

Installer APP&WEB Guide

V1.1 May 2025

Note: Please read this manual before using this product and retain it for future reference. Due to ongoing product improvement, the design and specifications may vary from the actual unit. All diagrams are therefore for reference only and the actual unit is to be considered as standard.

Contents

goMSolar guide	02
Download the goMSolar App	02
Register an Account	02
Connecting to the HEMS	03
Establish Bluetooth Connection	03
Quick Settings	04
Onboarding the Heat Pump	05
Onboarding the EV Charger	06
Onboarding the AC-Coupled Meter	07
Start Operation	07
Energy flow diagram	08
Maintenance	08
Alarm Management	14
Settings	20
Web Manual	34
Register an Account	35
Home	35
User Functions	35
Installer Functions	36
Alarms	36
History	37
Settings	37
Details	41
Plants	41
System	41
Appendix	44
Trademarks, Copyrights and Legal Statement	45
Data Protection Notice	45

The Household Energy Management System (HEMS) offers both user and installer illustrations are shown for reference purposes only and may differ from the app. apps. Support for the apps is guaranteed for at least 5 years from date of purchase.

goMSolar guide

This app is for professional installers only.

1. Download the goMSolar App

Please download the app using one of the following methods:

Method 1: Scan the following QR code and download the latest version.



Method 2: Search for goMSolar on the App Store or Google Play app market and download the latest version.

2. Register an Account

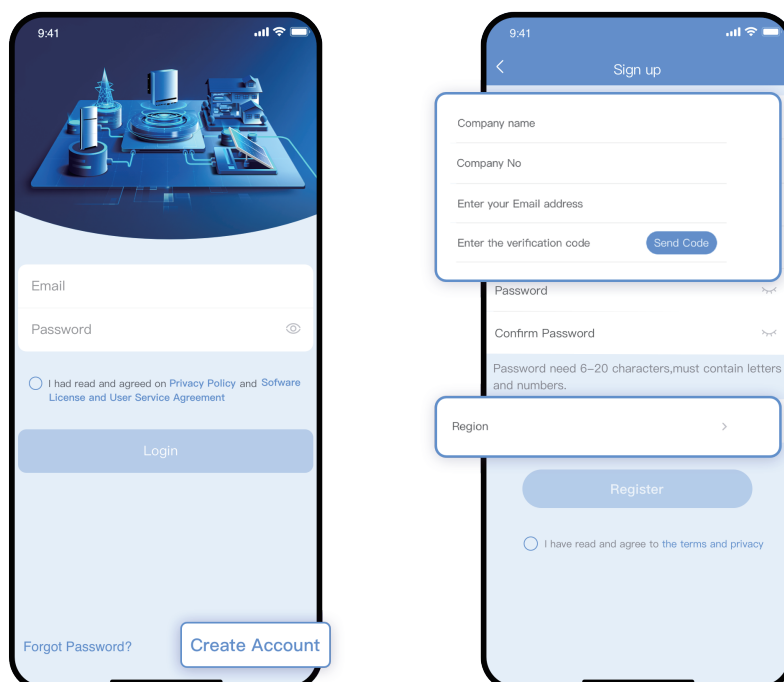
If you already have an installer account, please skip this step and proceed to login to the app using your phone number or email address.

Alternatively, create a new account as follows (please ensure that you have your company number, provided by the supplier, at hand):

Click on "Create Account".

Fill in the relevant fields and click on "Send Verification Code". You will be sent a code to the e-mail address that you provided.

Enter this code in the field provided and press "OK" to continue.



Connecting to the HEMS

3. Establish Bluetooth Connection

Note:

- All the devices required for the setup should be installed before proceeding with the configuration.
- This User Manual includes features applicable for devices with firmware version V15.0.6 or later.

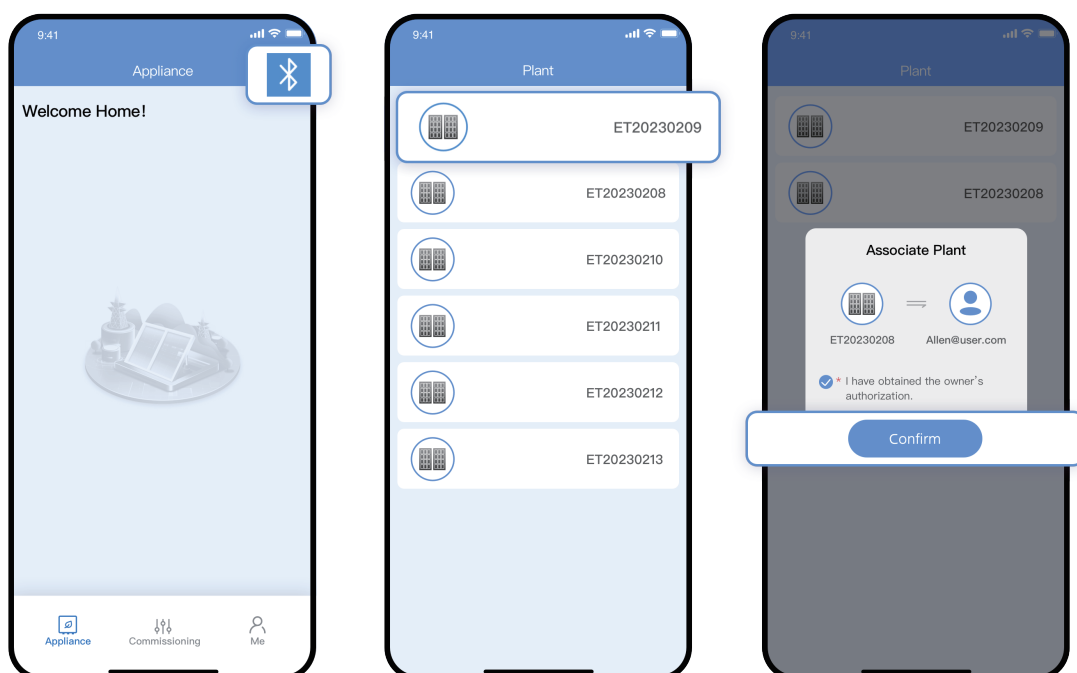
- Make sure that the device you wish to connect to is powered on. In the goMSolar app, tap on the Bluetooth icon, in the upper right-hand corner of the screen, to search for available devices.
- Click on the device to connect. Note that the app will locate all compatible wireless modules, not just the HEMS.
- The app will search for all hardware physically connected to the HEMS. If the list is incomplete, cancel the process and recheck the connections before trying again.

