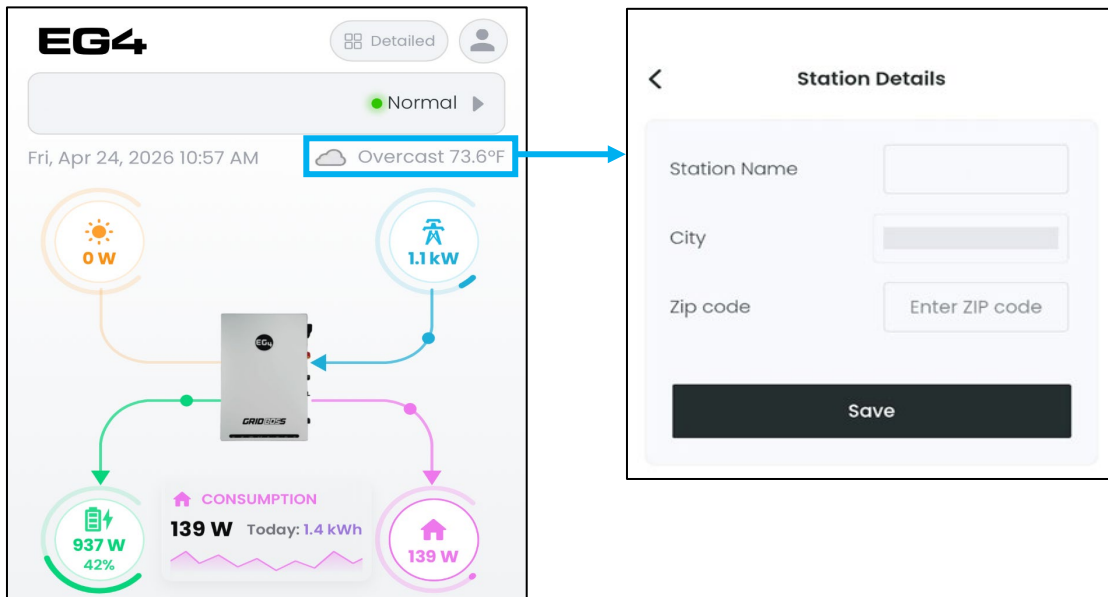


Figure 5.4 – Station Details

5.5 SYSTEM ENERGY FLOW DIAGRAM & INFO DISPLAY

The system energy flow diagram provides a real-time visualization of power flow between system components. Associated system data is displayed both within the diagram and in the data display area below.

ENERGY FLOW DIAGRAM

The Energy Flow Diagram provides a real-time visualization of power flow between major system components.



Figure 5.5 – Energy Flow Diagram

The diagram displays power flow between the following system components:

- Solar (PV)
- Grid
- Battery
- Load (Consumption)

Animated indicators show the direction and relative magnitude of energy flow. Each node displays real-time power values in watts (W) or kilowatts (kW). The central device represents the inverter or system controller. Selecting a node (PV, Grid, Battery, or Load) displays an information card within the diagram containing:

- Real-time power (W or kW)
- Daily energy totals (kWh)
- Trend graph of recent activity
- Component-specific metrics (if applicable)

DATA DISPLAY AREA

The area below the diagram provides additional system data and status information. Content in this area updates dynamically based on system conditions, user interaction, and selected node.

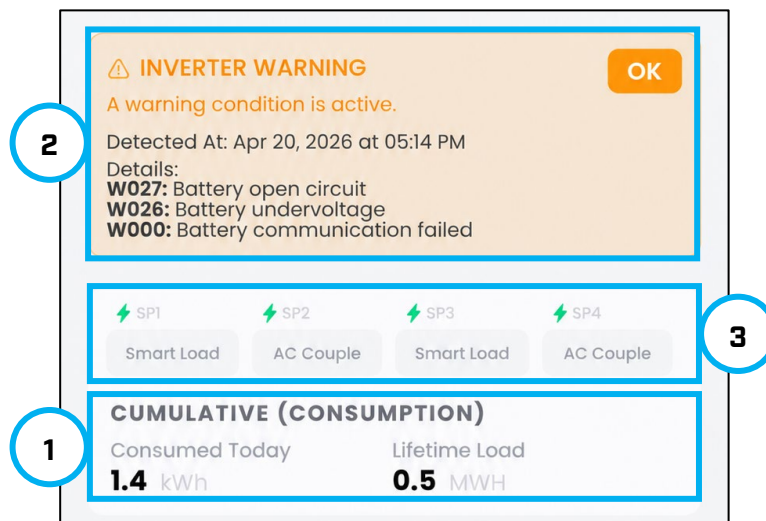


Figure 5.6 – Data Display Area

1. **Cumulative data** - Displays system-level or component-specific totals, including:
 - a. Daily energy consumption, generated PV power, battery charge/discharge, and grid import/export.
 - b. Lifetime energy consumption, generated PV power, battery charge/discharge, and grid import/export.
2. **System Warnings and Faults** - When a warning or fault condition is present, a notification banner will be displayed showing:
 - a. Event type (Warning or Fault)
 - b. Timestamp of when the issue was detected
 - c. Event codes and descriptions

 **NOTE**

Warning and fault messages will be displayed above the data display area until acknowledged or cleared.

3. **Smart Port Status (GridBOSS systems only)** – When a GridBOSS is installed:
 - a. Smart Ports (SP1 – SP4) are displayed
 - b. Assigned functions are indicated (Smart Load and AC Couple)
 - c. Real-time port status is shown

5.6 QUICK ACTIONS

The Home screen may display quick actions based on the connected equipment and system configuration. These actions provide direct access to commonly used control features for faster system interaction.

Quick actions appear as on-screen buttons and may include:

- **Quick Charge Start** – Initiates battery charging using available sources based on system configuration.
- **Start Gen Exercise** – Starts a generator exercise cycle (if a generator is connected and configured).

Select a quick action to execute the corresponding function. Some actions may require confirmation or may be available when specific system conditions are met.

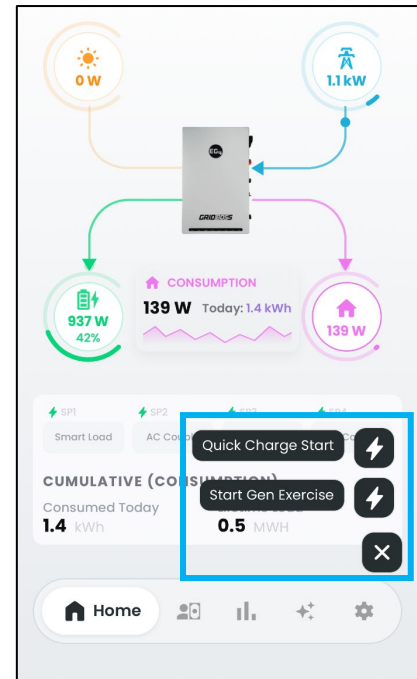
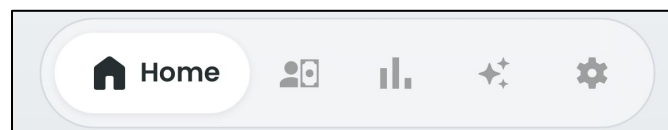


Figure 5.7 – Quick Actions

5.7 NAVIGATION BAR

The Navigation Bar is located at the bottom of the screen and provides direct access to the primary app pages. Each icon represents a specific page or function. Select an icon to navigate to the corresponding page.



Navigation bar options include:

- **Home**
- **VPP (Hybrid systems only)**
- **Energy Details**
- **AI Chat**
- **Settings**

For detailed information on each navigation option, refer to section 6.

6. NAVIGATION MENU

The numbered callout on the image corresponds to the subsection containing the information for the menu item.

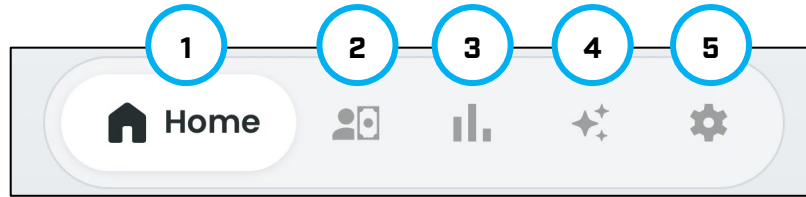


Figure 6.1 – Navigation Menu

6.1 HOME

Select “**Home**” to return to the main system overview screen. The Home screen provides real-time system status, energy flow visualization, and key system performance data. From this page, users can monitor power flow between solar (PV), grid, battery, and load, view battery state of charge (SOC), and identify active system warnings or faults. For a detailed breakdown of Home Screen features, refer to section 5.

6.2 VPP

Select “**VPP**” to access Virtual Power Plant functionality. This page displays system participation in utility or aggregator-managed programs, including event status and participation history. When enabled, the VPP page shows active and past events, indicating when the system has responded to external dispatch signals. Availability of this feature depends on system configuration, inverter compatibility, and enrollment in a supported VPP program.

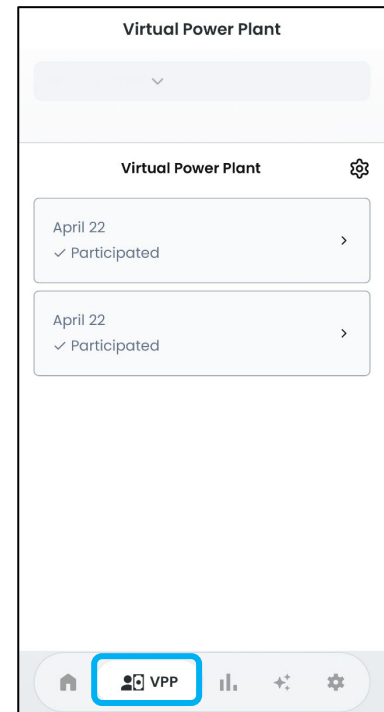


Figure 6.2 – VPP

6.3 ENERGY DETAILS

Select “**Energy Details**” to view detailed system performance data in graphical and numerical formats. The available data and layout vary depending on system configuration. Systems without a GridBOSS display inverter-level data, while systems with a GridBOSS display system-level aggregated data.

INVERTER SYSTEMS

When a GridBOSS is not installed, the Energy Details page displays inverter-level data, including energy flow between the home, battery, solar, and grid.

Select one of the following graph categories at the top of the page to view the data:

- Home - Displays total load consumption.
- Battery - Displays battery charge and discharge activity.
- Solar - Displays PV production (PV1, PV2, PV3, and total).
- Grid - Displays energy imported from and exported to the grid.

Use the Compare toggle to display multiple categories on the same graph. Available time ranges include Day, Week, Month, Year, and Custom. When using Custom, select a start and end date to populate the graph.

Graph Interaction

The graph displays data for the selected category and time range.

- Select a point on the graph to view detailed values.
- Use arrows to navigate between time periods.
- Select a label in the legend to show/hide data for that label.
- Time ranges adjust the level of detail displayed.

A summary section displays the totals for the selected range, including energy consumption, battery activity, grid import/export, and PV production.

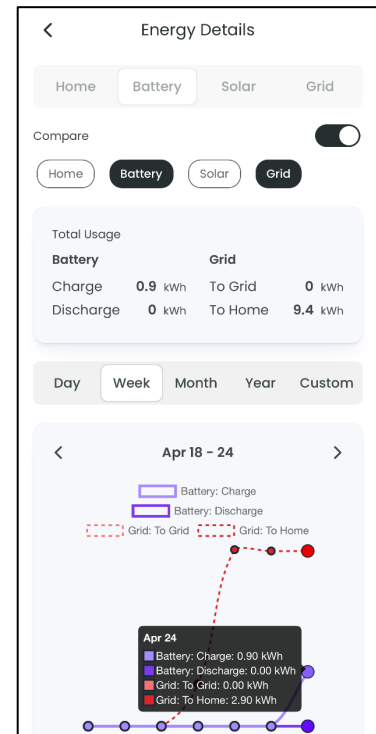


Figure 6.3 – Inverter Graphs

GRIDBOSS SYSTEMS

When a GridBOSS is installed, the Energy Details page displays system-level data across grid, load, generator, UPS, and smart load connections.

Select one of the following graph categories at the top of the page to view the data:

- RMS voltages
- RMS currents
- Active power
- Energy today
- Energy (all-time)
- Frequency

Graph Interaction

The graph displays data for the selected category and time range.

- Select a time range (Day, Week, Month, 3 month (3 mo in image)) to adjust the data window.
- Select a point on the graph to view detailed values.
- Use arrows to navigate between time periods.
- Select a label in the legend to show/hide data for that label.
- Time ranges adjust the level of detail displayed.

Each view includes a summary for the selected range section. Select **“Tap to View Graphs”** to open the detailed graph view.

