APP Instructions

Solarman Business

EN

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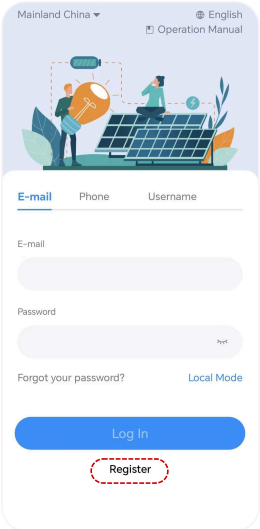
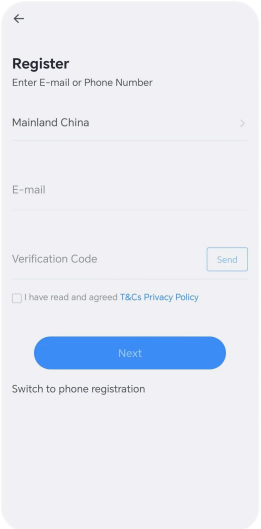
1 Download APP

Add the WiFi adapter and the connected device to the cloud server by Solarman Business website (https://cnpro.solarmanpv.com/login) or APP. Then you will be able to monitor the device and set parameters by PC or APP. The following is an example of APP.

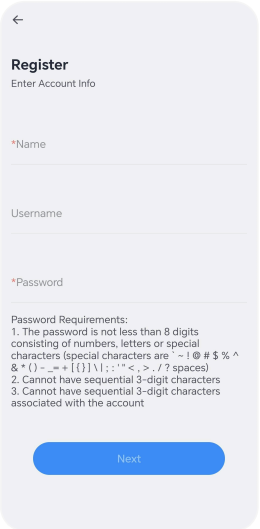
2 Registration and Login



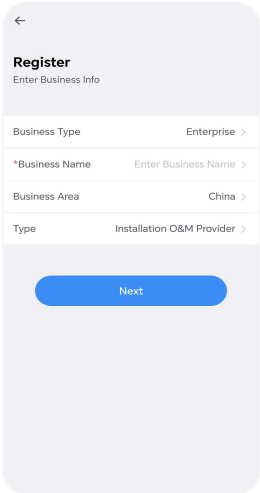
1. Account registration: After downloading the APP, launch it and tap "Register". Existing users may log in directly.

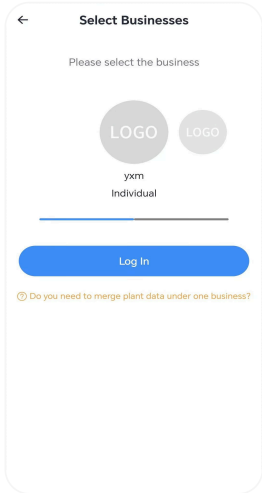


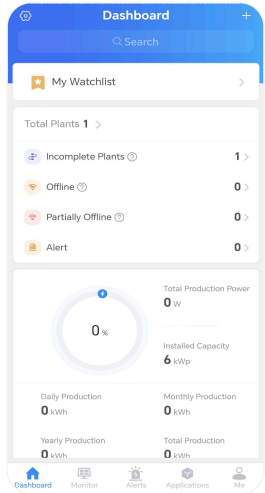
2. Registration method: Users can register using either a mobile number or an email address. As shown in the figure above, for email registration: choose the area first, enter your email address, and tap "Send" verification code; then input the received code, and tap "Next".



3. Enter account information: Set your username and login password (the password shall not be too simple), then tap "Next".





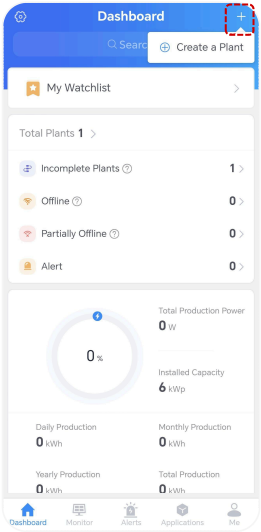


4. **Complete business information:** Select your business type, enter your business name, choose your business region, and specify the user affiliation type.

5. **Select business account:** Choose the business name created in Step 4 and tap to log in.

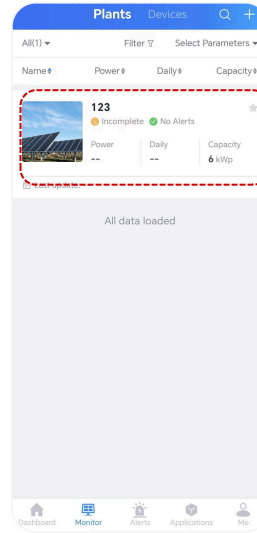
6. **Login completed:** After completing all the above steps, you will enter the main interface of the APP

3 Add Devices

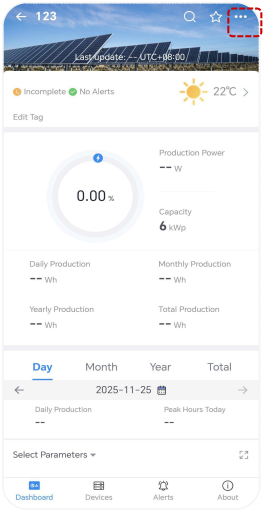


1. Log in to the APP. For new users without any devices, tap the "+" in the upper-right corner to begin adding a power plant.

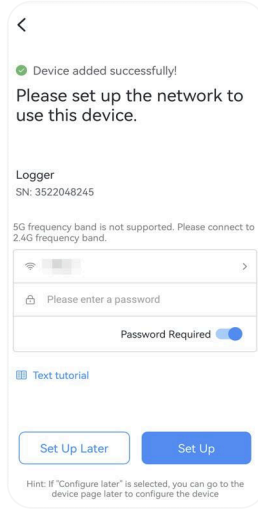
2. Fill in the required fields, including plant name, address, and installed capacity. Complete the optional fields as needed, then tap "Save" in the upper-right corner.



3. On the "Monitoring" screen, select the power plant you created.

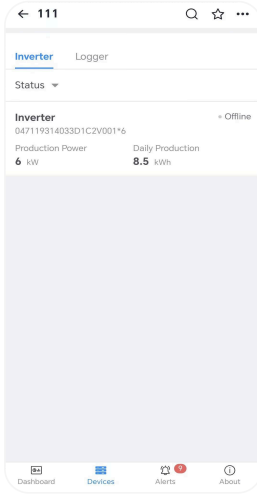


4. Tap the upper-right corner to add a data logger. Scan the QR code or manually enter the serial number to add your Wi-Fi module.



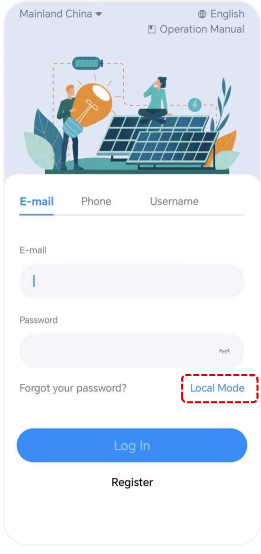
5. Turn on phone Bluetooth. Choose your Wi-Fi, enter password, and tap "Set Up" to confirm. Wait 1-2 minutes for completion. If setup fails due to weak signal, simply retry. **Note:** Make sure the inverter is normal working. Correct connection is shown by a solid light on the module.