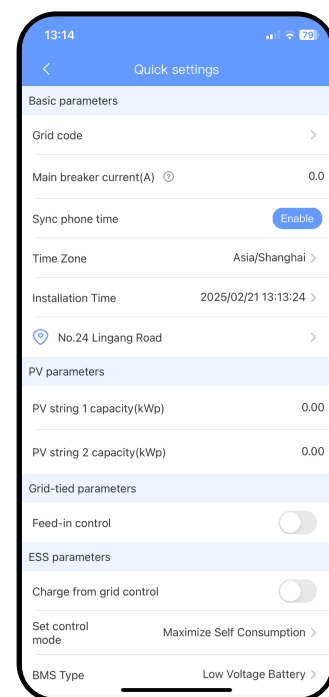
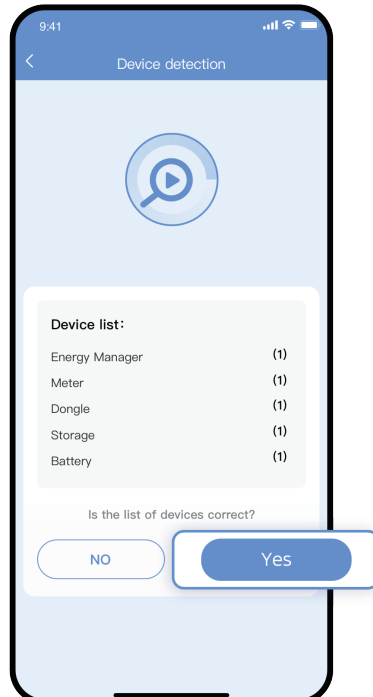
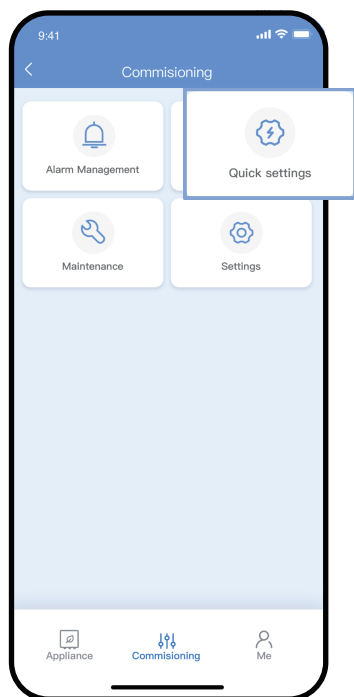
After tapping on “Proceed” you will be directed to the quick settings page where it is necessary to input the installation time. Optionally, you may configure the photovoltaic capacity and other variables.

When the configuration is complete, the HEMS will start automatically.

Note:

Please ensure that all components are listed including PV systems, additional EMS, energy storage converts, batteries, communication modules and smart meters. Missing elements could result in unusual loads.





4. Quick Settings

From the home screen tap on the “Commissioning” icon at the bottom of the screen. Then tap on “Quick Settings”

- The system will check the type a number of sub devices connected to the on-boarded equipment in real time.
- The installer can configure devices further in the “Quick Settings” section.
- The following parameters can be configured here:

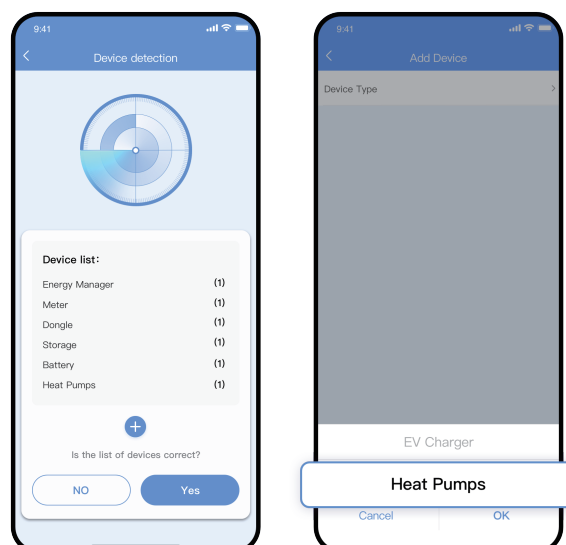
Parameter	Description	Value Range
Grid Code	Set this parameter based on the grid code of the country or region where the inverter is used and the inverter application scenario.	For detailed information please refer to Appendix 1
Main breaker current	When the current from grid over this value, the battery charging current will be limited. This feature is only available in Germany.	0 - 63A
Time Zone	The time zone where the device is located	/
Installation Time	Equipment installation time	/
PV String 1 Capacity	Insert the power range of the PV1 string.	0 - 10kW
PV String 2 Capacity	Insert the power range of the PV2 string.	0 - 10kW
Feed-In Control	Allow the user to control feed-in	<ul style="list-style-type: none"> • Disable • Enable

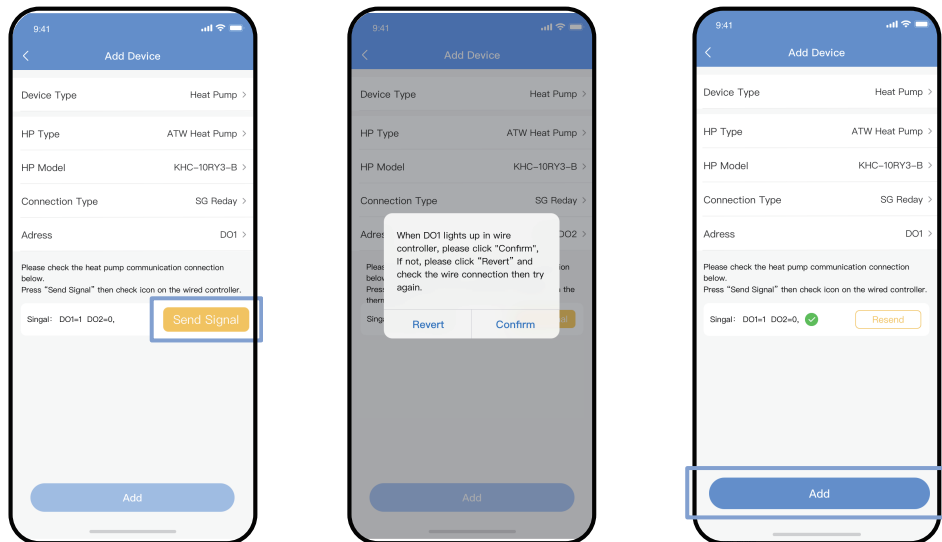
Limit Control	Set limits per phase or for the entire system	<ul style="list-style-type: none"> • All phase • per phase
Maximum Feed-In Power	Maximum power of feed to grid	0 - 10kW
Charge from Grid Control	Allow the battery to be charge from the grid.	<ul style="list-style-type: none"> • Disable • Enable
Maximum Charge Power from Grid	Maximum power from grid to battery	0 - 10 kW
Set Control Mode	Set default preference for the Energy Storage System (ESS)	<ul style="list-style-type: none"> • maximum Self-Consumption • Maximum Feed-In
Battery Type	Select the BMS Type of the EMS	<ul style="list-style-type: none"> • High-Voltage Battery • Low-Voltage Battery
Heat Pump Parameters	If Heat Pump is connected with the system, please set the corresponding parameters	/
EV Charger Parameters	If EV Charger is connected with the system, please set the corresponding parameters	/

- The installer must select the appropriate regional grid standard code via the system interface. Upon selection, the power quality response parameters and grid protection settings will be automatically configured to comply with local grid standards by default. If required for testing, these parameters can be further adjusted during system commissioning. For detailed instruction, please refer to 8. Settings.