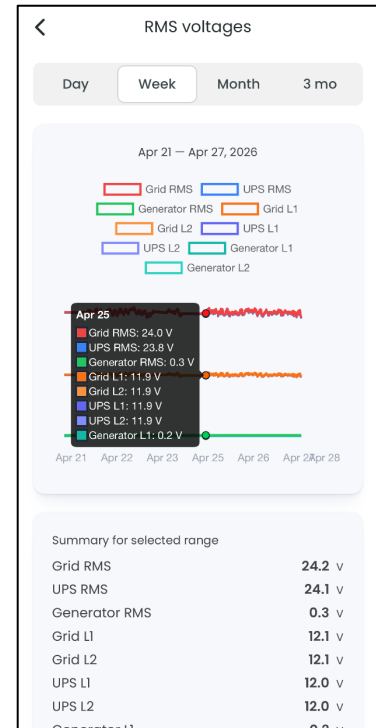


Figure 6.4 – GridBOSS Graphs

6.4 AI CHAT

Select **“AI Chat”** to access the integrated support assistant. This feature allows users to ask questions related to system operation, configuration, and troubleshooting. The AI Chat provides guided responses based on available system information and general product knowledge. An active internet connection is required to use this feature.

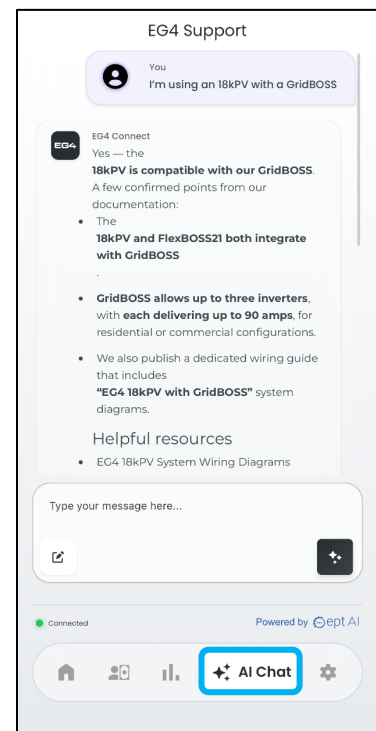


Figure 6.5 – AI Chat

6.5 SETTINGS

Select “**Settings**” to configure station and device information, operating modes, auxiliary devices, system parameters, and firmware updates.

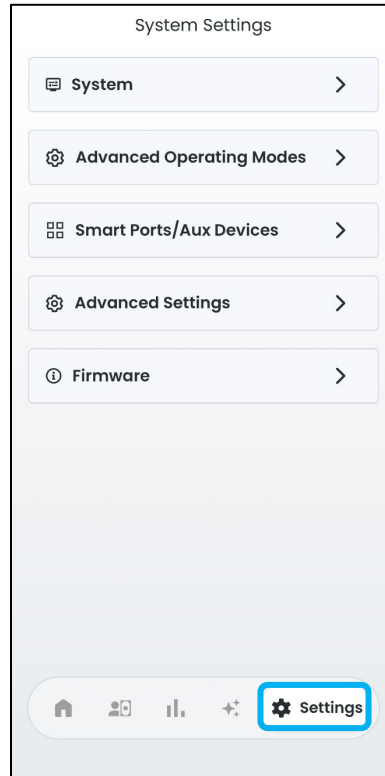


Figure 6.6 – Settings

SYSTEM

The System page displays a summary of the selected station and associated devices and allows users to view and modify station and device information for system identification, organization, and basic configuration. Access this page by selecting the **Settings** icon from the navigation bar.

Edit System Information

The top section displays the station name and configured location. Select the edit icon to modify station details.

Devices

All devices associated with the station are listed below the station information. Devices may include inverters, GridBOSS units, and other connected equipment. Each device displays:

- Device image or icon
- Serial number
- Device type and assigned name

Select a device to open the configuration page.

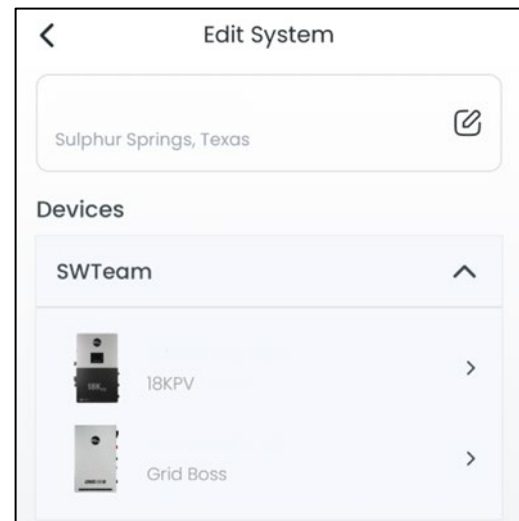


Figure 6.7 – Edit System

Edit Station

The Edit Station page allows users to configure station-level settings and location information. Available settings include:

- Station Name – Assign a custom name for system identification.
- Solar PV Power – Enter the installed PV system capacity.
- Continent/ Region/ Country – Select system location.
- Timezone – Set the system time zone.
- Daylight Saving Time – Enable or disable automatic adjustment.

Delete Station

Selecting “**Delete Station**” permanently removes the station and all associated devices from the account. This action cannot be undone.

Figure 6.8 – Edit Station

Edit Inverter

The Edit Inverter page allows users to modify inverter identification and time settings. Available settings include:

- Inverter Name - Assign a custom name.
- Aux Port Name - Label the auxiliary port function.
- Date and Time – Set or adjust the inverter system time.

Delete Inverter

Selecting “**Delete Inverter**” removes the inverter from the station. This action cannot be undone.

Figure 6.9 – Edit Inverter

Edit GridBOSS

The Edit GridBOSS page allows configuration of device naming and Smart Port identification. Available settings include:

- GridBOSS Name - Assign a custom device name.
- Port 1 Name (SP1) - Label Smart Port 1.
- Port 2 Name (SP2) - Label Smart Port 2.
- Port 3 Name (SP3) - Label Smart Port 3.
- Port 4 Name (SP4) - Label Smart Port 4.

Delete GridBOSS

Selecting “Delete GridBOSS” removes the device from the system. This action cannot be undone.

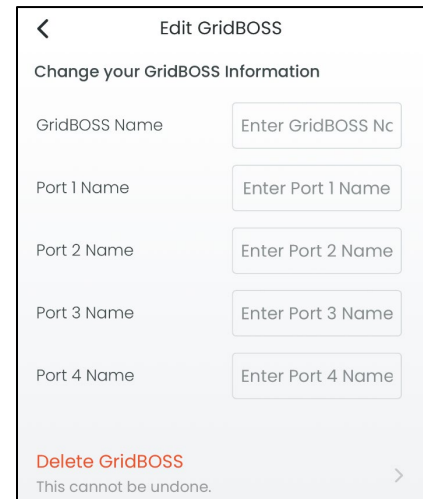


Figure 6.10 – Edit GridBOSS



Port names should reflect connected equipment or function to improve system visibility and monitoring.

OPERATING MODES & ADVANCED OPERATING MODES

Operating Modes define how the system prioritizes solar, battery, grid, and load interaction. Available modes depend on the system configuration (Hybrid or Off-Grid) and user type (Simple or Advanced). To configure operating mode settings, select the operating mode or arrow icon next to the respective operating mode.

Simple User Type Operating Modes

All operating modes within this user type utilize a Reserve SOC% setting. This setting defines the minimum battery SOC% the system will maintain for backup power. Once the Reserve SOC% is reached, battery discharging stops and loads are powered by the grid (if available).

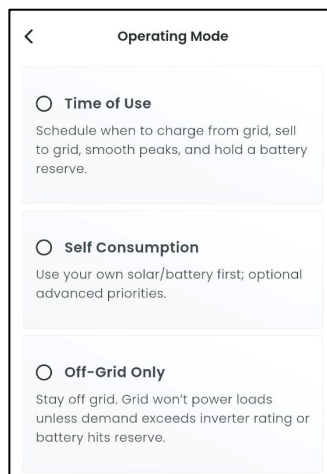


Figure 6.11 – Simple User Type Operating Modes

Time of Use Mode: Operates based on 24-hour scheduling allowing users to define when the inverter charges the battery using the grid, discharges the battery to the grid, prioritizes solar charging, and enforces Peak Limit.

 **NOTE**

Due to inverter limitations, Time Only and SOC% + Time blocks must not be mixed.

Configurable Time of Use block actions and included settings for hybrid inverters:

1. **Grid Charging:** Charge the battery using grid power during configured periods. Configure up to three block actions. Control based on Time Only or SOC% and Time.
 - **Start/End Time:** Set the start/end time that grid charging is active.
 - **Charge Current (A):** Set the maximum battery charging current drawn from the grid.
 - **Start/End SOC%:** Set the start/end SOC% grid charging range. Charging starts when battery SOC% reaches the start threshold and stops when the end SOC% is reached.

2. **Battery Export:** Send excess power to the grid. Configure up to three block actions. Control based on Time Only or SOC% and Time.
 - **Start/End Time:** Set the start/end time that battery export is active.
 - **Max Export Rate (kW):** Set the maximum power that can be exported to the grid.
 - **Export Reserve SOC%:** Sets the minimum battery SOC% to be maintained. Battery export stops once this reserve SOC% limit is reached.

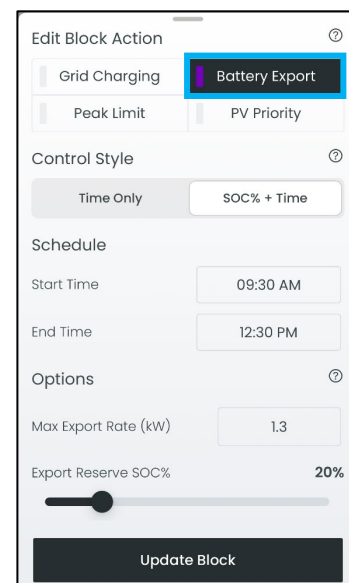
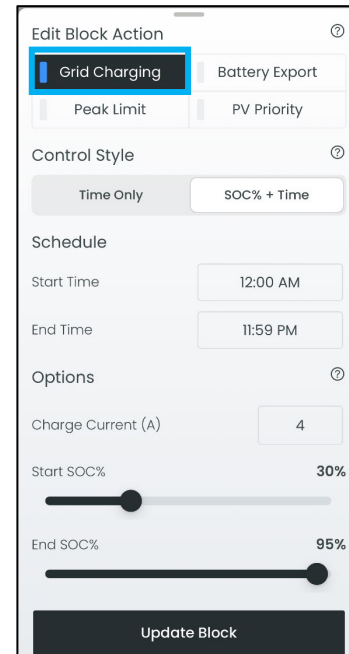


Figure 6.12 – Grid Charging/Battery Export

- Peak Limit:** Limits the maximum amount of power imported from the grid during peak demand periods. Configure up to three block actions.

 - Start/End Time:** Set the start/end time during which peak limit is enforced.
 - SOC Floor %:** Set the minimum battery SOC% required for peak limiting to function. When SOC% falls below this level, peak limiting is disabled.
 - Max Grid Input Power (kW):** Set the maximum allowable grid import power.

The screenshot shows the 'Block Action' configuration interface. At the top, there are four toggle options: 'Grid Charging', 'Battery Export', 'Peak Limit' (which is selected and highlighted with a red bar), and 'PV Priority'. Below this is the 'Schedule' section with 'Start Time' set to 12:00 AM and 'End Time' set to 06:00 AM. The 'Options' section includes a 'SOC Floor %' slider set to 30% and a 'Max Grid Input Power (kW)' input field set to 10. An 'Add Block' button is at the bottom.

- PV Priority:** Prioritizes solar power to maintain the battery at or above the reserve level for outages and protection. Configure up to two block actions. Control based on Time Only or SOC% and Time.

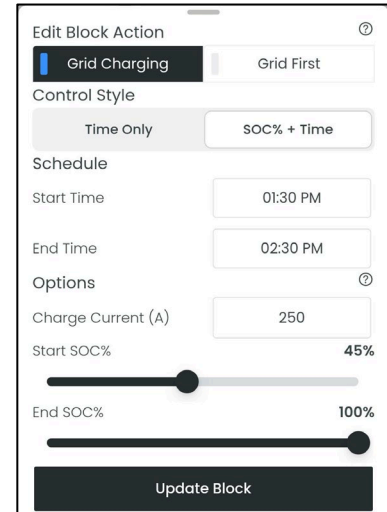
 - Start/End Time:** Set the start/end time during which PV Priority is active.
 - Charge Power (kW):** Set the maximum power used to charge the battery from solar.
 - PV Priority SOC Limit:** Set the battery SOC% target that PV charging will maintain or reach during the scheduled PV Priority time.

The screenshot shows the 'Edit Block Action' configuration interface. At the top, there are four toggle options: 'Grid Charging', 'Battery Export', 'Peak Limit', and 'PV Priority' (which is selected and highlighted with a blue bar). Below this is the 'Control Style' section with two options: 'Time Only' and 'SOC% + Time' (which is selected). The 'Schedule' section has 'Start Time' set to 12:00 AM and 'End Time' set to 11:59 PM. The 'Options' section includes a 'Charge Power (kW)' input field set to 12 and a 'PV Priority SOC Limit' slider set to 100%. An 'Update Block' button is at the bottom.