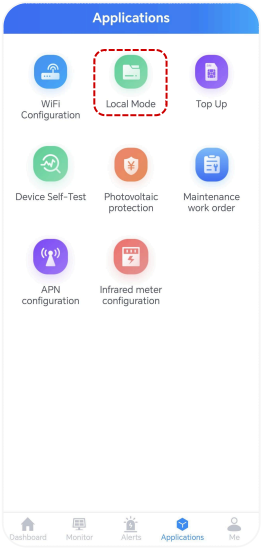
6. Once connected, go to "Monitor"screen and tap your plant. View the energy dashboard showing live power flow: PV, battery, grid, and load.



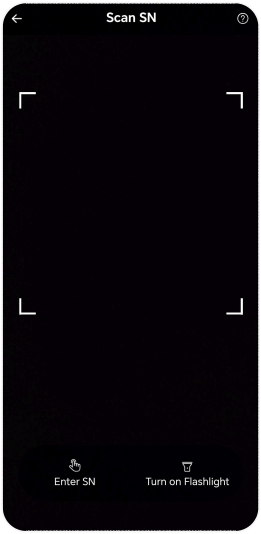
7. Navigate to the device page of your plant to view the inverter and data logger. **Note:** After adding a device, the inverter status may take some time to appear in the list.

4 Local Connection

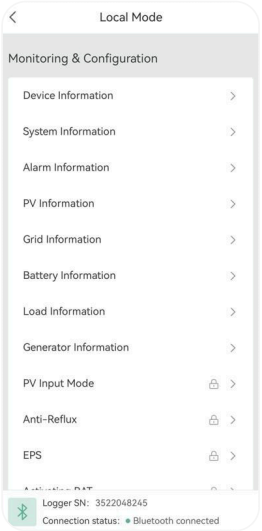




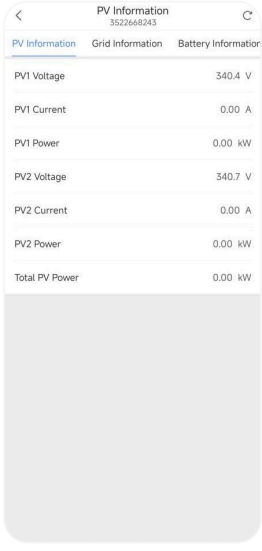
1. On the login screen or within the “Application” interface, tap "Local Mode".



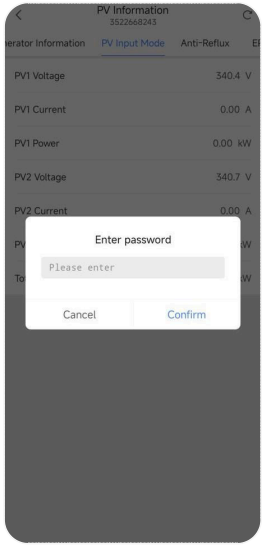
2. Scan the QR code on the module, or tap "Enter SN" to input it manually. **Note:** Ensure the inverter is powered on during connection. A solid indicator light on the module confirms successful communication with the inverter.



3. After the above steps, enter the "Monitoring & Configuration" page. You can view and set the parameters.



4. After clicking the corresponding data, the detailed data will be displayed.

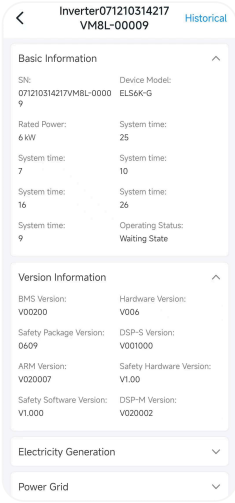


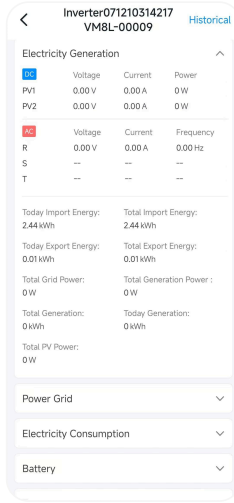
5. Enter the password before setting parameters, please contact the after-sales for the password. For parameter settings, please refer to Chapter 11 Remote Control.

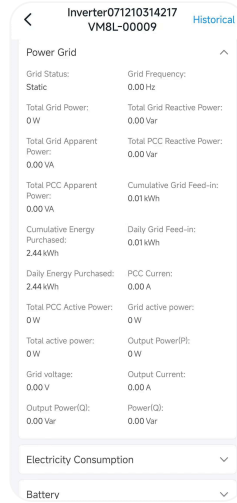
5 Device Situation

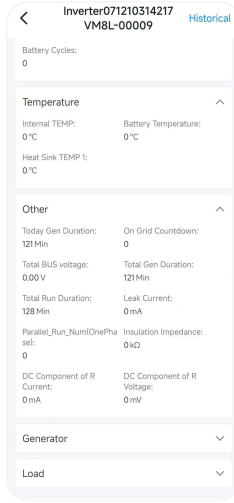
Swipe right on the plant interface to view the device information.

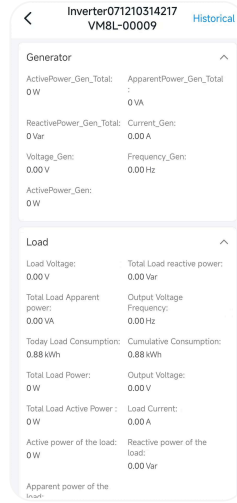
6 Real-time Data





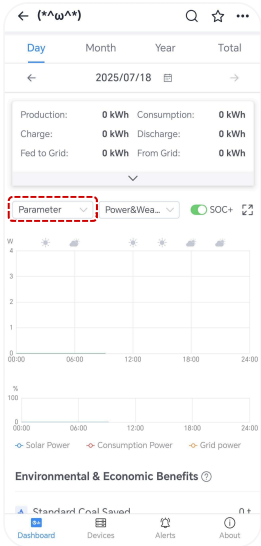


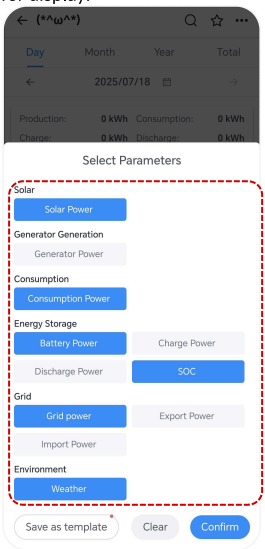




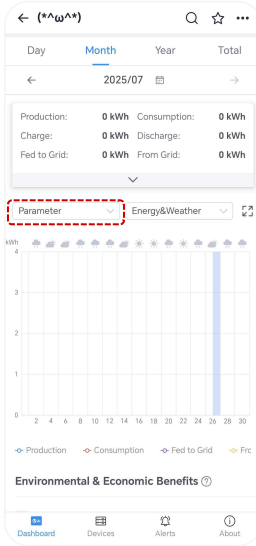
7 Data Statistics for All Inverters

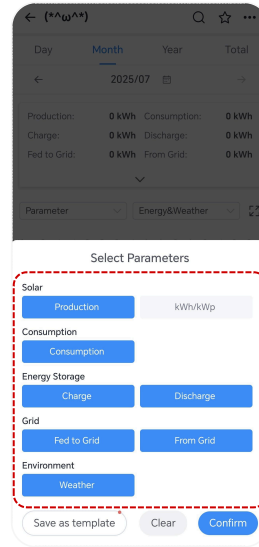
On the plant creation homepage, swipe down to view the data dashboard: Statistical charts for all inverters.
Click “Parameter”: Selection to choose specific parameters for display.