4.1 Onboarding the Heat Pump

- From “Quick Settings” navigate to “Device Detection” and tap on the “+” icon. Select “Heat Pumps”.
- Input the required values for the device you are onboarding and tap on “Add”.
- When the connection type is selected as Modbus, the address cannot be modified.

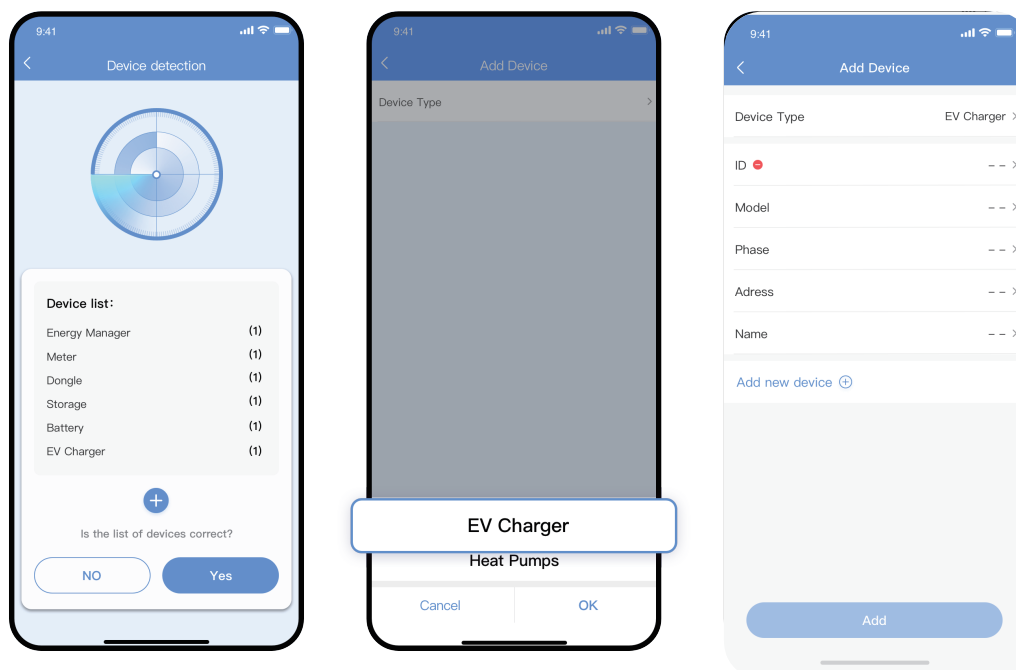




- User can check heat pump wiring via signal during device addition:
 1. After finish heat pump wiring and parameters settings, select a DO address, click "Send Signal," then the user can verify the wiring connection by the wired controller's display. If the DO1 icon appears in the controller , click "Confirm"; if not, click "Revert," then recheck the wiring and resend the signal.
 2. Only add the device after successful signal verification to avoid wiring connection problem.

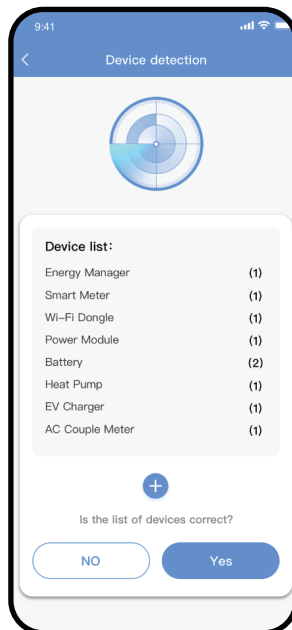
4.2 Onboarding the EV Charger

- From "Quick Settings" navigate to "Device Detection" and tap on the "+" icon.
- Select "EV Charger".
- Input the required values for the device you are onboarding and tap on "Add".



4.3 Onboarding the AC-Coupled Meter

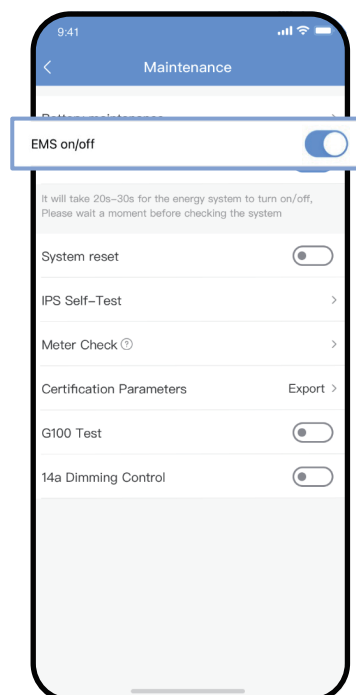
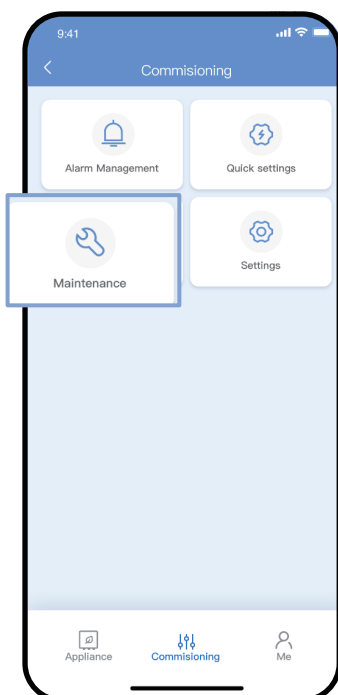
- With the help of AC-Coupled meter, the solar generation from existing PV system can be counted together.
- Make sure the AC-Coupled meter is connected correctly,
- From “Quick Settings” navigate to “Device Detection”, the AC-Coupled Meter will appear in the device list.
- The AC-Coupled meter is same as the smart meter which comes bundled with the inverter. When using the AC-Coupling feature, be sure to use correct meter model.



5. System Launch

5.1 Start Operation

After finish the quick settings, user need to turn on the EMS. Tap “Maintenance” and enable the “EMS on/off”.