Figure 6.13 – Peak Limit/PV Priority

Configurable Time of Use block actions and included settings for off-grid inverters:

1. **Grid Charging:** Charge the battery using grid power. Configure up to three block actions. Control based on Time Only or SOC% and Time.
 - **Start/End Time:** Set the start/end time that Grid Charging is active.
 - **Charge Current (A):** Set the maximum battery charging current drawn from the grid.
 - **Start/End SOC%:** Set the start/end SOC% grid charging range. Charging starts when battery SOC% reaches the start threshold and stops when the end SOC% is reached.



2. **Grid First:** Prioritize powering loads with grid power during selected time periods. Configure up to three block actions.
 - **Start/End Time:** Set the start/end time during which grid power is prioritized over battery discharge.

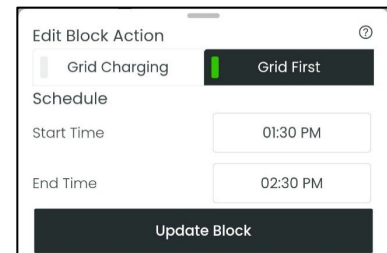


Figure 6.14 – Grid Charging/Grid First

Self-Consumption Mode – Uses solar and battery power locally before exporting to the grid.

Configurable Self-Consumption PV Strategies and included settings:

1. **Home First:** Prioritizes supplying load with available solar power first, followed by battery charging. Grid power is used only if solar and battery are insufficient.
2. **Battery First (Hybrid systems only):** Prioritizes charging the battery with available solar power between 9:00 a.m. and 3:00 p.m. local time before supplying power to loads.
 - **PV Priority SOC% Limit:** Defines the SOC up to which the battery will be charged first.
 - **PV Priority Power (kW):** Defines the amount of PV power to prioritize for charging the battery.

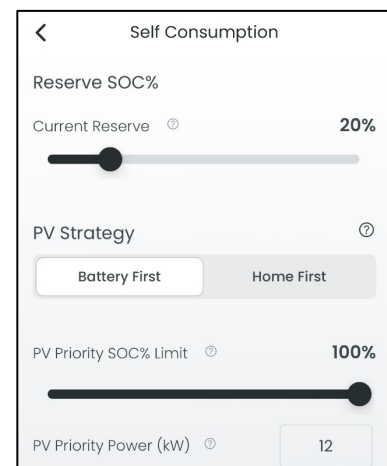


Figure 6.15 – Battery First

Off-Grid Only Mode (Hybrid systems only) – Off-Grid Only Mode disables grid interaction and export functions. The system relies on available solar and battery energy to power loads. If demand exceeds available solar and battery energy, the inverter switches to grid power (if available). Control based on Time Only or SOC% and Time.

Configurable Off-Grid settings include:

- **Start/End Time:** Set the start/end time during which Off-Grid Only mode is active.
- **AC Charge Power (kW):** Set the maximum charging power drawn from the grid when AC charging is enabled.
- **Start/End SOC%:** Set the start/stop battery SOC% thresholds for starting and stopping AC charging.

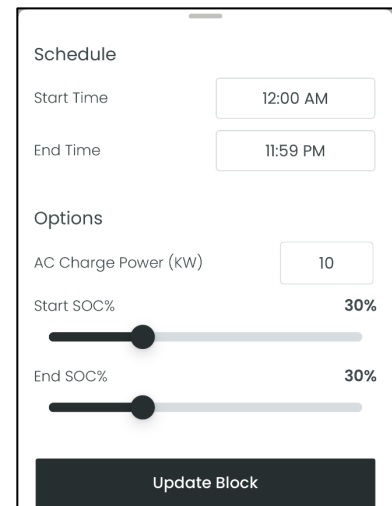


Figure 6.16 – Off-Grid Only Mode

Advanced User Type Operating modes

Advanced User Type Operating Modes provide additional scheduling and battery control options for users who require more detailed control of system charging, discharging, backup reserve, and grid interaction. These modes allow users to configure operating parameters based on time, battery State of Charge (SOC), or battery voltage.

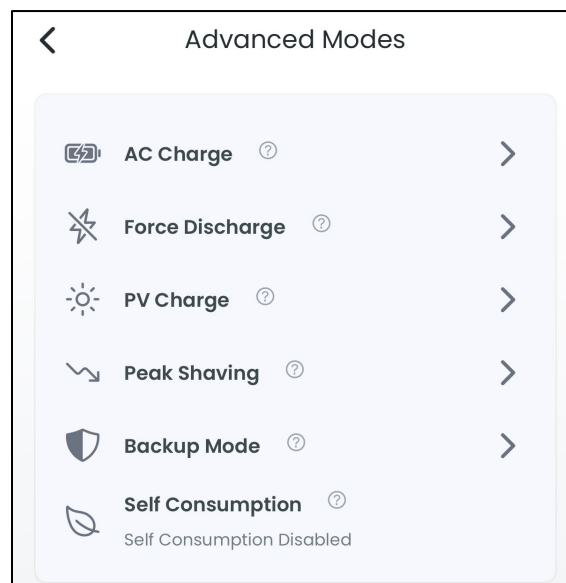


Figure 6.17 – Advanced User Type Operating Modes

AC First: Prioritizes AC input as the primary power source when available. (Off-Grid inverter only)

- **Start Time/End Time 1/2/3:** Set up to three different start and stop times for the AC First working mode.

Start Time	End Time
1:00 AM	12:00 AM
12:00 AM	12:00 AM
12:00 AM	12:00 AM

AC Charge: Allows the battery to charge using AC grid or generator power.

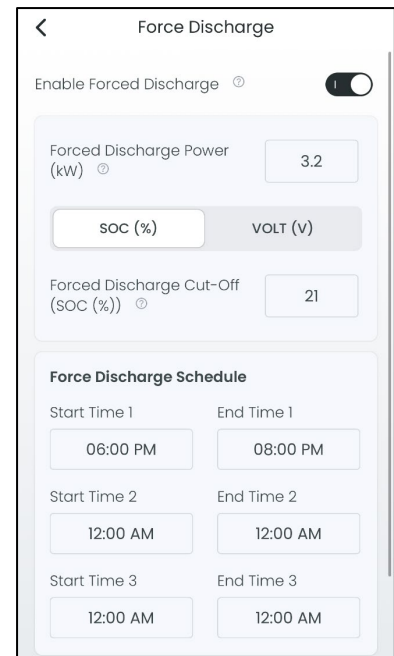
- **Enable AC Charge:** Enable or disable AC Charging functionality.
- **AC Charge Power (kW):** Set the AC Charge power in kilowatts.
- **AC Charge Battery Current (A):** Set the AC Charge battery current in Amperes. (Off-Grid inverter only)
- **AC Charge Based On:** Select the criteria for AC Charging control.
- **Start SOC (%) / Volt (V):** Defines the SOC/voltage from which AC charging will start.
- **Stop SOC (%) / Volt (V):** Defines the SOC/voltage up to which AC charging will occur.
- **Start Time/End Time 1/2/3:** Set up to three different start and end times for AC Charge mode depending on SOC/voltage as configured above.

Start Time	End Time
10:00 AM	05:15 PM
12:00 AM	12:00 AM
12:00 AM	12:00 AM

Figure 6.18 – AC First/AC Charge

Force Discharge: Forces the battery to discharge during configured time periods.

- **Enable Forced Discharge:** Enable or disable the forced discharge functionality.
- **Forced Discharge Power (kW):** Set the forced discharge power limit in kW.
- **Forced Discharge Cut-Off SOC (%) / Volt (V):** Set the forced discharge State of Charge (SOC) / Voltage limit.
- **Start Time / End Time 1/2/3:** Set up to three different start and stop times for the Force Discharge working mode.



PV Charge: Charges the battery using available solar (PV) power.

- **Enable PV Priority:** Enable or disable the PV charge priority functionality.
- **PV Charge Power (kW) (?) [0 – 26]:** Set the maximum amount of power to charge the batteries from solar.
- **Charge Priority Stop SOC (%) [0 – 100]:** Set the State of Charge (SOC) percentage to stop PV charging.
- **Charge Priority Stop Volt (V) [40 – 56]:** Set the voltage (V) to stop PV charging.
- **Start Time / End Time 1/2/3:** Set up to three different start and stop times for the PV Charge working mode.

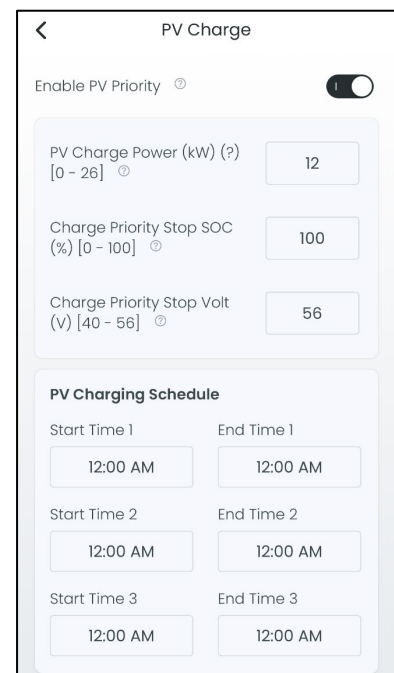
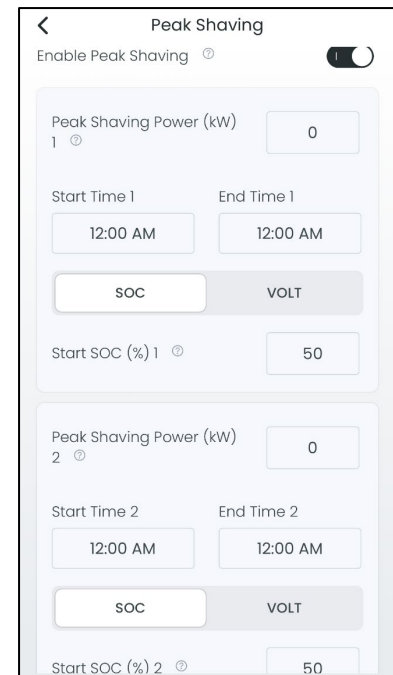


Figure 6.19 – Forced Discharge/PV Charge

Peak Shaving: Reduces grid usage during peak demand by using battery power.

- **Enable Peak Shaving:** Enable or disable the peak shaving functionality.
- **Peak shaving Power (kW) 1/2:** Set the peak shaving power in kW.
- **Start SOC 1/2 (%):** Set the battery SOC percentage to start peak shaving.
- **Start Volt 1/2 (V):** Set the battery voltage to start peak shaving.
- **Start/End Time 1/2:** Set the start/end time of peak-shaving depending on SOC/voltage as configured above.



Backup Mode: Reserves battery capacity to provide backup power during outages.

- **Enable Battery Backup:** Enable or disable the battery backup functionality.
- **AC Charge Power Limit (kW) [0 – 25.5]:** Set the maximum AC charge power limit in kW.
- **Battery Reserve Minimum (SOC%) [0 – 100]:** Set the minimum State of Charge (SOC) percentage to reserve for battery backup.
- **Battery Reserve Minimum (V) [42 – 59]:** Set the minimum voltage to reserve for battery backup.
- **Start/End Time 1/2/3:** Set up to three different start and end times for the Backup working mode.

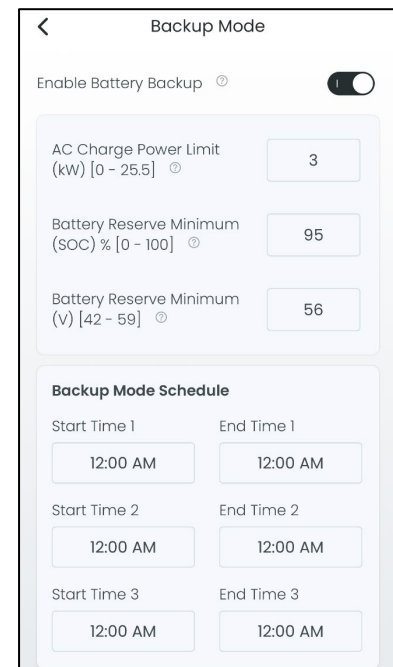


Figure 6.20 – Peak Shaving/Backup Mode

Self-Consumption: Uses solar and battery power locally before exporting to the grid.

SMART PORTS/AUX DEVICES

The Auxiliary Devices section allows the configuration of supported external devices such as Smart Loads, Existing PV Link, and a Generator. Select “**Add Device**” or an existing auxiliary device to configure. Available devices depend on inverter model and system configuration.

NOTE

GridBOSS Only Setting

Smart port Number: Select which smart port the auxiliary device is connected to.

Smart Load

A Smart Load is a controllable, non-critical load that can automatically turn ON or OFF based on system configuration. The Smart Load feature is designed to optimize energy usage by consuming power only when sufficient solar or battery capacity is available. Smart Load configuration settings include:

- **Grid Always On:** Enable to keep the load on at all times when grid power is available.
- **PV Shedding Power (kW):** PV power threshold used to control Smart Load.
- **Control Style:** Configure how the system will control the Smart Load using SOC/Volt or SOC/Volt + Time.
- **Start SOC (%)/Voltage (V):** Battery SOC (%)/Voltage (V) level at which charging will start.
- **End SOC (%)/Voltage (V):** Battery SOC (%)/Voltage (V) level at which charging will stop.