In daily statistics mode, the above right parameters can be viewed.

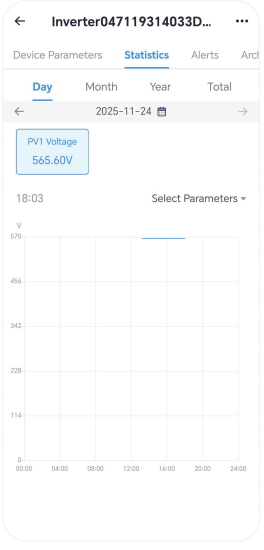


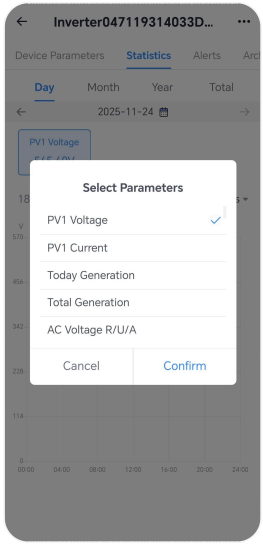


When selecting monthly, yearly, or total statistics, the above right parameters are available.

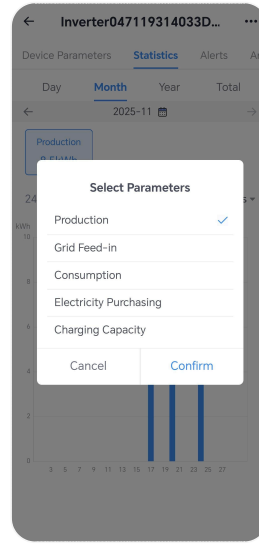
8 Data Statistics for the Inverter

From the home page, navigate to the “Device” interface (for specific steps, refer to Section 3, Step 6), then select Devices → corresponding inverter → “Statistics” to view daily, monthly, yearly, and cumulative data.





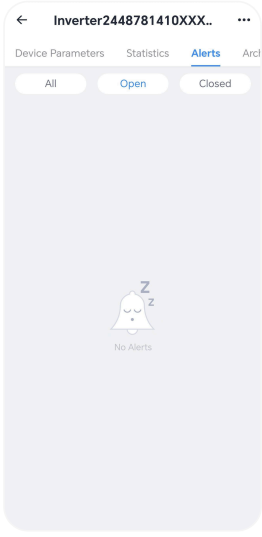
When viewing daily data, you may select up to 10 data types., and click " ✓ " to confirm your selection.

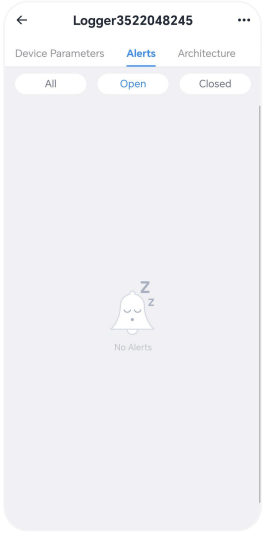


When viewing monthly, yearly, or total statistics, you may select up to 6 data types, and click " ✓ " to confirm your selection

9 Device Alarm

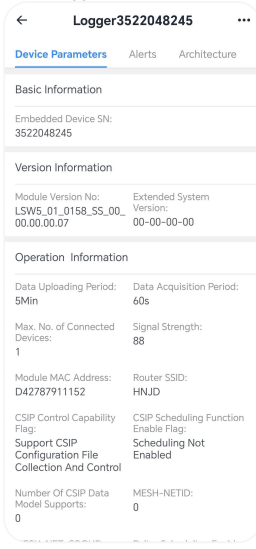
Click home page-Device-Corresponding inverter/Logger-Alarm, you can view all anomaly alerts, including Open and Closed cases.



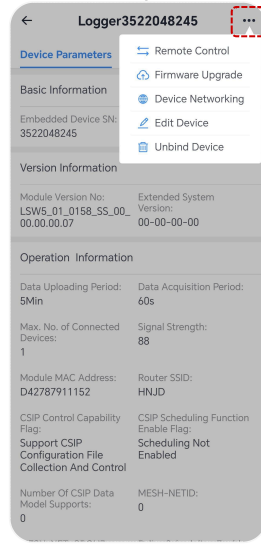


10 Logger Information

Click home page-Device-Corresponding logger-"Device Parameters", you can view the logger information.



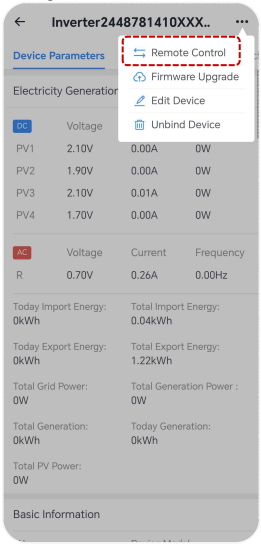
Click home page-Device-Corresponding logger-"...", you can set network, edit device, delete device and upgrade the firmware.



11 Remote Control

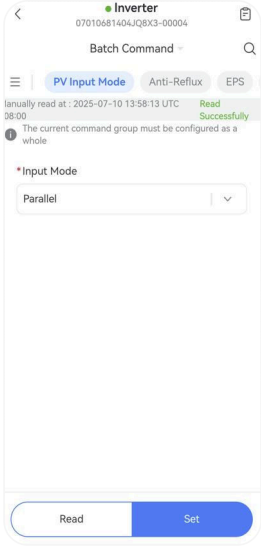
Remote control allows you to configure various functional parameters of the inverter. When modifying settings, if incorrect data entries prevent configuration, first tap "Read" to retrieve current values before making changes.

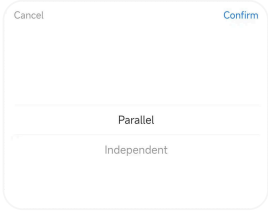
Click home page-Device-Corresponding inverter-"..."- “Remote Control”.