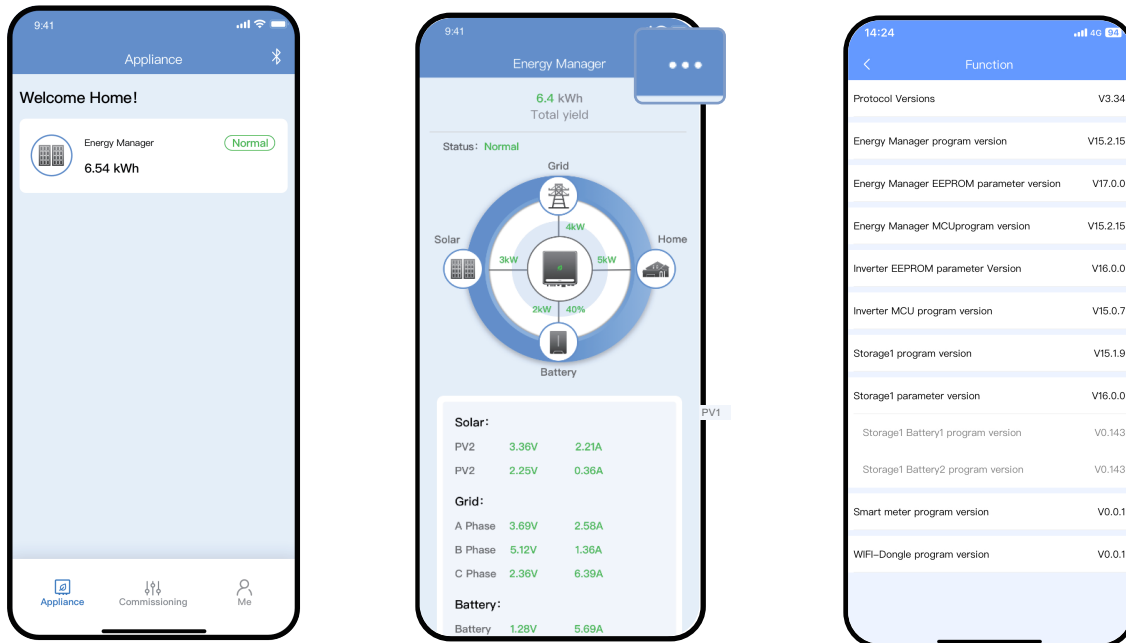


5.2 Energy flow diagram

Once the devices are onboarded, the status changes from Standby to Normal and the real time energy flow can be seen in the app.

The following information will be shown:

- Status of the equipment
- Flow direction of the energy
- Voltage, current values and firmware version identification