Existing PV Link

The Existing PV Link allows the integration of an existing AC-coupled PV system into the current system. The inverter will utilize the AC solar energy by first powering loads, then charging the battery, and finally exporting excess energy to the grid.

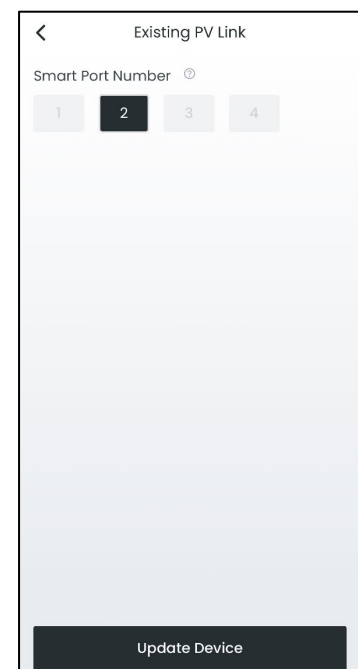
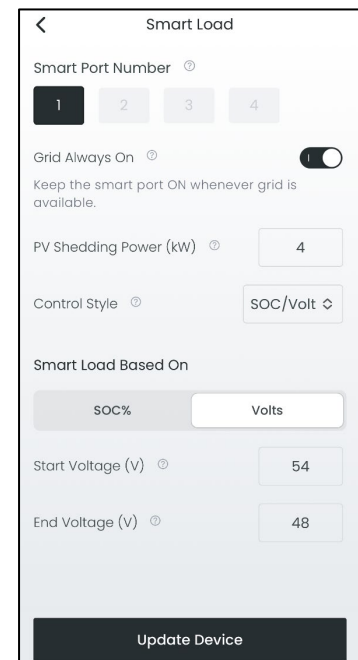


Figure 6.21 – Smart Load/Existing PV Link

Generator

The Generator section allows users to add and configure a backup generator as a power source within the system. When enabled, the system provides operational parameters, and protection features for proper integration. Generator configuration settings include:

- **Gen Boost:** Inverter supplements power if loads exceed generator capacity.
- **Cooldown Time (M):** Run time before shutdown after stop (minutes).
- **Start SOC (%) / Voltage (V):** Start generator when SOC/voltage drops to this level.
- **Stop SOC (%) / Voltage (V):** Stop generator when SOC/voltage reaches this level.
- **Charge Limit (Amps):** Maximum DC charge current (Amps).
- **Rated Power (W):** If loads exceed generator capacity, inverter supplements power. Enter rated output for protection.

The screenshot shows the 'Generator' configuration screen. At the top, there is a back arrow and the title 'Generator'. Below the title, there is a toggle switch for 'Generator Manual Start' which is currently turned off. The following settings are listed with their respective values in input fields:

- Warmup Time (S): 30
- Cooldown Time (S): 30
- Remote Turn Off Time (M): 6
- Charge Based On: A radio button selection between 'SOC%' (selected) and 'Volts'.
- Start SOC (%): 20
- End SOC (%): 80
- Charge Limit (Amps): 30
- Rated Power (W): 10

At the bottom of the screen, there is a dark grey button labeled 'Add Device'.

Figure 6.22 – Generator



NOTE

GridBOSS Generator Settings

- **Generator Manual Start:** Enable to allow manual control of dry contact 1 for generator start/stop.
- **Warmup Time (S):** Sets the “Generator Warmup Time” in seconds. The generator relay will close only after the warmup time is complete. GridBOSS will restart the warmup period if the generator’s voltage is detected as abnormal during the warm-up process.
- **Remote Turn Off Time (M):** Sets the generator “Remote Turn Off Time” in minutes. GridBOSS will automatically power off the generator according to the Remote Turn Off Time. This setting can also be used for a generator exercise function.

ADVANCED SETTINGS

The Settings menu provides access to detailed configuration parameters for system behavior, power control, parallel operation, safety, and grid interaction.

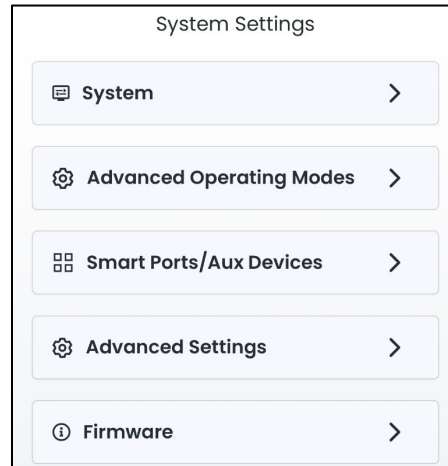
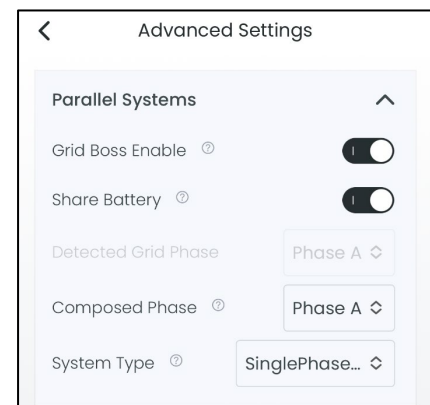


Figure 6.23 – Advanced Settings

Parallel Systems

Defines system type and paralleled inverter behavior.

- **Grid Boss Enable:** Enable Grid Boss when connected to the system.
- **Share Battery:** Enable share battery to allow multiple inverters to share a single battery bank.
- **Detected Grid Phase:** Manually adjust the auto-detected phase if the inverter is part of a three-phase system configuration and the phase mapping needs correction.
- **Composed Phase:** Select the phase for the composed system.
- **System Type:** Select the type of parallel system configuration.



PV Settings

Controls PV input behavior and solar related configuration.

- **PV Input Mode:** Enable or disable PV input for the Hybrid/Off-Grid system.
- **Export PV Only:** Enable to export only PV power to the grid, without using battery power.
- **PV Voltage Floor (V):** Set the minimum PV voltage required for the inverter to operate.

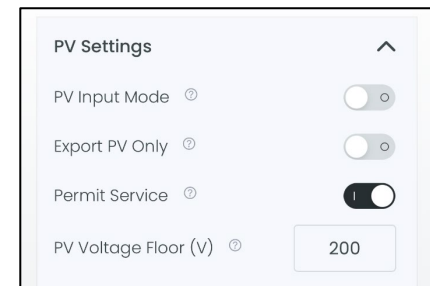


Figure 6.24 – Parallel Systems/PV Settings



Installer Only PV Setting

Permit Service: Enable permit service to allow maintenance work on the PV system while keeping the inverter operational.

Grid Settings

Controls export permissions, grid limits, and grid behavior settings.

- **Grid Export:** Enable or disable the ability to export power to the grid.
- **Grid Sellback Power (kW):** Set the maximum power that can be sold back to the grid.
- **Max AC Input Power (kW):** Set the maximum AC power from the grid to the inverter.
- **Grid Type:** Select the grid type for the hybrid system.
- **Battery Eco Enable:** Enable Battery Eco mode to optimize battery usage and extend battery life. (Off-Grid only)

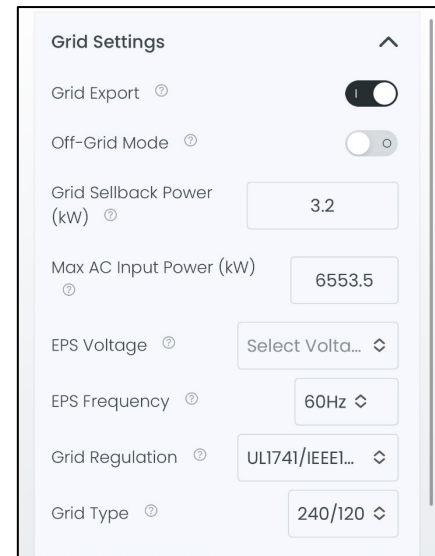


Figure 6.25 – Grid Settings



NOTE

Advanced User Type Only Grid Setting

- **Off-Grid Mode:** Enable Off-Grid Mode to allow the system to operate independently from the grid.

Installer Only Grid Settings

- **EPS Voltage:** Set the Emergency Power Supply (EPS) voltage for the system.
- **EPS Frequency:** Sets the Emergency Power Supply (EPS) frequency for the system.
- **Grid Regulation:** Select the grid regulation standard for compliance.

System Settings

Controls system logic, battery type, CT/Meter setup, and battery limits.

- **System Control:** Allows the user to select system wide control logic based on SOC% or battery voltage.
- **Dark Start SOC%/Volt (V):** Minimum battery level kept for outages and protection when the grid is disconnected.
- **No Batteries:** Enable No Batteries mode if the system is operating without a battery bank.
- **Battery Type:** Select the type of battery used in the system.
- **Lithium Brand:** Select the brand of lithium battery used in the system.
- **CT / Meter:** Select whether to use a Current Transformer (CT) or Meter for monitoring.
- **Sample Ratio:** Select the sample ratio for the Current Transformer (CT).
- **CT Direction Reversed:** Toggle if the Current Transformer (CT) direction is reversed.
- **CT Offset Power (W):** Set the power offset for the Current Transformer (CT) in watts.
- **Current Limit (Amps):** Set the current limit for the system in amperes.

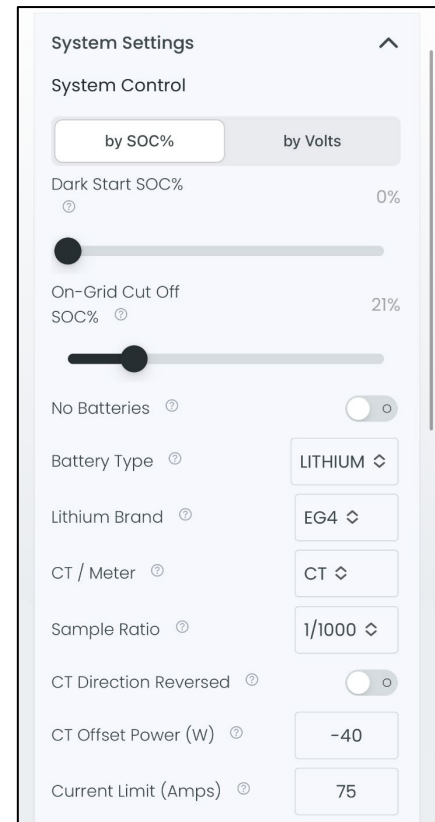


Figure 6.26 – System Settings



NOTE

Advanced User Type Only System Setting

- **On-Grid Cut Off SOC%:** Set the State of Charge (SOC) percentage for on-grid cut off conditions.

Safety

Controls protective features and maintenance-related controls.

- **Green Function Enable:** Enable or disable the Green Function feature for energy saving. (Off-Grid only)
- **Buzzer Enable:** Enable or disable the buzzer for audible alerts. (Off-Grid only)
- **Seamless EPS Switching:** Enable or disable seamless switching to Emergency Power Supply (EPS) mode.
- **Reset:** Reset all settings to default.
- **Restart:** Restarts the device.

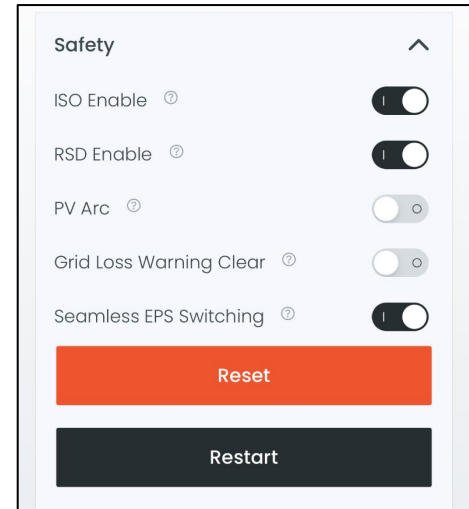


Figure 6.27 – Safety

NOTE

Installer Only Safety Settings

- **ISO Enable:** Enable or disable the Isolation Monitoring function (ISO).
- **RSD Enable:** Enable or disable the Rapid Shut Down (RSD) function.
- **PV Arc:** Enable or disable the PV Arc Protection feature.
- **Grid Loss Warning Clear:** Enable or disable automatic clearing of grid loss warnings.

FIRMWARE

The Firmware screen displays current firmware versions installed on system components and allows users to manage firmware updates.

View Changelog

Selecting “**View Changelog**” navigates the user to an external browser page listing firmware history and version change details.