11.1 PV Input Mode

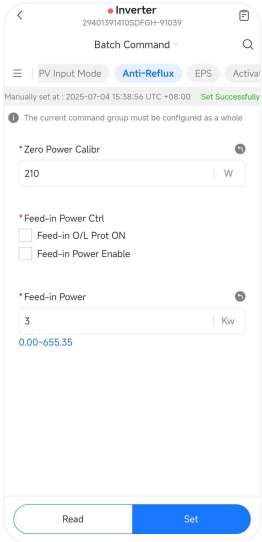
Since the inverter is designed with two PV input terminals, select "Input Mode" as "Parallel" or "Independent" according to the connection method between the PV array and the inverter. And then, click "Confirm" and "Set".





11.2 Anti-Reflux

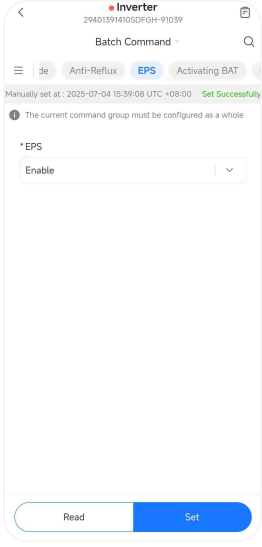
Enable the "Feed-in Power Enable" and set the "Feed-in Power" before using this function. And then, click "Set". The "Feed-in O/L Prot ON" can be enabled as needed. Once activated, a fault will be triggered if the feed-in power exceeds the set value.

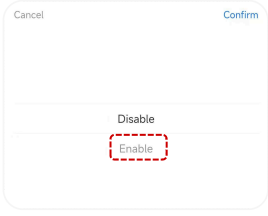


Item	Full Name	Description
Feed-in O/L Prot ON	Feed-in Power Overload Protection ON	When enabled, the inverter will shut down and switch to grid bypass mode in the event of feed-in overload.
Feed-in Power Enable	Feed-in Power Enable	When enabled, the power fed into the grid can be limited.
Feed-in Power	Feed-in Power	The power fed into the grid can be set as required.
Zero Power Calibr	Zero Power Calibration	If the set feed-in power is 0W while the actual power fed into the grid is 50W, set the value to 50W in the “Zero Power Calibr” field.

11.3 EPS

Enable this parameter to realize the function of an uninterrupted power supply (UPS). The battery will supply power to the load during the absence of the grid. Set "EPS" (Emergency Power Supply) as "Enable". And then, click "Confirm" and "Set".



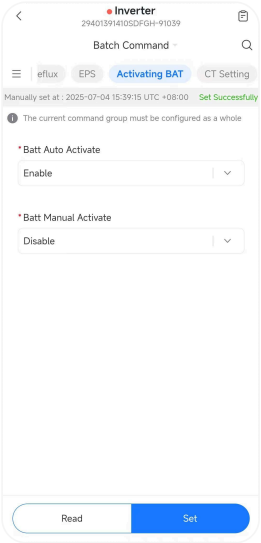


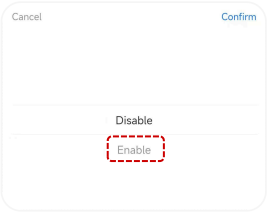
11.4 Activating BAT

When a battery BMS communication error occurs due to severe insufficient voltage, battery activation is required to recover the battery. Battery activation is divided into auto-activation and manual activation: set either "Batt Auto Activate" to "Enable" or "Batt Manual Activate" to "Enable", then tap "Confirm" and "Set".

"Batt Auto Activate" allows the battery to activate automatically after undervoltage, while "Batt Manual Activate" enables manual activation for undervoltage recovery. Ensure the battery mechanical switch is closed during activation.

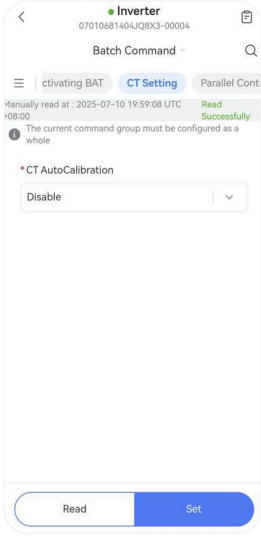
Note: "Batt Auto Activate" is not available for EHD series, ELD series and ELS7.5-15K series models.

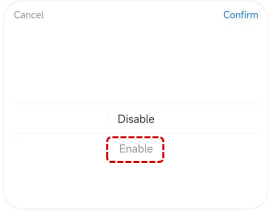




11.5 CT Setting

If the external CT direction is installed incorrectly, use the CT direction reverse function without changing the physical CT installation. Set "CT AutoCalibration" to "Enable", then click "Confirm" and "Set".





11.6 Parallel Control

When the parallel operation system is not in use, set "Parallel" to “Disabled the AC Parallel”. When using a parallel system, set "Parallel" to "Enable the AC Parallel" or "Enable the AC+BAT Parallel".

Enable the AC Parallel: Each inverter is connected to the batteries separately.

Enable the AC+BAT Parallel: Muti-inverters are connected to one battery.

For parallel operation, configure parameters according to different inverter models as follows:

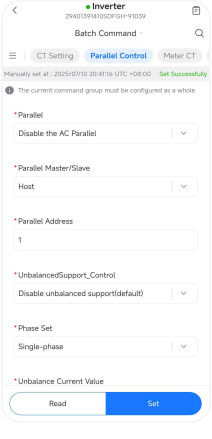
- **ELS3-6K Series and RLS Series Models**

For a single-phase parallel system, set "Phase Set" to "Single-phase". Designate one inverter as the "Host" unit, and the others as "Slave" units. The address does not need to be set manually; it will be uniformly assigned by the system. For a three-phase parallel system, set "Phase Set" to Phase A, Phase B, and Phase C for the respective host units of each phase; set all other inverters as Slave units corresponding to each phase. The address does not need to be set manually; it will be uniformly assigned by the system. After completing parameter configuration, tap "Confirm" and "Set".

- **EHD Series, ELD Series, ELS7.5-15K Series and Other Models**

For a single-phase or split-phase parallel system, set "Phase Set" to “Single-phase”. Designate one inverter as the "Host" unit, and the others as "Slave" units. Assign unique parallel operation addresses to both host and slave units—duplicate addresses are not allowed. After completing parameter configuration, tap "Confirm" and "Set".

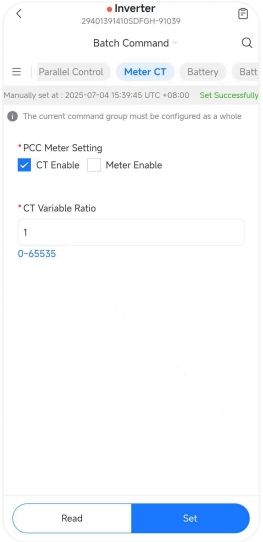
Note: The three-phase parallel system is only available for ELS3-6K series models. EHD series, ELD series, ELS7.5-15K series and other models do not support the three-phase parallel function for now.