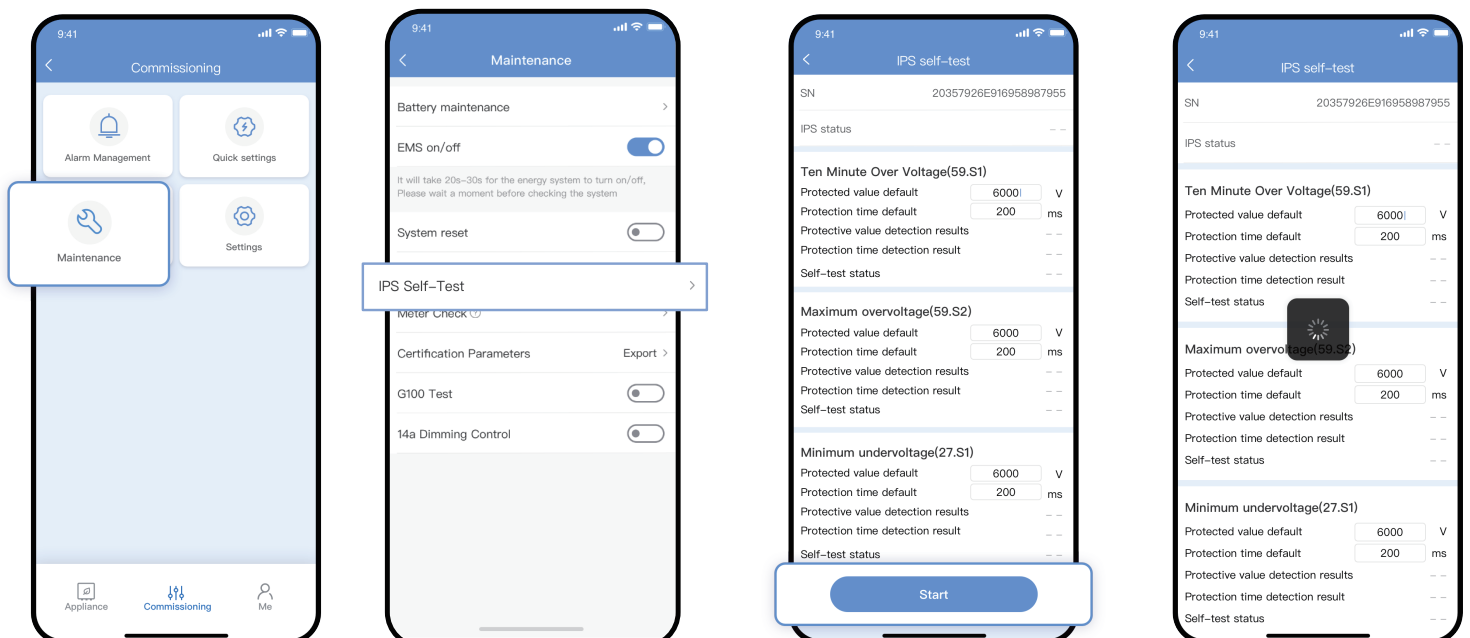
6. Maintenance

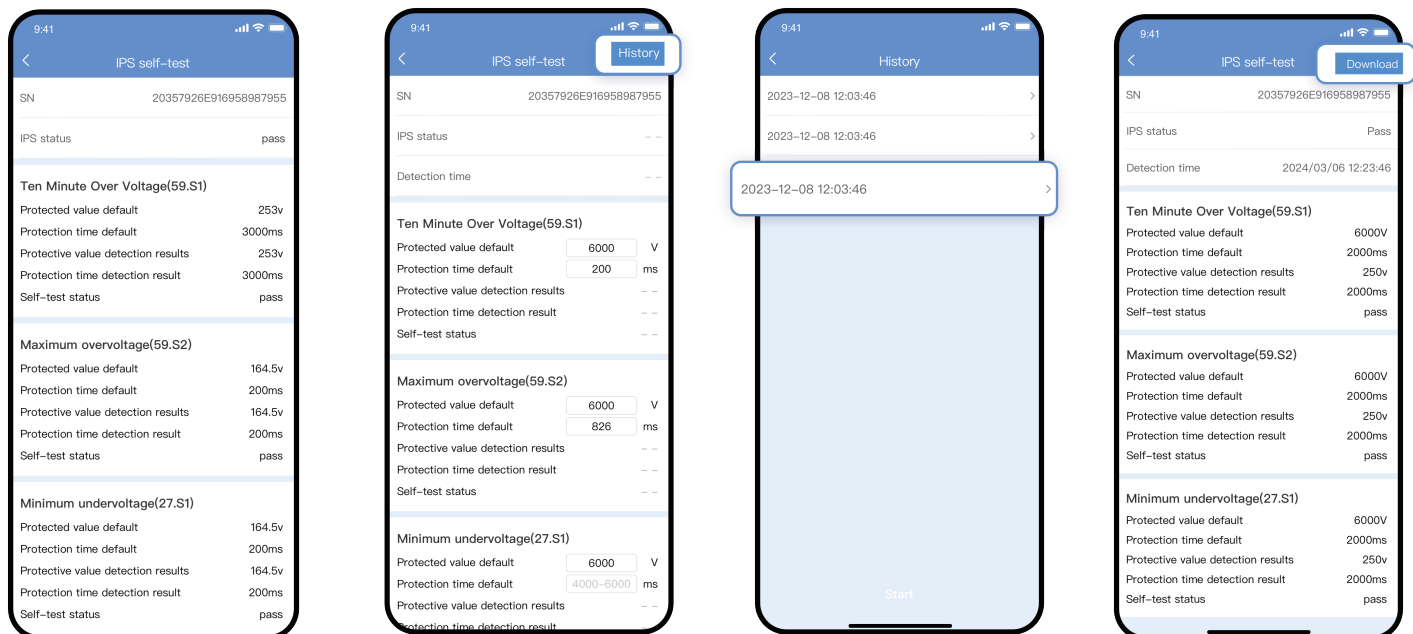
From the home screen, tap on the “Commissioning” icon at the bottom of the screen and then tap on “Maintenance”.

6.1 IPS self-test

The IPS self-test function can be initiated on the Maintenance page, which can verify the parameters and export the historical report from here.

This feature is designed for Italian IPS Test. For further details, please refer to local regulations.



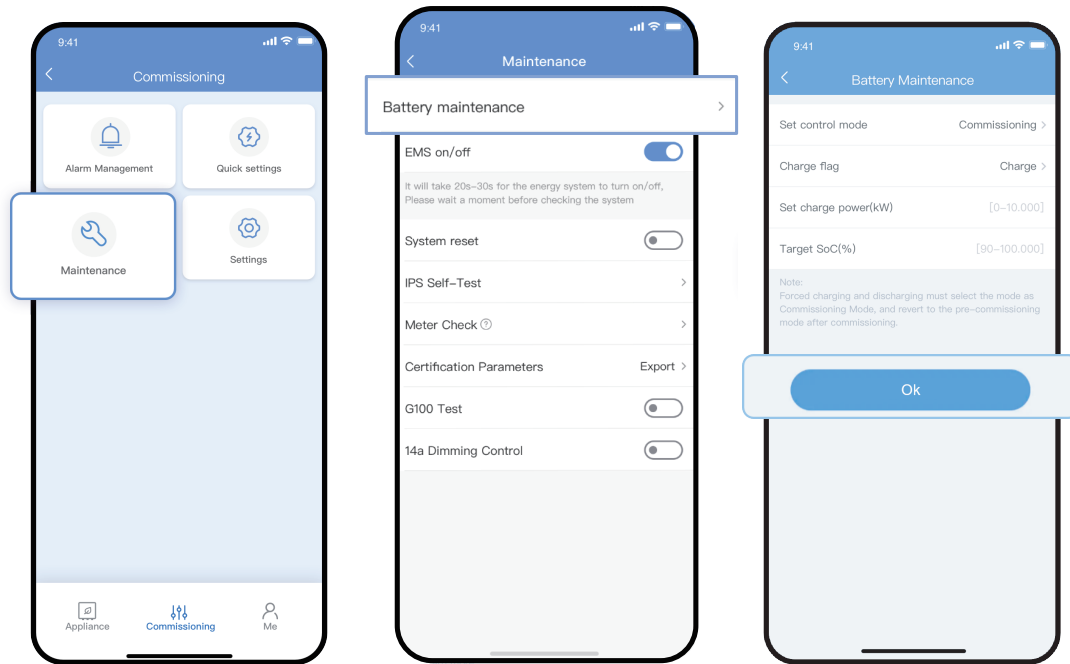


Feature supports the checking of the following parameters.

IPS self-test type	Protected value default	Protection time default
Ten Minute Over Voltage (59.S1)	253V	2900ms
Maximum overvoltage (59.S2)	264.5V	200ms
Minimum undervoltage (27.S1)	195.5V	1500ms
Undervoltage minimum (27.S2)	34.5V	200ms
Overfrequency maximum (81.S1)	50.2Hz	100ms
Overfrequency maximum (81.S2)	51.5Hz	100ms
Underfrequency minimum (81.S1)	49.8Hz	100ms
Underfrequency minimum (81.S2)	47.5Hz	100ms