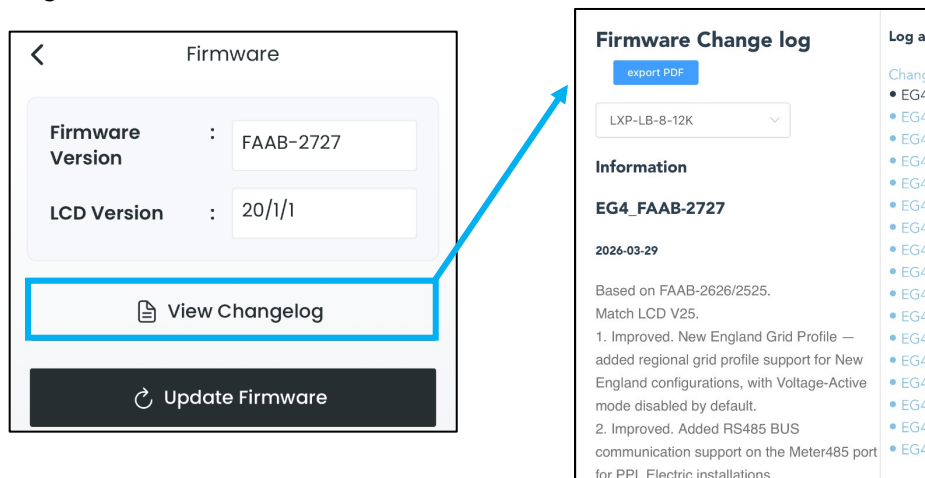


Figure 6.28 – Firmware Changelog

Update Firmware

Selecting “**Update Firmware**” begins the firmware update process. When the Confirm Update prompt appears, select “**Confirm**” to continue. During the update process, firmware is first downloaded and installed to the inverter before being distributed to connected devices.

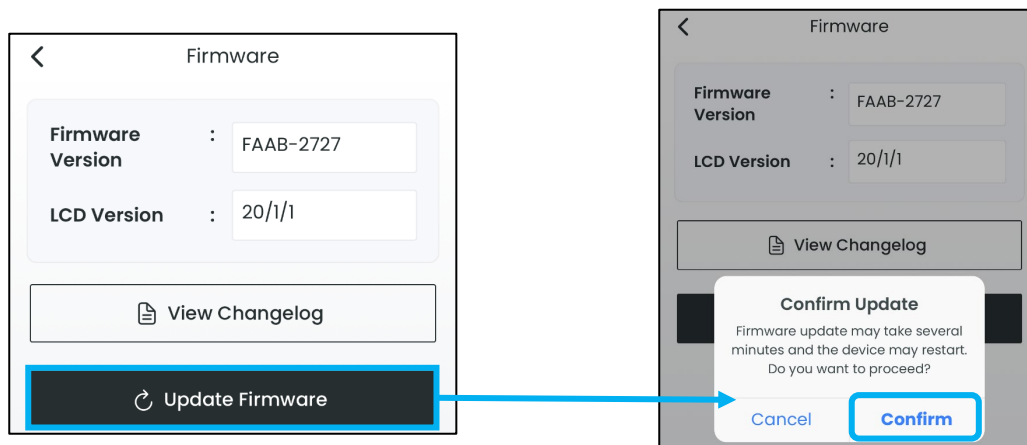


Figure 6.29 – Firmware Update

NOTICE

Do not power off the inverter or connected components while a firmware update is in progress.

7. DONGLE CONNECT

The Dongle Connect screen is used to connect an communication dongle to a local Wi-Fi network. This process allows the dongle to transmit system data to the EG4® Connect app and Monitor Center. During this process, the mobile device connects to the dongle’s built-in Wi-Fi hotspot so that network credentials can be securely transferred to the dongle.

The Dongle Connect screen includes the following primary actions to assist with dongle connection:

- **Scan Wi-Fi Networks:** Scans for nearby available Wi-Fi networks once the mobile device is connected to the dongle’s Wi-Fi hotspot.
- **Send Credentials:** Sends the selected Wi-Fi network name and password to the dongle. This option becomes available after a network is selected and credentials are entered.

7.1 DONGLE CONNECTION PROCESS

To connect the communication dongle to Wi-Fi, complete the following steps:

1. Connect the mobile device to the dongle’s Wi-Fi network (the network name typically matches the dongle serial number).
2. Continue setup without internet access when prompted by the mobile device.
3. On the Dongle Connect screen, select “**SCAN WI-FI NETWORKS**” to display nearby networks.
4. Select the Wi-Fi network the device will connect to from the available list.
5. Enter the network’s Wi-Fi password.
6. Select “**SEND CREDENTIALS**” to transmit the network information to the dongle.
7. Wait until the three indicator LEDs on the dongle turn solid green, confirming a successful connection.

Once the dongle is connected, the mobile device may automatically reconnect to the home Wi-Fi network.

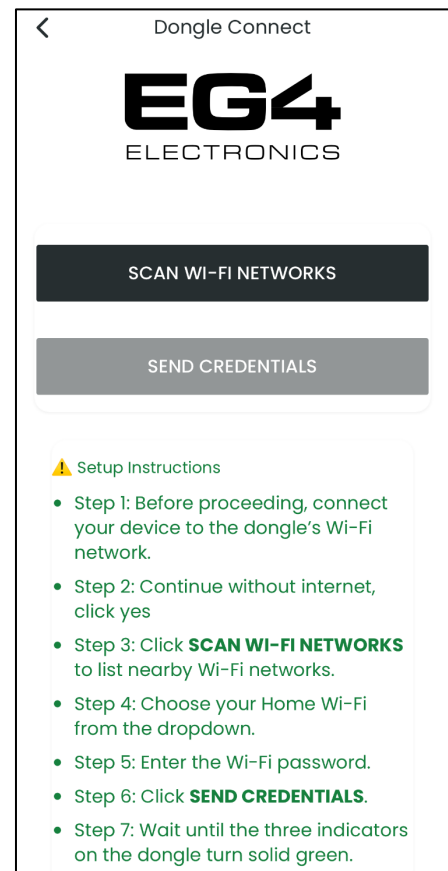


Figure 7.1 – Dongle Connect

8. ACCOUNT REGISTRATION

Fields with an asterisk (*) are required to proceed.

1. On the Login screen, select **“Register Here”** to begin the user registration process.

Figure 8.1 – New User Account

2. On the Register screen, enter the following information into the form:
 - Email address*
 - Phone number
 - Username*
 - Nickname

Once the information is entered, select **“Continue”**.

3. On the Create a Password screen, enter and confirm the password. Then select **“Continue”**.

Figure 8.2 – New User Account 2

4. On the Location Details screen, provide the required location information:
 - Continent*
 - Region*
 - Country*
 - Time zone*
 - City*
 - State*
 - Zip Code*
 - Address Line 1*
 - Address Line 2 (Optional)
 After entering all required information, select “**Continue**”.

5. On the System Setup screen, enter the following information:
 - Customer Code (if applicable)
 - Station Name*
 - Enable Allow Remote Tech Support to allow the distributor or installer to remotely adjust settings and perform updates. Select “**Setup Dongles**” to continue.

6. On the Dongles screen, select “**Add Dongle**” to register a communication dongle. At least one dongle will have to be added to continue.

Figure 8.3 – New User Account 3

 **NOTICE**

Before adding any dongles to the station, the user must first connect each dongle to the Wi-Fi network. Follow the steps in section 7.1 to connect the dongle to the Wi-Fi network.

- On the New Dongle screen, enter the dongle serial number and PIN located on the label attached to the dongle. Then select **“Add Dongle”**.

- On the Dongles list screen, confirm the dongle(s) appear on the Dongles list.
 - To add additional dongles, select **“Add Dongle”** again and repeat step 7.

Once all dongles have been added, select **“Continue”**.

Figure 8.4 – New User Account 4

After selecting **“Continue”** the user will begin the commissioning steps. See the next section for commissioning instructions.

9. COMMISSIONING

The Commissioning process guides the user through configuring a station before it becomes operational. Using a series of guided screens, the EG4® Connect app ensures the station, inverter, battery, phase type, operating mode, and smart ports/aux devices are correctly defined.

9.1 HYBRID COMMISSIONING WORKFLOW

From the Account Menu, select **“Commission”** to open the Commission Station menu.

1. Commission Station

This screen displays a list of stations connected to the account.

- Select the station to be commissioned.
 - To create a new station, select **“Add Station”**.
- Once the station is selected, select **“Continue”**.

Figure 9.1 – Hybrid Commissioning

- a. **Add Station** (if creating new station)
 The Add Station screen is used to create a new station for system monitoring and commissioning.
1. Enter the Station Name.
 2. Select the appropriate Continent, Region, and Country.
 3. Select the correct Timezone for the installation location.
 4. Enable or disable Daylight Saving Time as required for the region.
 5. Once all required information has been entered, select “**Add Station**” at the bottom of the screen.

2. Station Inverters

On the Station Inverters screen, select the inverter(s) to be commissioned.

- Select the inverter(s) to be commissioned.
- To add an inverter that is not listed, select “**Add Inverter**”.

After selecting the inverter(s), select “**Continue**”.

Figure 9.2 – Hybrid Commissioning 2

a. **Add Inverter** (if adding new inverter)

The Add Inverter screen is used to register a dongle and associate the inverter with the station.

1. On the Station Inverters screen, select **"Add Inverter"**.
2. Enter the dongle serial number and PIN located on the label attached to the dongle. See section 7.1 for the full dongle connection process.
3. Select **"Add Dongle"** to register the dongle.
4. Confirm the dongle appears in the Dongles list.
5. Add additional inverters by repeating the process for each dongle.
6. Once all inverters have been added, select **"Continue"**.



b. **Master Inverter** (when commissioning paralleled inverters):

- Select the Master Inverter of the system.
- After selecting the master inverter, select **"Continue"**.

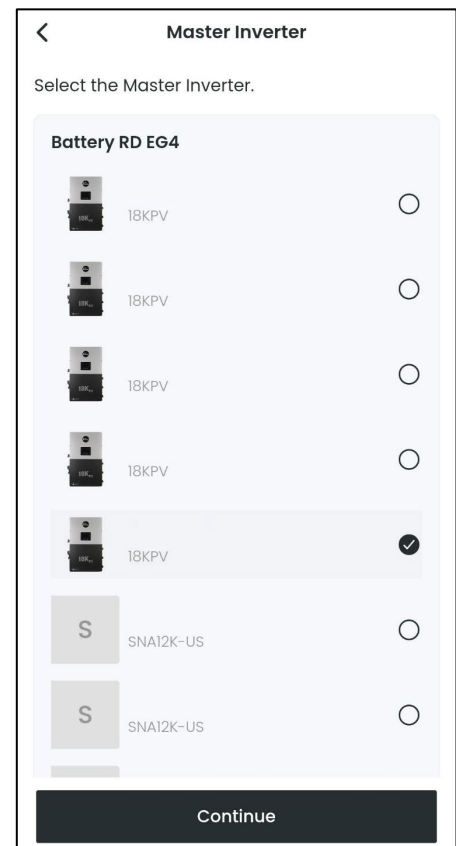
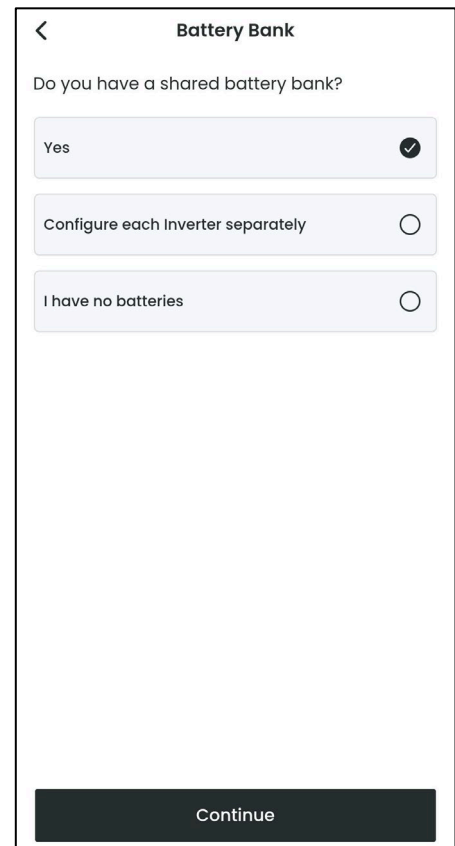


Figure 9.3 – Hybrid Commissioning 3

- c. **Battery Bank** (when commissioning paralleled inverters):
- Select **“Yes”** if all inverters are connected to a single battery bank.
 - Select **“Configure each Inverter separately”** if each inverter uses a separate battery configuration. Configure each battery in the system.
 - Select **“I have no batteries”** if no battery storage is available.

After selecting the system’s shared battery configuration, select **“Continue”**.



- d. **Configure Batteries** (when commissioning paralleled inverters):
- On the Configure Batteries screen, configure the battery type for each inverter:

- Select each inverter to choose the battery type for the inverter.

After configuring each inverter’s batteries, select **“Continue”**.



Figure 9.4 – Hybrid Commissioning 4

3. Battery Type

On the Battery Type screen, select the type of battery used by the station:

- EG4 Battery
- Lithium Compatible
- Lead-Acid / Non-Compatible
- No Batteries

Select “**Continue**” to proceed.

a. Battery Model (when using Lithium Compatible)

On the Battery Model screen, select the battery brand used by the system.