11.7 Meter CT

The meter and CT settings can be configured based on the actual needs under “PCC Meter Setting” (Point of Common Coupling Meter Setting). After setting the parameters, click "Set".

Note: This function is read-only for the ELD series and EHD series at present.



11.8 Battery

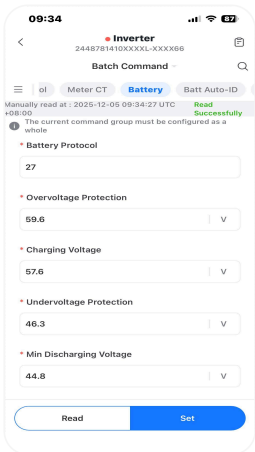
Users need to confirm the model and brand of the battery in use first, then refer to the "EPEVER Inverter-Battery Protocol Compatibility List" to find the corresponding battery protocol number for the confirmed battery, and finally configure the "Battery Protocol" (mandatory: enter the obtained battery protocol number), "Max Charging Current" (optional: auto-detection supported if not set), and "Max Discharging Current" (optional: auto-detection supported if not set) based on the battery information.

The battery models and brands supported by the whitelist are detailed in the Battery Instructions Manual of the corresponding product, and you can visit:

https://www.epever.com/support/documents to obtain the battery user manual and the compatible battery protocol list for the corresponding product.

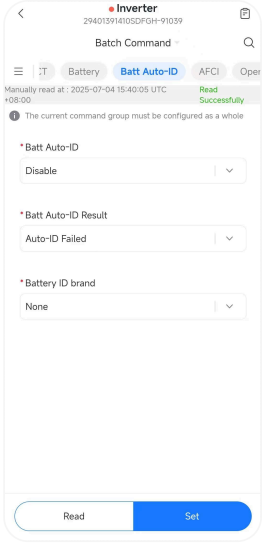
- The "DOD (On-Grid)" represents the maximum discharge depth of the battery when connected to the grid. For example, if the "DOD (On-Grid)" is set to 80%, it means the battery will stop discharging when the battery SOC drops to 20%.
- The "DOD (Off-Grid)" represents the maximum discharge depth of the battery when there is no grid power. For example, if the "DOD (Off-Grid)" is set to 80%, it means the battery stops discharging when the battery SOC drops to 20%.
- The "Discharge ReturnDiff" indicates the threshold for resuming battery discharge. For example, if the "DOD (Off-Grid)" is set to 80%, and the "Discharge ReturnDiff" is set to 20%, it means the battery stops discharging when the battery SOC drops to 20%, and resumes discharging when the battery SOC is charged back up to 40%.

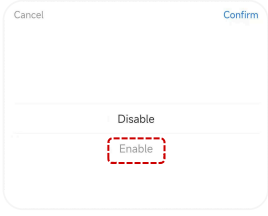
Set the corresponding parameters, and click "Set".



11.9 Batt Auto-ID

Set "Batt Auto-ID" to "Enable", then the inverter can automatically identify the battery protocol, no manual setup is required (only the battery models listed in the battery whitelist can be automatically identified). After setting the parameters, click "Confirm" and "Set".



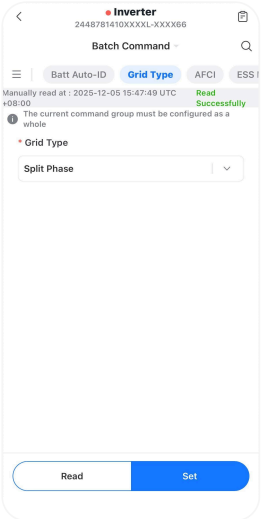


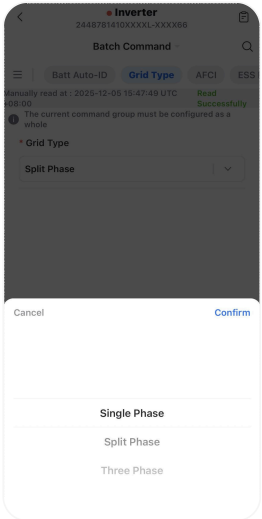
11.10 Grid Type

Select "Three-Phase" or "Split-Phase" based on the actual grid type: choose Split-Phase for L1/L2/N 120/240VAC grids and Three-Phase for L1/L2/N 120/208VAC grids, then click "Set".

For "Safety Standard", options include "UL1741", "UL General", and "UL 120/208 3phase". When "UL General" is selected, additional configuration of rated voltage, over/under-voltage protection, and over/under-frequency protection parameters is required; otherwise, the inverter will not operate normally.

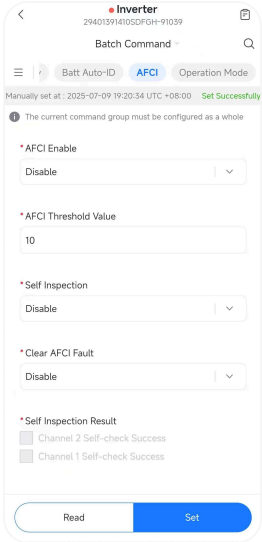
Note: Not available for the single-phase unit.

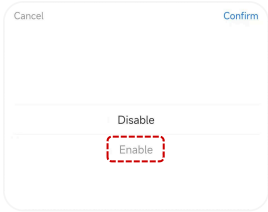




11.11 AFCI

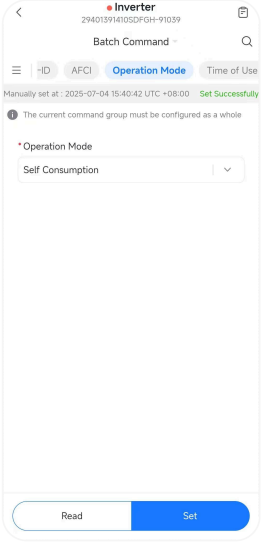
When an AFCI module is optionally installed, set "AFCI Enable" and "Self Inspection" to "Enable", then click "Confirm" and "Set".





11.12 Operation Mode

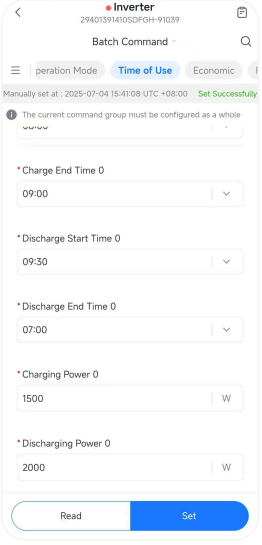
"Operation Mode" includes "Time of Use", "Economic", "Self Consumption", and "Peak Shaving". Select the operation mode based on user's actual needs, then click "Set".



11.13 Time of Use

When the "Operation Mode" is selected as "Time of Use" mode, related parameter settings are required. Users set the corresponding "Charge Start Time", "Charge End Time", "Charging Power", "Discharge Start Time", "Discharge End Time" and "Discharging Power" according to the actual needs, and the device allows the setting of multiple time period rules. Set "Time of Use" to "Charge Enable" and "Discharge Enable", only when the settings are enabled can the rules take effect. Set the corresponding parameters, and click "Set". It is recommended to calibrate the time on a monthly basis.