6.2 Battery maintenance

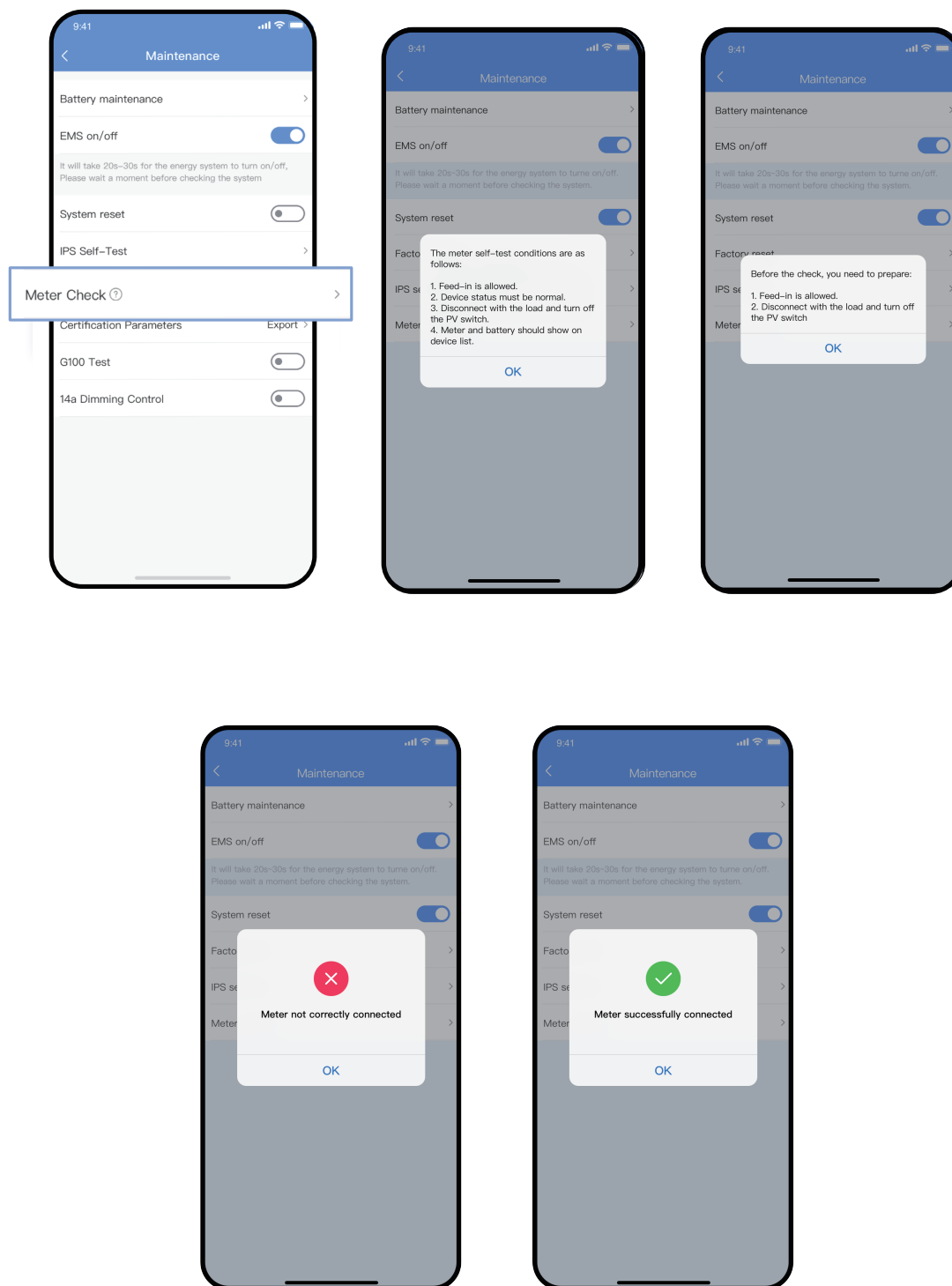
- If maintenance requires forcing the battery to charge or discharge, the installer can modify the battery settings here. The system must run under “Commissioning” mode.
- After using this feature, the system must be changed back to the original operating mode.



Battery Parameters	Description	Value Range
Set charge power	In Commissioning Mode, set the charging power for the battery. The battery will charge at this rate until it reaches the Target SoC.	0 - Max charge power
Set discharge power	In Commissioning Mode, set the discharging power for the battery. The battery will discharge at this rate until it reaches the Target SoC.	0 - Max discharge power
Target SoC	The desired target state of charge for the battery in Commissioning Mode.	0- 100%

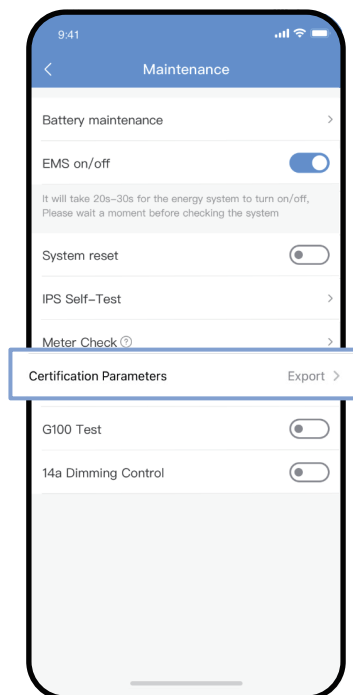
6.3 Electricity meter check:

- Before performing this process, establish if the system is permitted to feed-in to the grid according to local regulations. If not, do not proceed.
- Once the energy meter is connected to the system, the automatic meter check should be performed.
- Devices drawing or generating load such as PV plants, heat pumps, EV chargers and so forth should be switched off or disconnected to avoid causing interference.
- Go to the “Maintenance” section and select “Meter Check” to run the function. The system will confirm the result.



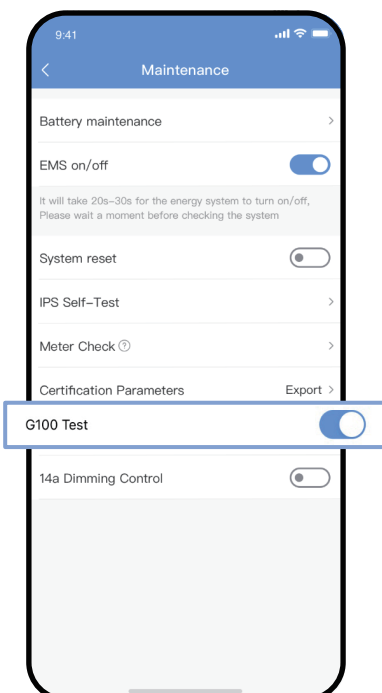
6.4 Parameters Export

- The settings parameters can be exported as PDF document on Maintenance page.
- This feature is designed for Austrian Grid Certification. For further details, please refer to local regulations.



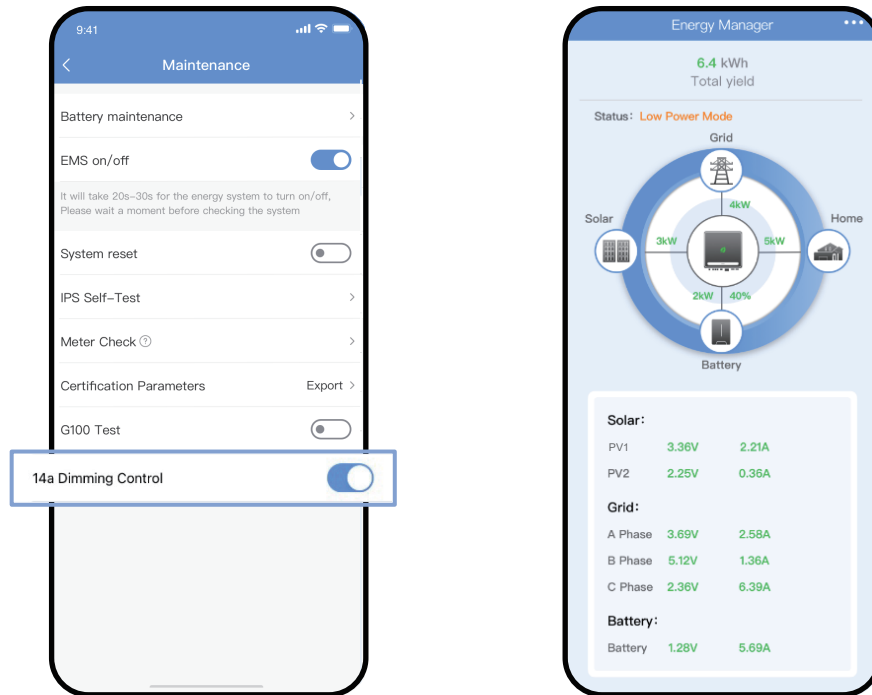
6.5 G100 Test

- When a G100 test is required, certified test personnel can enable this switch. This feature is designed for UK G100 certification. For further details, please refer to local regulations.