- EG4
- New EG4
- Pylon/UZ Energy
- GSL Energy
- Luxpowertek Protocol/Homegrid
- Fortress
- Renogy/Sunwoda
- Gotion

Select the correct battery model, then select “**Continue**”.

Figure 9.5 – Hybrid Commissioning 5

- b. **Battery Capacity** (when using Lead-Acid/Non-compatible)

The Battery Capacity screen will be displayed when selecting Lead-Acid/Non-compatible.

- Enter the total battery capacity in amp-hours (Ah) for the system.

After entering the capacity value, select **“Continue”**.

4. **Phase Type**

On the Phase Type screen, select the station's phase configuration:

- Single Phase
- Three Phase

Select the correct phase type, then select **“Continue”**.

5. **GridBOSS**

On the GridBOSS screen, select if the system has a GridBOSS device installed.

- Select **“Yes”** if the system includes a GridBOSS.
- Select **“No”** if the system does not include a GridBOSS.

Select **“Continue”** to proceed.

6. **CT or Meter** (Hybrid systems only)

On the CT or Meter screen, select the method used to measure AC power:

- CT
- Meter

See section 6.5 for more information on CT / Meter settings and descriptions. Once the correct option is selected, select **“Continue”**.

a. **CT Configuration**

If CT is selected, the CT Configuration screen is displayed, and the user will need to configure the following:

- Sample Ratio
- CT Power Offset

After completing the CT configuration, select **“Continue”**.

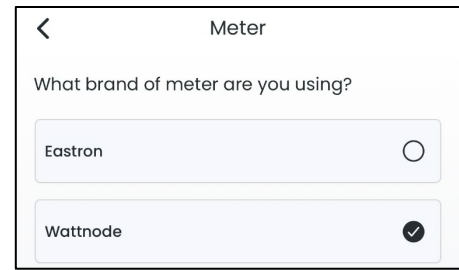
Figure 9.6 – Hybrid Commissioning 6

b. **Meter**

If Meter is selected, the Meter screen is displayed. The user will need to select the brand of meter being used:

- Eastron
- Wattnode

After choosing the correct meter brand, select **“Continue”**.



7. Export to Grid Screen

 **NOTICE**

Utility provider permission is required to export power to the grid.

On the Export to Grid screen, select whether the system is permitted to export power to the grid.

- Select **“Yes”** to enable exporting power to the grid. When selecting “Yes” a pop-up prompt will appear asking to confirm exporting power to the grid.
- Select **“No”** to disable exporting power to the grid. Select **“Continue”** to proceed.



a. **Export Settings**

If Export to Grid is enabled, the Export Settings screen is displayed. Configure the following:

- Export Power (kW)
- Export Solar Only

After configuring the export settings, select **“Continue”**.

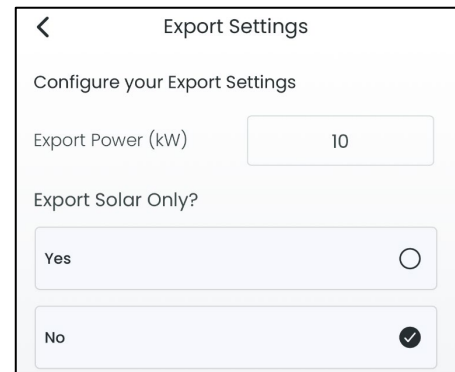


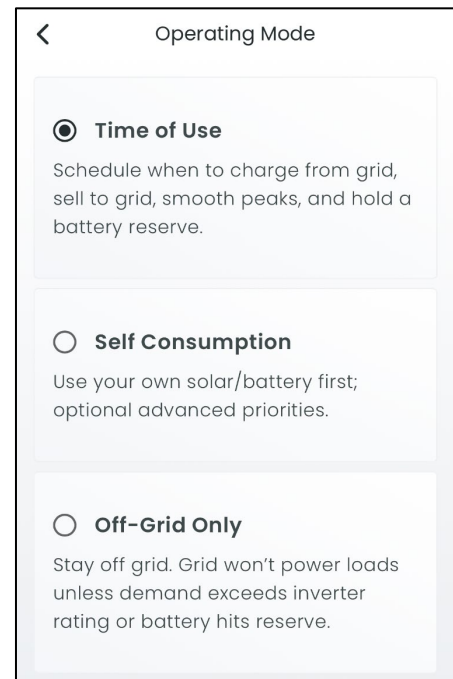
Figure 9.7 – Hybrid Commissioning 7

8. Operating Mode

On the Operating Mode screen, select how the system will prioritize power flow:

- Time of Use
- Self-Consumption
- Off-Grid Only

See section 6.5 for more information on each block action and included settings. Select the desired operating mode to configure parameters.



a. Time of Use Configuration

If Time of Use is selected, configure the following:

- Reserve SOC%
- Select **"Add New Block"** to schedule block actions for functions such as Grid Charging, Battery Export, Peak Limit, and PV Priority.

Select **"Save"** to apply the configuration.

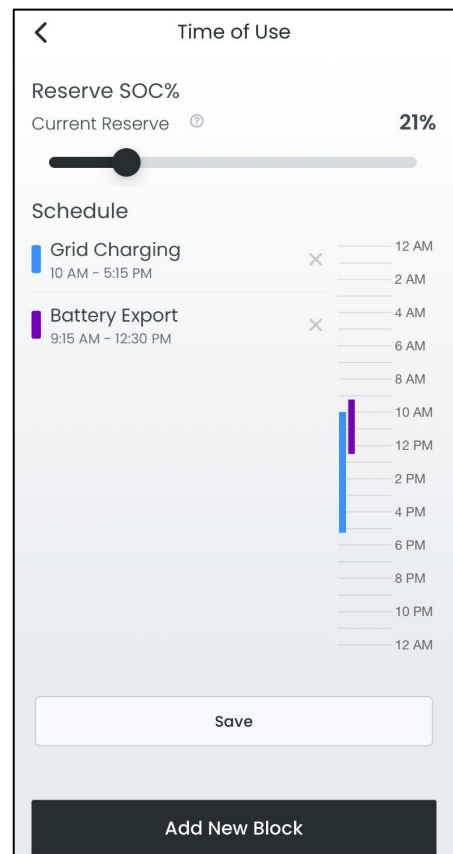


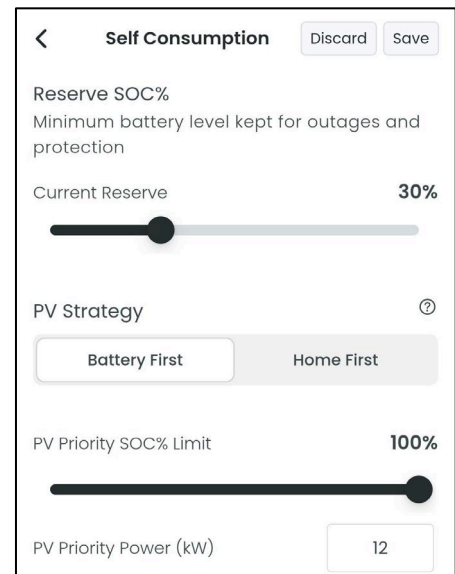
Figure 9.8 – Hybrid Commissioning 8

b. Self-Consumption Configuration

If Self-Consumption is selected, configure the following:

- Reserve SOC%
- Set how PV power will be utilized by selecting Battery First or Home First.

Select **“Save”** to apply the configuration.



c. Off-Grid Only Configuration

If Off-Grid Only is selected, configure the following:

- Reserve SOC%
- Select between control based on Time Only or SOC% + Time.
- Select **“Add New Block”** to schedule start/end times and SOC% limits.

Select **“Save”** to apply the configuration.

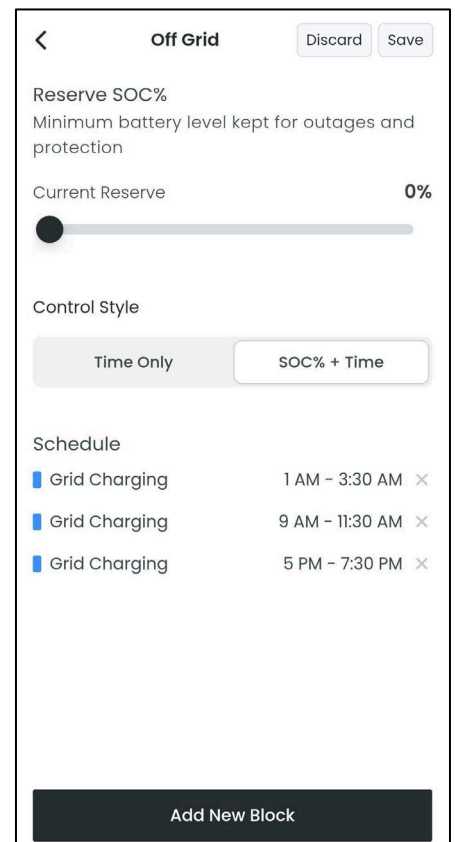
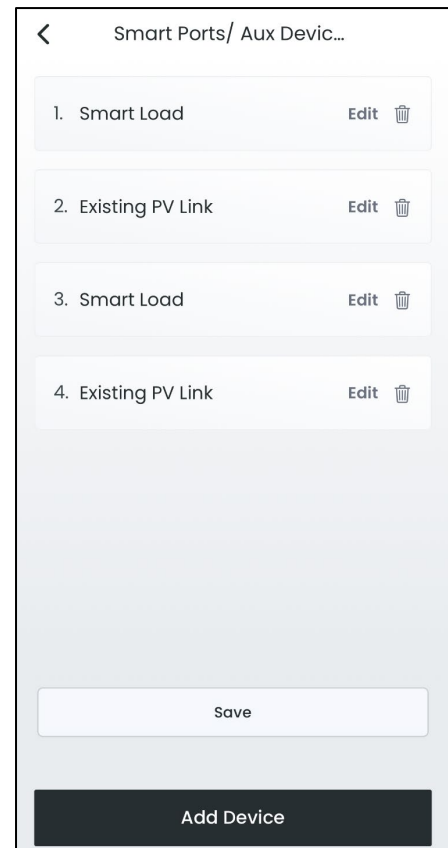


Figure 9.9 – Hybrid Commissioning 9

9. Smart Ports/ Aux Devices

On the Smart Ports / Aux Devices screen, users can configure supported auxiliary devices.

- Select “**Add Device**” to begin configuring an auxiliary device.
- Select “**Save**” to continue if no auxiliary devices are required. If no auxiliary devices are required, proceed to step 12.



10. Select Device Type

On the Select Device Type screen, choose the type of auxiliary device to add:

- Smart Load
- Existing PV Link
- Generator

See section 6.5 for more information on Smart Ports / Aux Devices settings and descriptions. Select the desired device type to configure parameters.

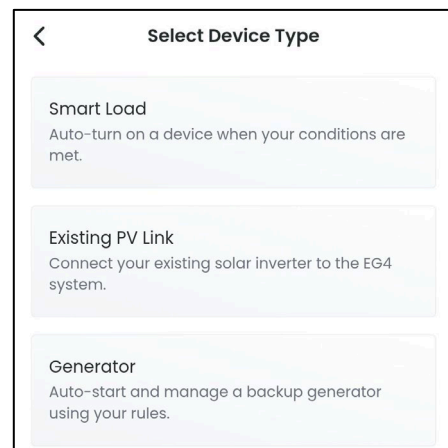


Figure 9.10 – Hybrid Commissioning 10

a. Smart Load Configuration

If Smart Load is selected, configure the following:

- Smart Port Number
- Grid Always On
- PV Power
- Smart Load Based On
- Start/End SOC%

After configuring these parameters, select “**Add Device**” to save the smart load settings.

The screenshot shows the 'Smart Load' configuration interface. At the top, there's a back arrow and the title 'Smart Load'. Below that, 'Smart Port Number' is set to 1, with options 1, 2, 3, and 4. 'Grid Always On' is a toggle switch that is turned on, with a subtext: 'Keep the smart port ON whenever grid is available.' 'PV Shedding Power (kW)' is set to 4. 'Control Style' is set to 'SOC/Volt'. Under 'Smart Load Based On', 'Volts' is selected over 'SOC%'. 'Start Voltage (V)' is 54 and 'End Voltage (V)' is 48. At the bottom is a dark button labeled 'Update Device'.

b. Generator Configuration

If Generator is selected, configure the following generator operating parameters:

- Generator Manual Start
- Warmup Time (GridBOSS only)
- Cooldown Time (M)
- Remote Turn Off Time (GridBOSS only)
- Charge Based On
- Start/End SOC%
- Charge Limit (Amps)
- Rated Power (W)

After configuring these parameters, select “**Add Device**” to save the generator settings.

The screenshot shows the 'Generator' configuration interface. At the top, there's a back arrow and the title 'Generator'. 'Generator Manual Start' is a toggle switch that is turned off. 'Warmup Time (s)' is 30, 'Cooldown Time (s)' is 30, and 'Remote Turn Off Time (M)' is 6. Under 'Charge Based On', 'SOC%' is selected over 'Volts'. 'Start SOC (%)' is 20, 'End SOC (%)' is 80, 'Charge Limit (Amps)' is 30, and 'Rated Power (W)' is 10. At the bottom is a dark button labeled 'Add Device'.