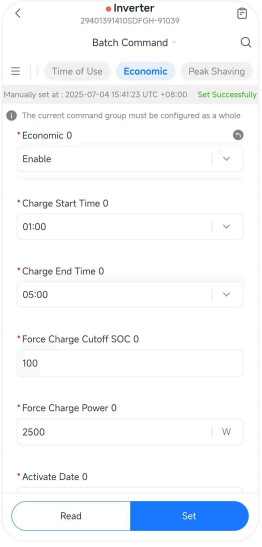
Note: The configuration of multiple time-period rules is not supported at present.



11.14 Economic

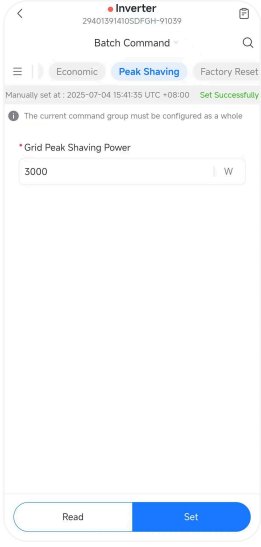
When the "Operation Mode" is selected as "Economic" mode, related parameter settings are required. The user sets the corresponding "Rule Repeat", "Charge Start Time", "Charge End Time", "Force Charge Power" and "Force Charge Cutoff SOC" based on their needs, and the device allows the setting of multiple rules. Set "Economic-Rule" to "Enable", only when the setting is enabled can the rules take effect. Set the corresponding parameters, and click "Set". It is recommended to calibrate the time on a monthly basis.

Note: The configuration of multiple time-period rules is not supported at present.



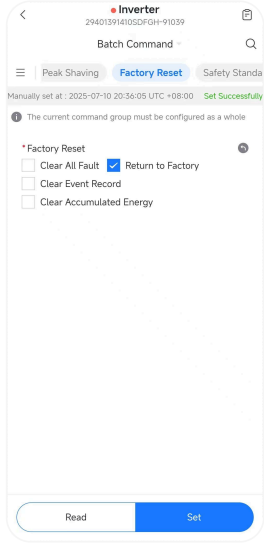
11.15 Peak Shaving

When the operation mode is selected as "Peak Shaving" mode, related parameter settings are required. User sets the grid peak shaving power according to their needs, namely, the upper limit of power allowed to buy from the grid. Set the grid peak shaving power and click "Set".



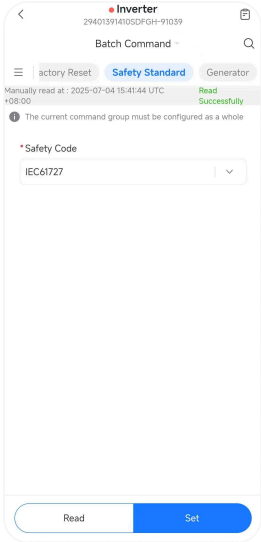
11.16 Factory Reset

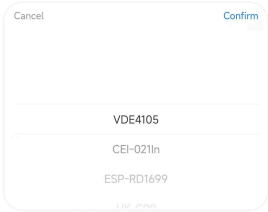
Select the corresponding parameters, and click "Set".



11.17 Safety Standard

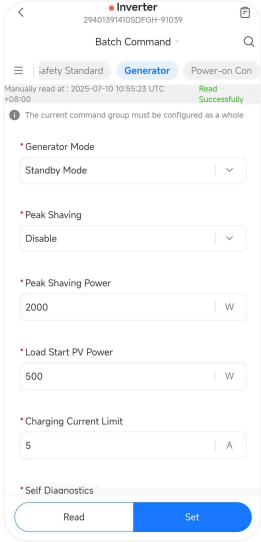
Select the corresponding safety code based on local grid connection requirements, and click "Confirm" and "Set".

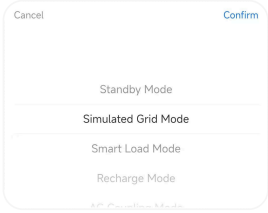




11.18 Generator

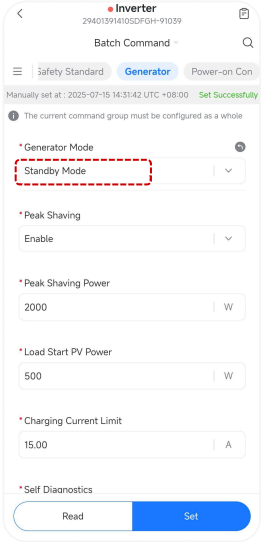
Set the operation mode of the inverter's generator access function, include "Standby Mode", "Simulated Grid Mode", "Smart Load Mode", "Recharge Mode" and "AC Coupling Mode". After setting the parameters, click "Confirm" and "Set".





11.18.1 Standby Mode

When the "Generator Mode" is selected as "Standby Mode", the generator function is disabled.

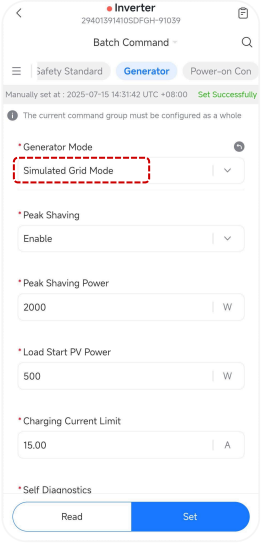


11.18.2 Simulated Grid Mode

Connect the generator to the Grid port. The inverter will automatically enable the anti-backflow function to prevent injecting current into the generator, which could trigger overvoltage protection. Set the overload power of the generator according to its load capacity.

Click "Read" to obtain the default parameters of the APP. Select the "Generator Mode" as "Simulated Grid Mode". After setting the parameters, click "Set" to apply. You can configure parameters based on your requirements.

Note: Load Start Voltage ≥ Load Off Voltage plus 1V, Load Start SOC ≥ Load Off SOC plus 4%

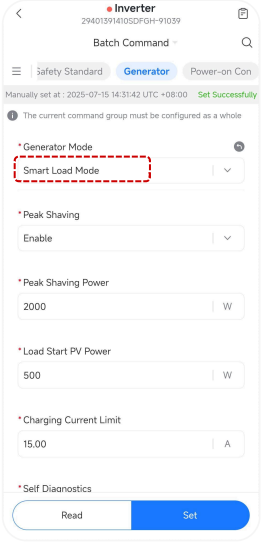


11.18.3 Smart Load Mode

Connect the smart load to the GEN port. The inverter supplies power to the smart load after both the battery and PV power meet the conditions.

Click "Read" to obtain the default parameters of the APP. Select the "Generator Mode" as "Smart Load Mode". After setting the parameters, click "Set" to apply. You can configure parameters based on your requirements.