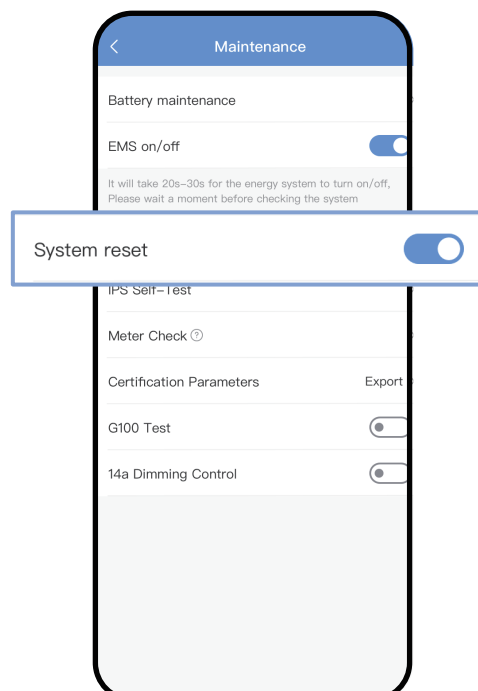
6.6 14a Dimming Control

- In compliance with german §14a EnWG (Energy Industry Act), large-scale power equipment connected to the grid must be capable of being regulated by the grid operator. When this function is enabled, it allows the device to receive and respond to control signals from the grid operator. In "Commissioning" then tap in "Maintenance" page. Installer can enable the "14a Dimming Control". When this function is enabled and the device is under grid operator control, the status will display as "Low Power Mode". This function is only valid in Germany and requires the grid code to be set to "Germany-VDE-AR-N-4105".



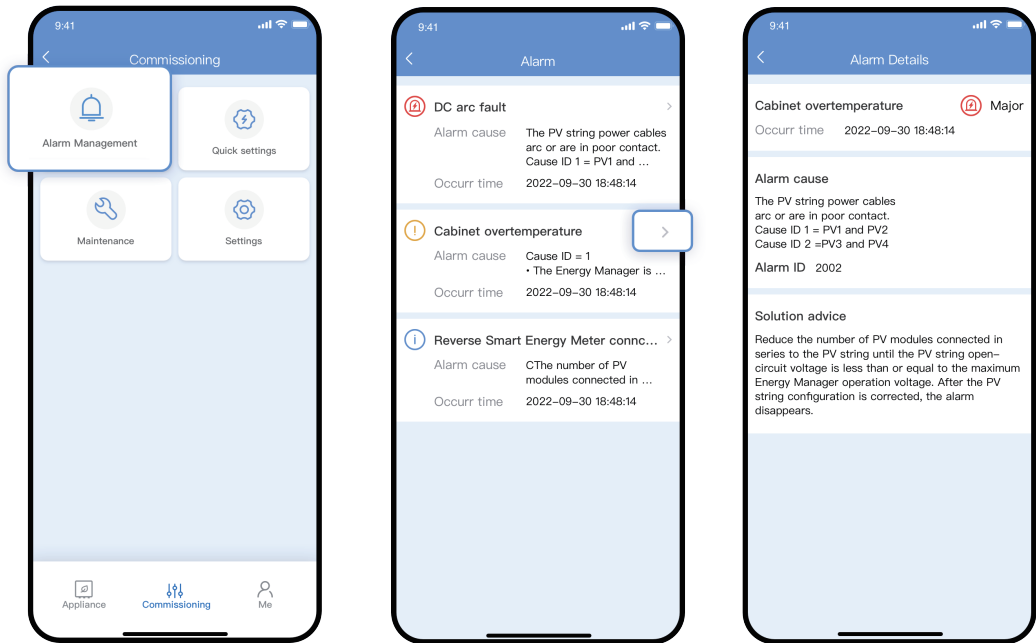
6.7 Reset

- In "System reset", certain faults can be cleared.



7. Alarm Management

From the home screen, tap on “Commissioning” and then “Alarm Management” to configure alarms.
The specific faults and corresponding indicator lights are shown in the table below:



Alarm ID	Alarm Name	Alarm Severity	Possible Cause	Trouble shooting
1001	String reverse connection	Major	The PV string polarity is reversed.	Check whether the PV string is reversely connected to the inverter. If so, wait until the PV string current decreases to below 0.5 A. Then, turn off the DC switch and correct the PV string polarity.
1002	Abnormal residual current	Major	The input-to-ground insulation impedance has decreased during the inverter operation.	1. If the alarm occurs accidentally, the external power cable may be abnormal temporarily. The inverter automatically recovers after the fault is rectified. 2. If the alarm persists or lasts a long time, check whether the impedance between the PV string and ground is too low.
1003	Low insulation resistance	Major	1. A short circuit exists between the PV array and the ground. 2. The PV array is in a moist environment and the circuit is not well	1. Check the impedance between the PV array output and the ground. If a short circuit occurs or the insulation is insufficient, rectify the fault. 2. Check whether the PE cable of the inverter is correctly connected. 3. If you have confirmed that the impedance is lower than the specified protection threshold in a cloudy or rainy environment, log in to WEB and APP set the Insulation resistance protection threshold.
1004	Cabinet overtemperature	Major	1. The inverter is installed in a place with poor ventilation. 2. The ambient temperature exceeds the upper threshold. 3. The inverter is not operating properly.	1. Check the ventilation and ambient temperature at the inverter installation position. 2. If the ventilation is poor or the ambient temperature exceeds the upper threshold, please improve the ventilation and heat dissipation. 3. If the ventilation and ambient temperature are normal, contact your dealer or technical support.
1005	Grid loss	Major	1. Power grid outage occurs. 2. The AC circuit is disconnected or the AC switch is off.	1. The alarm is cleared automatically after the power grid recovers. 2. Check whether the AC circuit is disconnected or the AC switch is off.
1006	Power Module Communication failure	Major	The battery communication is abnormal	Check if the communications cable is correctly installed and ensure that the communication parameters match the inverter RS485 configurations.
1007	BMS Communication failure	Major	The battery communication is abnormal	Check if the communications cable is correctly installed and ensure that the communication parameters match the inverter RS485 configurations.
1008	Meter Communication failure	Major	The meter communication is abnormal	Check if the communications cable is correctly installed and ensure that the communication parameters match the inverter RS485 configurations.
1009	Equipment fault	Major	An unrecoverable fault occurs on a circuit inside the inverter.	Turn off the AC output switch and DC input switch, and then turn them on after 5 minutes. If the alarm persists, replace the monitoring board or contact your dealer or technical support.