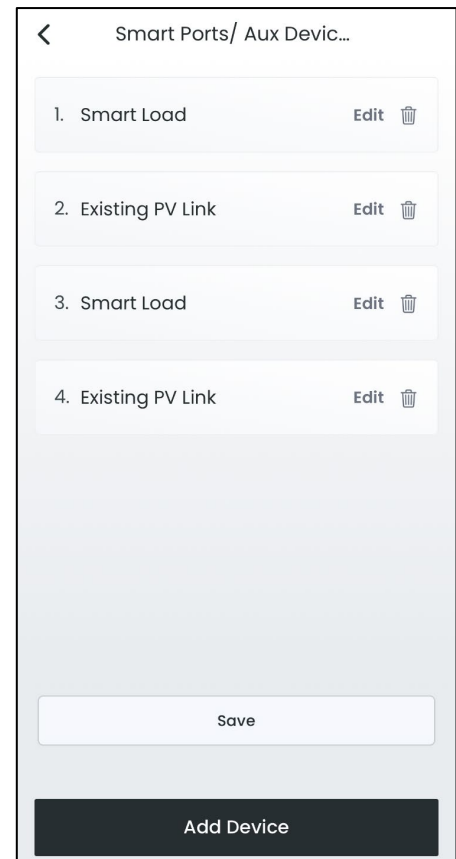
Figure 9.11 – Hybrid Commissioning 11

11. Smart Ports / Aux Devices Summary

After adding an auxiliary device, the screen displays a list of configured devices.

- Select **“Edit”** to modify an existing device.
- Select the trash icon to remove a device.
- Select **“Add Device”** to configure additional auxiliary devices.

Once all devices are properly configured, select **“Save”** to continue.



12. Review

The Review screen provides a summary of the station configuration, including:

- Inverters and master designation
- System configuration
- Battery configuration
- Smart Ports / Auxiliary device configuration

Review all system information carefully. After verifying all information, select **“Commission”** to proceed.

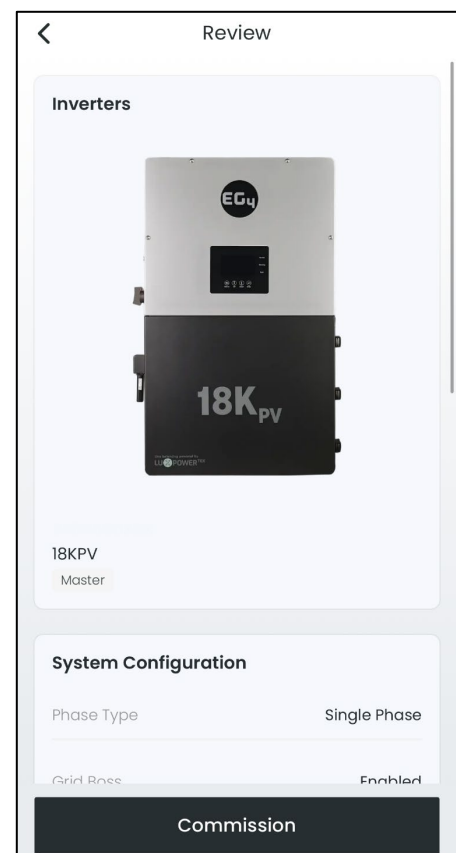


Figure 9.12 – Hybrid Commissioning 12

13. Firmware

After Commissioning, the Firmware screen displays the current inverter and LCD screen firmware versions. From this screen, users may:

- Select “**View Changelog**” to review firmware update notes.
- Select “**Update Firmware**” to begin the firmware update process.

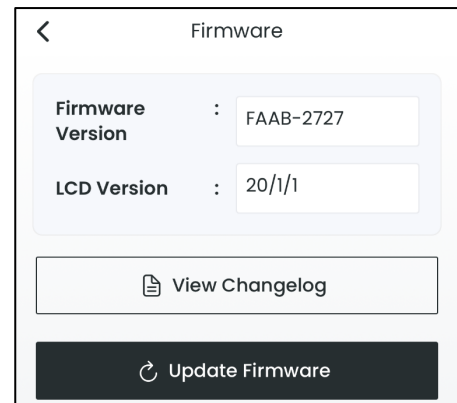


Figure 9.13 – Hybrid Commissioning 13

Commissioning is now complete, and the hybrid system is fully configured and ready for normal operation.

9.2 OFF-GRID COMMISSIONING WORKFLOW

From the Account Menu, select “**Commission**” to open the Commission Station menu.

1. Commission Station

This screen displays a list of stations connected to the account.

- Select the station to be commissioned.
 - To create a new station, select “**Add Station**”.
- Once the station is selected, select “**Continue**”.

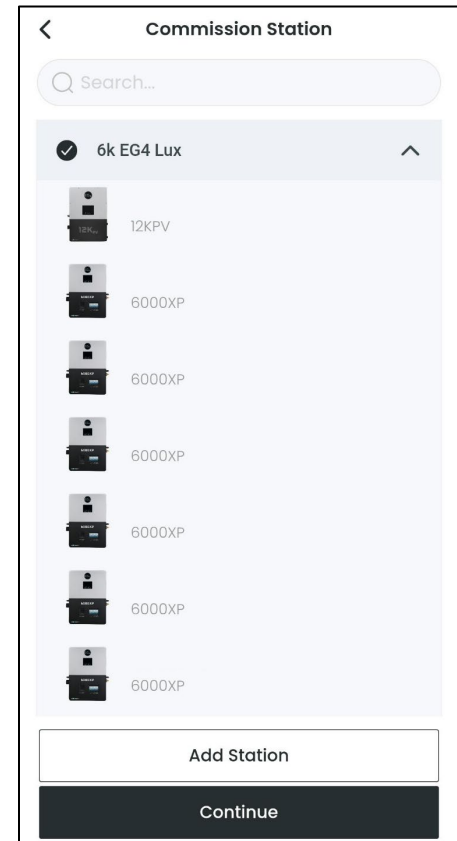
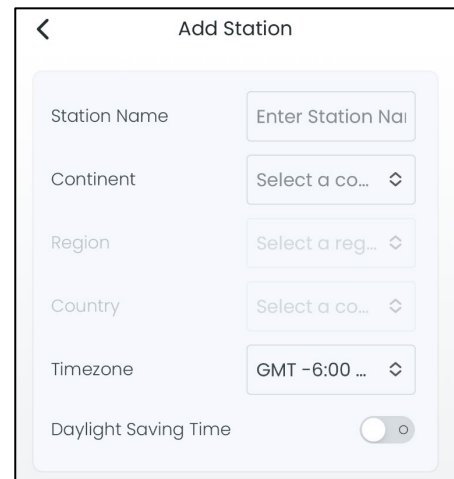


Figure 9.14 – Off-Grid Commissioning

- a. **Add Station** (if creating new station)
 The Add Station screen is used to create a new station for system monitoring and commissioning.
1. Enter the Station Name.
 2. Select the appropriate Continent, Region, and Country.
 3. Select the correct Timezone for the installation location.
 4. Enable or disable Daylight Saving Time as required for the region.
 5. Once all required information has been entered, select “**Add Station**” at the bottom of the screen.



2. Station Inverters

On the Station Inverters screen, select the inverter(s) to be commissioned.

- Select the inverter(s) to be commissioned.
- To add an inverter that is not listed, select “**Add Inverter**”.

After selecting the inverter(s), select “**Continue**”.

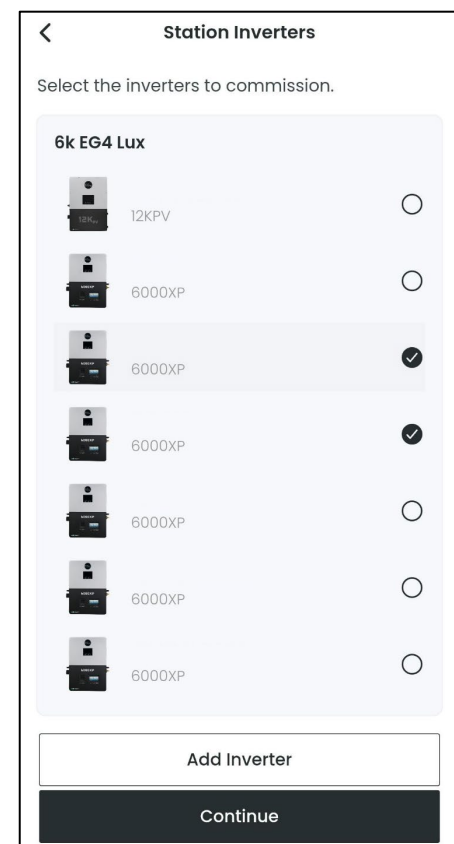
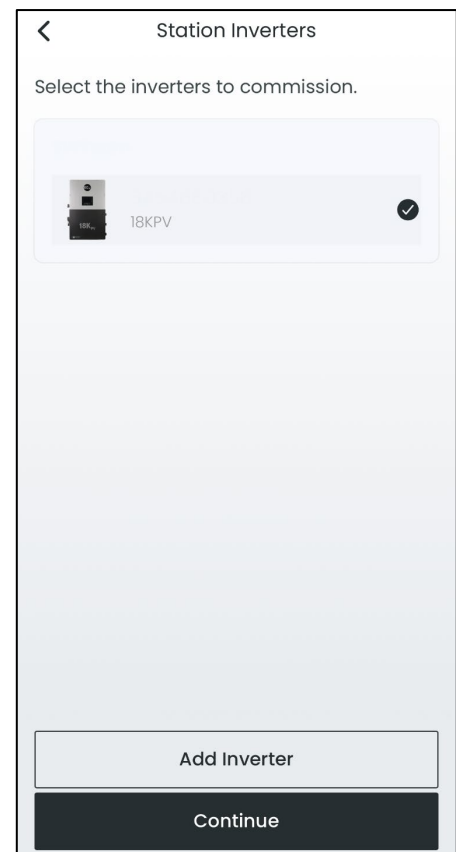


Figure 9.15 – Off-Grid Commissioning 2

a. **Add Inverter** (if adding new inverter)

The Add Inverter screen is used to register a dongle and associate the inverter with the station.

1. On the Station Inverters screen, select **"Add Inverter"**.
2. Enter the dongle serial number and PIN located on the label attached to the dongle. See section 7.1 for the full dongle connection process.
3. Select **"Add Dongle"** to register the dongle.
4. Confirm the dongle appears in the Dongles list.
5. Add additional inverters by repeating the process for each dongle.
6. Once all inverters have been added, select **"Continue"**.



b. **Master Inverter** (when commissioning paralleled inverters):

- Select the Master Inverter of the system.
- After selecting the master inverter, select **"Continue"**.

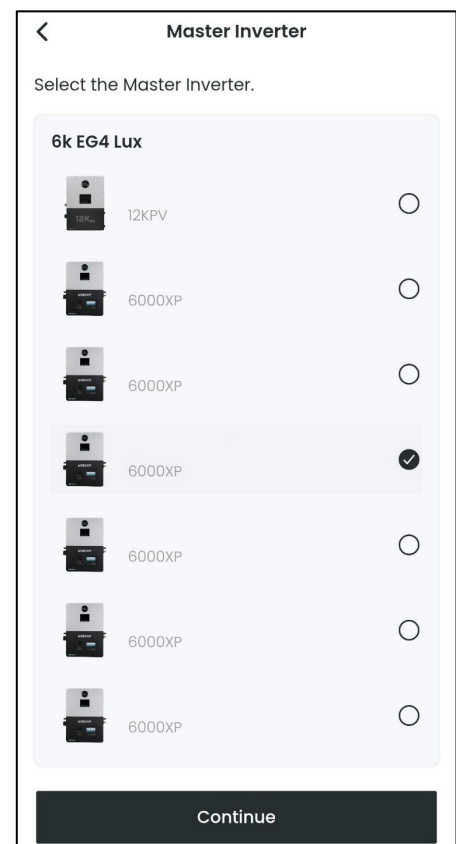
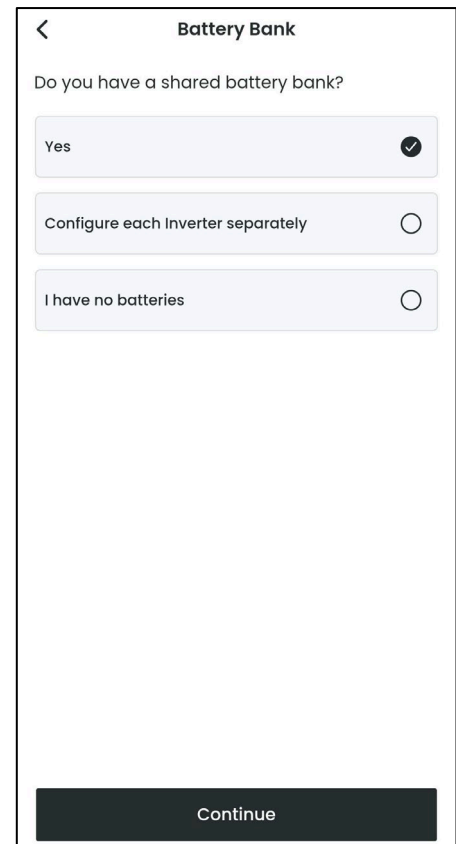


Figure 9.16 – Off-Grid Commissioning 3

- c. **Battery Bank** (when commissioning paralleled inverters):
- Select **“Yes”** if all inverters are connected to a single battery bank.
 - Select **“Configure each Inverter separately”** if each inverter uses a separate battery configuration. Configure each battery in the system.
 - Select **“I have no batteries”** if no battery storage is available.