Note: Load Start Voltage ≥ Load Off Voltage plus 1V, Load Start SOC ≥ Load Off SOC plus 4%

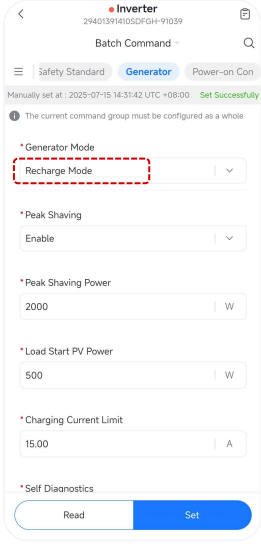


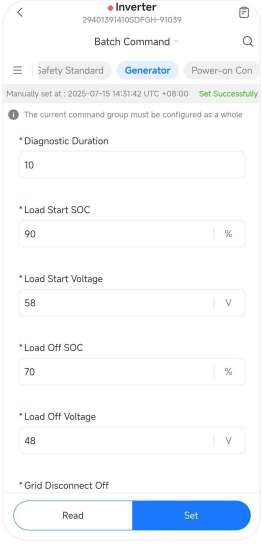
11.18.4 Recharge Mode

After connecting the generator to the GEN port, it can charge the battery directly, and supply power to the critical load simultaneously.

Click "Read" to obtain the default parameters of the APP. Select the "Generator Mode" as "Recharge Mode". After setting the parameters, click "Set" to apply. You can configure parameters based on your requirements.

Note: Load Start Voltage ≤ Load Off Voltage minus 1V, Load Start SOC ≤ Load Off SOC minus 4%

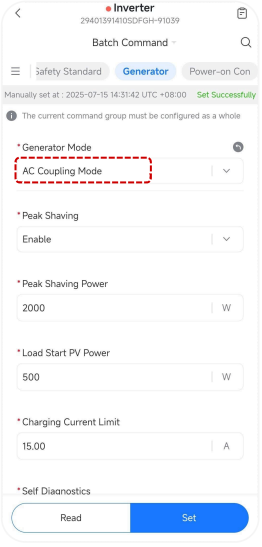




11.18.5 AC Coupling Mode

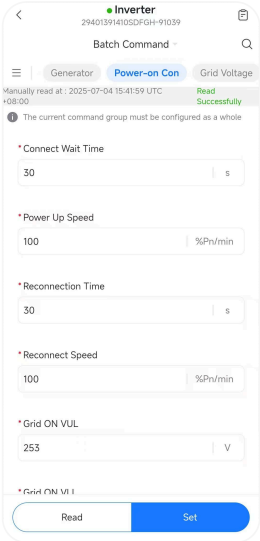
Click "Read" to obtain the default parameters of the APP. Select the "Generator Mode" as "AC Coupling Mode". After setting the parameters, click "Set" to apply. You can configure parameters based on your requirements.

Note: Load Start Voltage ≤ Load Off Voltage minus 1V, Load Start SOC ≤ Load Off SOC minus 4%



11.19 Power-on Con

The power-on parameters are automatically synchronized based on the selected "Safety Code". Users can also customize these parameters. After setting the parameters, click "Set".

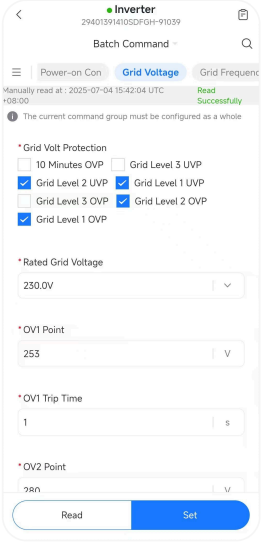


Item	Full Name	Description
Power-on Con	Power-on Configuration	Set the power-on parameters
Power Up Speed	Power Up Speed	Ramp-up rate to full load within 1 minute
Reconnect Speed	Reconnect Speed	Ramp-up rate to full load within 1 minute after grid fault recovery
Grid ON VUL	Grid ON Voltage Upper Limit	-
Grid ON VLL	Grid ON Voltage Low Limit	-

11.20 Grid Voltage

Set the overvoltage or undervoltage protection parameters for voltage level 1, voltage level 2 and voltage level 3, to protect the inverter. When modifying the "Rated Grid Voltage", the over/under-voltage protection values and the upper/lower limits of the grid voltage in the power-on parameters must be adjusted accordingly. After setting the parameters, click "Set".

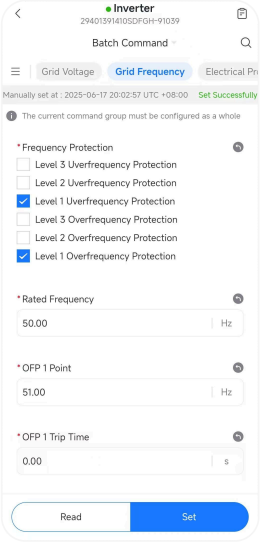
Note: Confirm the correct configuration of the "Grid Type" (including Split-Phase and Three-Phase) before setting the "Rated Grid Voltage".



Item	Full Name
Grid Level 1 OVP	Grid Level 1 Over-voltage Protection
UVP	Under-voltage Protection
OV1 Point	Grid Level 1 Over-voltage Protection Value

11.21 Grid Frequency

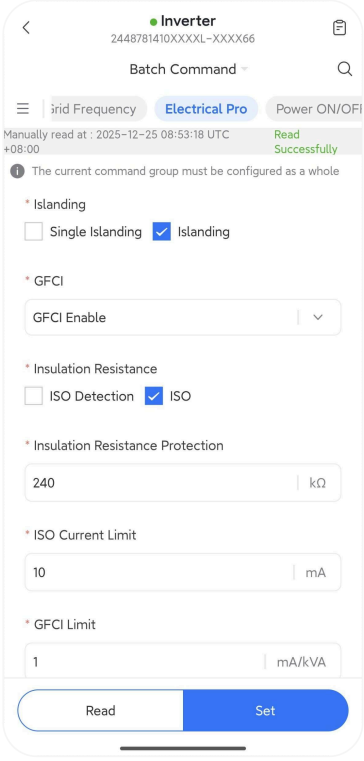
Set the overfrequency or underfrequency protection parameters for voltage level 1, voltage level 2 and voltage level 3, to protect the inverter. When modifying the "Rated Frequency", the overfrequency and underfrequency protection values and the upper/lower limits of the frequency in the power-on parameters must be adjusted accordingly. After setting the parameters, click "Set".



Item	Full Name
OFP	Over-frequency Protection
UFP	Under-frequency Protection
OFP1 Point	Level 1 Over-frequency Protection Value

11.22 Electrical Pro

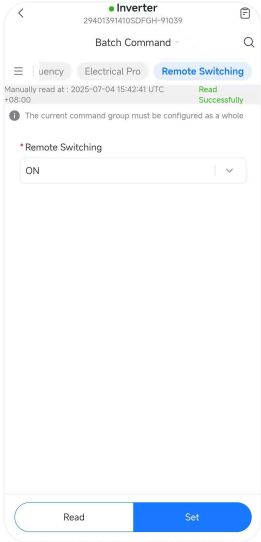
Set electrical relevant protection parameters. In grid regions where it is necessary to bond the grid neutral (N) and protective earth (PE) together, the "Grid PEN Bond Detect" must be enabled. Failure to do so will result in the inverter being unable to operate. After setting the parameters, click "Set".

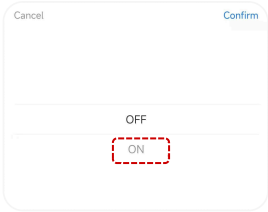


Item	Description
Electrical Pro	Electrical Protection
Single Islanding	Single-phase Islanding Enable
Islanding	Islanding Enable

11.23 Remote Switching

Users can remotely control the power on/off of the inverter by APP. Set "Remote Switching" to "ON", then click "Confirm" and "Set".

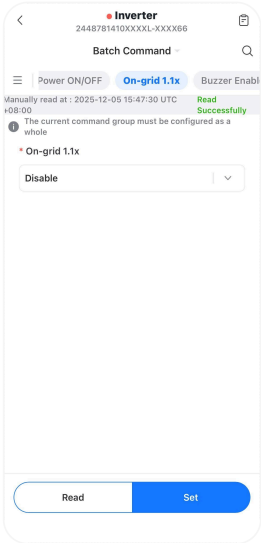


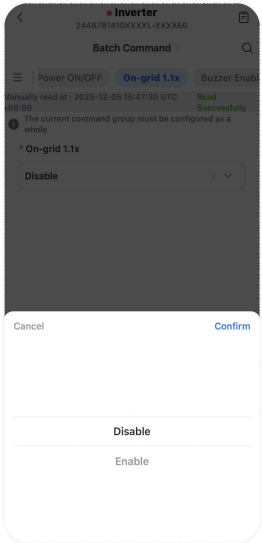


11.24 On-grid ×1.1 Enable

Set "On-grid ×1.1 Enable" to "Enable" when the unit needs to operate at 1.1× power, then click "Confirm" and "Set".

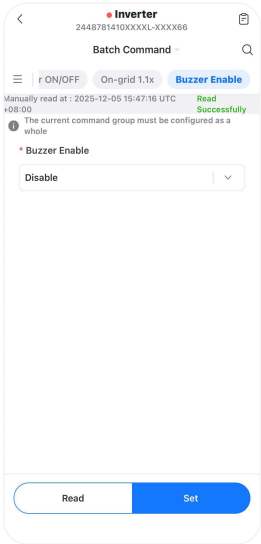
Note: This setting is not available for the EHD series and ELD series.

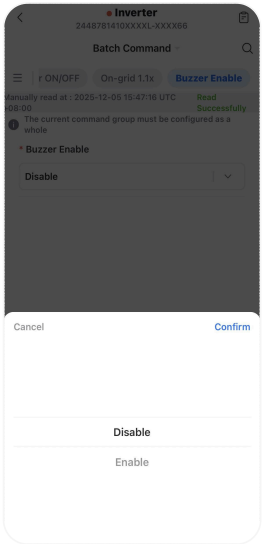




11.25 Buzzer

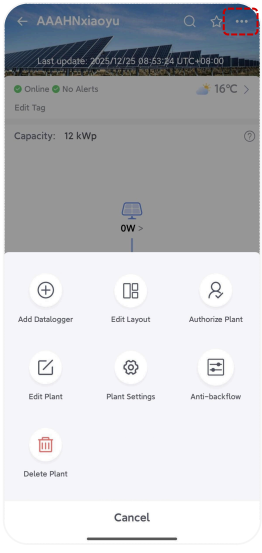
To turn the buzzer alarm on or off, configure the "Buzzer" setting, then click "Confirm" and "Set" after verification.



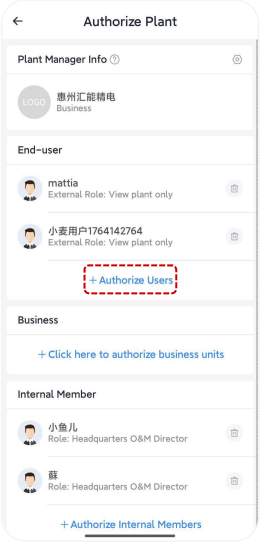


12 Device Authorization

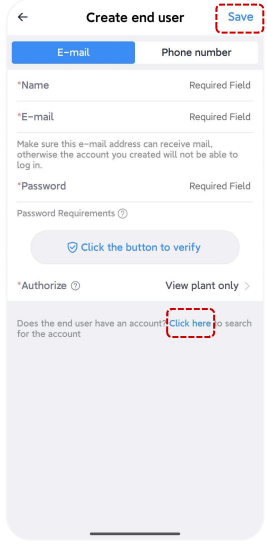
After distributors or installers add a data collector via the Solarman Business APP, end-users cannot add the same collector again. Distributors or installers must authorize end-users through the APP before end-users can log in and use the collector. Specific authorization steps are as follows:



Step 1: Follow the device addition instructions in Chapter 3 Add Devices to navigate to the interface for Step 6. Tap "..." on the upper-right corner to display the screen shown above, then tap "Authorize Plant".



Step 2: On the authorization page, select from the options: End-user, Business and Internal Member. Tap "Authorize Users" under the End-user column.



Step 3: Existing account: Tap “Click Here” → Search via phone/email → Tap “+” to add.

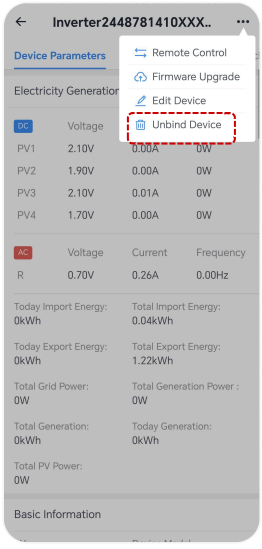
No account: Create via phone/email → Tap “Save” (top-right) → Use the displayed name, phone/email, and password to log in to the APP.

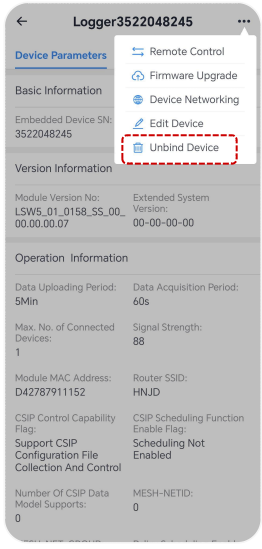
Select permission: View Only / View & Edit / View, Edit & Delete.

Return to Step 2 to check authorized end-user info.

13 Delete Device

Click home page-Device-Corresponding inverter or logger-"..."- "Unbind Device" to delete the device. Each device can only be bound to one account for use. When you need to switch to another account to use the device, you must first delete the device; before deleting the device, other accounts cannot add the device





Any changes without prior notice! Version number: V1.1

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