After selecting the system’s shared battery configuration, select **“Continue”**.



- d. **Configure Batteries** (when commissioning paralleled inverters):
- On the Configure Batteries screen, configure the battery type for each inverter:
- Select each inverter to choose the battery type for the inverter.

After configuring each inverter’s batteries, select **“Continue”**.



Figure 9.17 – Off-Grid Commissioning 4

3. Battery Type

On the Battery Type screen, select the type of battery used by the station:

- EG4 Battery
- Lithium Compatible
- Lead-Acid / Non-Compatible
- No Batteries

Select “**Continue**” to proceed.

a. **Battery Model** (when using Lithium Compatible)

On the Battery Model screen, select the battery brand used by the system.

- EG4
- New EG4
- Pylon/UZ Energy
- GSL Energy
- Luxpowertek Protocol/Homegrid/Volthium
- Fortress
- Renogy/Sunwoda

Select the correct battery model, then select “**Continue**”.

Figure 9.18 – Off-Grid Commissioning 5

b. **Battery Capacity** (when using Lead-Acid/Non-compatible)

The Battery Capacity screen will only be displayed when selecting Lead-Acid/Non-compatible.

Enter the total battery capacity in amp-hours (Ah) for the system.

After entering the capacity value, select **“Continue”**.

4. **Phase Type**

On the Phase Type screen, select the station's phase configuration:

- Single Phase
- Three Phase

Select the correct phase type, then select **“Continue”**.

5. **Operating Mode**

On the Operating Mode screen, select how the system will prioritize power flow:

- Time of Use
- Self-Consumption

See section 6.5 for more information on each block action and included settings. Select the desired operating mode to configure parameters.

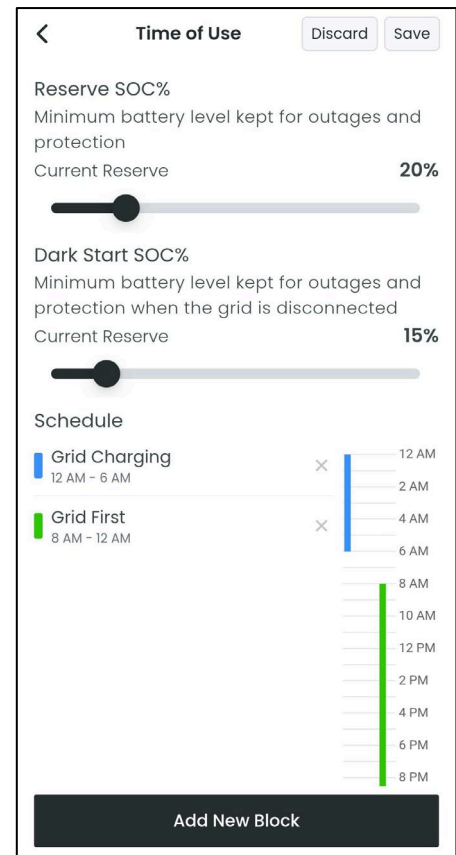
Figure 9.19 – Off-Grid Commissioning 6

a. Time of Use Configuration

If Time of Use is selected, configure the following:

- Reserve SOC%
- Dark Start SOC%
- Select **“Add New Block”** to schedule block actions for functions such as Grid Charging and Grid First.

Dark Start SOC% must be less than Reserve SOC%. Select **“Save”** to apply the configuration.



b. Self-Consumption Configuration

If Self-Consumption is selected, configure the following:

- Reserve SOC%
- Dark Start SOC%

Dark Start SOC% must be less than Reserve SOC%. Select **“Save”** to apply the configuration.

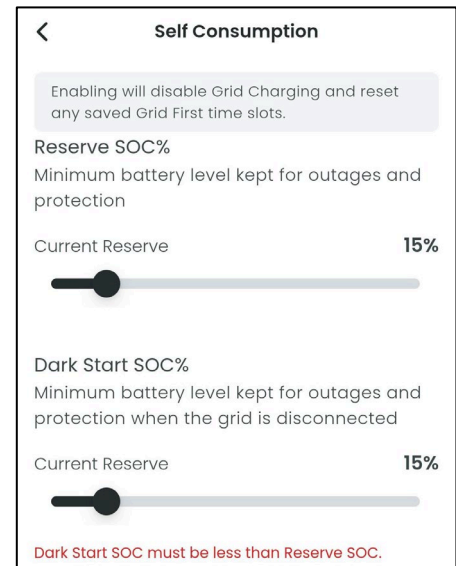
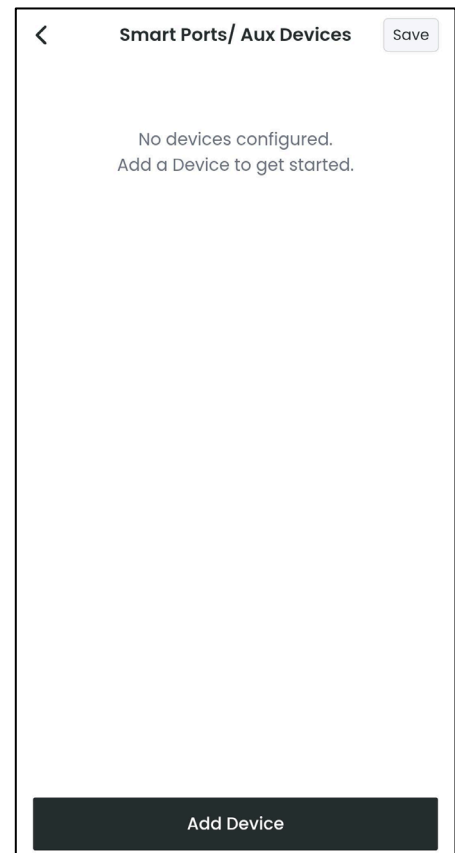


Figure 9.20 – Off-Grid Commissioning 7

6. Smart Ports / Aux Devices

On the Smart Ports / Aux Devices screen, users can configure supported auxiliary devices.

- Select **“Add Device”** to begin configuring an auxiliary device.
- Select **“Save”** to continue if no auxiliary devices are required. If no auxiliary devices are required, proceed to step 12.



7. Select Device Type

On the Select Device Type screen, choose the type of auxiliary device to add:

- Smart Load
- Existing PV Link
- Generator

See section 6.5 for more information on Smart Ports / Aux Devices settings and descriptions. Select the desired device type to configure parameters.

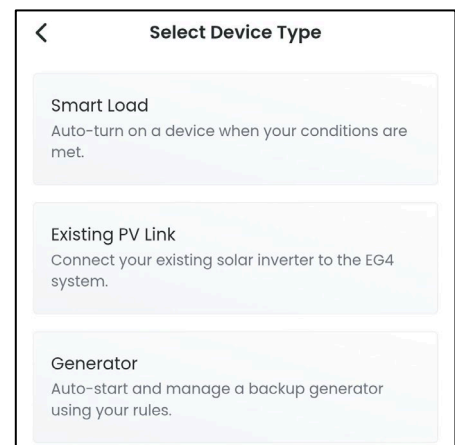


Figure 9.21 – Off-Grid Commissioning 8

a. Smart Load Configuration

If Smart Load is selected, configure the following:

- Grid Always On
- PV Power
- Smart Load Based On
- Start/End SOC%

After configuring these parameters, select “**Add Device**” to save the smart load settings.

The screenshot shows the 'Smart Load' configuration interface. At the top, there is a back arrow and the title 'Smart Load'. Below the title, there is a toggle switch for 'Grid Always On' which is currently turned off. Underneath it, the text reads 'Keep the smart port ON whenever grid is available.' Below that is a text input field for 'PV Power' with the value '0'. Further down, there is a section for 'Smart Load Based On' with two radio button options: 'SOC%' (selected) and 'Volts'. Below this, there are two text input fields: 'Start SOC (%)' with the value '100' and 'End SOC (%)' with the value '20'. At the bottom of the screen is a dark button labeled 'Add Device'.

b. Generator Configuration

If Generator is selected, configure the following generator operating parameters:

- Gen Boost
- Cooldown Time (M)
- Charge Based On
- Start/End SOC%/Volts
- Charge Limit (Amps)
- Rated Power (W)

After configuring these parameters, select “**Add Device**” to save the generator settings.

The screenshot shows the 'Generator' configuration interface. At the top, there is a back arrow and the title 'Generator'. Below the title, there is a toggle switch for 'Gen Boost' which is currently turned off. Underneath it, there is a text input field for 'Cooldown Time (M)' with the value '3'. Below that is a section for 'Charge Based On' with two radio button options: 'SOC%' (selected) and 'Volts'. Below this, there are three text input fields: 'Start SOC (%)' with the value '20', 'End SOC (%)' with the value '80', and 'Charge Limit (Amps)' with the value '30'. At the bottom, there is a text input field for 'Rated Power (W)' with the value '10'. At the bottom of the screen is a dark button labeled 'Add Device'.

Figure 9.22 – Off-Grid Commissioning 9

8. Smart Ports / Aux Devices Summary

After adding an auxiliary device, the screen displays a list of configured devices.

- Select **“Edit”** to modify an existing device.
- Select the trash icon to remove a device.
- Select **“Add Device”** to configure additional auxiliary devices.

Once all devices are properly configured, select **“Save”** to continue.



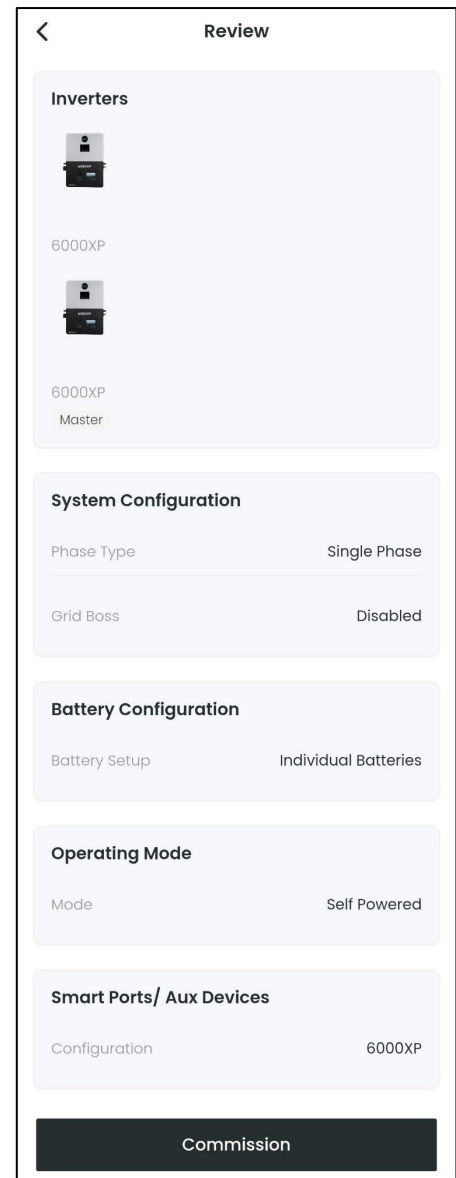
Figure 9.23 – Off-Grid Commissioning 10

9. Review

The Review screen provides a summary of the station configuration, including:

- Inverters and master designation
- System configuration
- Battery configuration
- Operating Mode
- Smart Ports / Auxiliary device configuration

Review all system information carefully. After verifying all information, select “**Commission**” to proceed.



10. Firmware

After Commissioning, the Firmware screen displays the current inverter and LCD screen firmware versions. From this screen, users may:

- Select “**View Changelog**” to review firmware update notes.
- Select “**Update Firmware**” to begin the firmware update process.

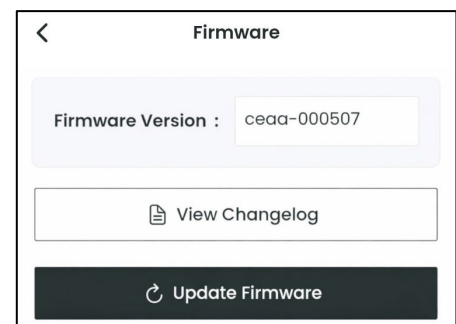


Figure 9.24 – Off-Grid Commissioning 11

Commissioning is now complete, and the off-grid system is fully configured and ready for normal operation.

EG4

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