1010	Grid overvoltage	Minor	The grid voltage exceeds the upper threshold or the high voltage duration has lasted for more than the value specified by high voltage ride-through (HVRT).	1. If the alarm occurs occasionally, the power grid may be abnormal temporarily. The inverter automatically recovers after detecting that the power grid becomes normal.2. If the alarm persists, check whether the power grid voltage is within the acceptable range. If not, contact the local power operator. If yes, modify the grid overvoltage protection threshold through the WEB and APP with the consent of the local power operator.3. Check whether the peak voltage of the power grid is too high. If the alarm persists and cannot be rectified for a long time, contact the power operator.
1011	Grid undervoltage	Minor	The grid voltage is below the lower threshold or the low-voltage duration has lasted for more than the value specified by low voltage ride-through (LVRT).	1. If the alarm occurs occasionally, the power grid may be abnormal temporarily. The inverter automatically recovers after detecting that the power grid becomes normal.2. If the alarm persists, check whether the power grid voltage is within the acceptable range. If not, contact the local power operator. If yes, modify the grid overvoltage protection threshold through the WEB and APP with the consent of the local power operator.3. Check whether the peak voltage of the power grid is too high. If the alarm persists and cannot be rectified for a long time, contact the power operator.
1012	Grid overfrequency	Minor	Power grid exception: The actual power grid frequency is higher than the requirements for the local power grid code.	1. If the alarm occurs occasionally, the power grid may be abnormal temporarily. The inverter automatically recovers after detecting that the power grid becomes normal.2. If the alarm persists, check whether the power grid voltage is within the acceptable range. If not, contact the local power operator. If yes, modify the grid overvoltage protection threshold through the WEB and APP with the consent of the local power operator.3. Check whether the peak voltage of the power grid is too high. If the alarm persists and cannot be rectified for a long time, contact the power operator.
1013	Grid underfrequency	Minor	Power grid exception: The actual power grid frequency is lower than the requirements for the local power grid code.	1. If the alarm occurs occasionally, the power grid may be abnormal temporarily. The inverter automatically recovers after detecting that the power grid becomes normal.2. If the alarm persists, check whether the power grid voltage is within the acceptable range. If not, contact the local power operator. If yes, modify the grid overvoltage protection threshold through the WEB and APP with the consent of the local power operator.3. Check whether the peak voltage of the power grid is too high. If the alarm persists and cannot be rectified for a long time, contact the power operator.

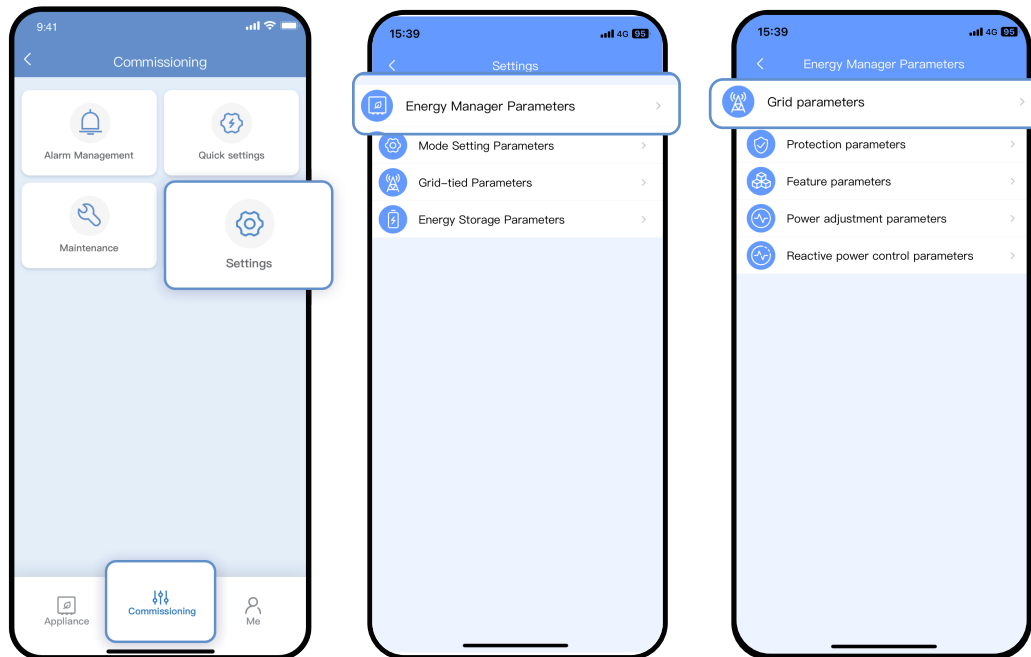
1014	AC-grid output overcurrent	Minor	The power grid voltage drops dramatically or the power grid is short circuited. As a result, the inverter transient output current exceeds the upper threshold, and protection is triggered.	1. The inverter monitors its external operating conditions in real time and automatically recovers after the fault is rectified. 2. If the alarm persists and affects the energy yield of the power plant, check whether the output is short-circuited. If the fault persists, contact your dealer or technical support.
1015	AC-backup output overcurrent	Minor	The backup load power exceeds the upper threshold.	1、 Try to reduce the load power ; 2、 If it doesn't work out , contact your dealer or technical support.
1101	Internal communication loss	Minor	MCUs communication failure in the inverter	1, Wait for the system auto-restart, or 2, Manually power off and on the system
1102	Heat pump communication loss	Warning	Heat pump communication is abnormal	Check if the communications cable is correctly installed and ensure that the communication parameters match the inverter RS485 configurations.
1103	EV charger communication loss	Warning	The EV charger communication is abnormal	Check if the communications cable is correctly installed and ensure that the communication parameters match the inverter RS485 configurations.
1104	Second meter communication loss	Warning	The Second meter communication is abnormal	Check if the communications cable is correctly installed and ensure that the communication parameters match the inverter RS485 configurations.
1105	Excessive Excursion Failure	Major	The grid power exceeds the maximum feed-in power or peak-shaving power from the limitation of EREC G100. This could be caused by normal operation (eg switching) of the Customer's Devices or other loads in the Customer's Installation (eg a kettle in a Domestic Installation), or it could be caused by the sudden failure or tripping of part of the Customer's load or generation equipment.	If the alarm occurs occasionally, the customer following resolution of the loads of the failure, shall reset the system back to normal operation. Three resets shall be allowed in any 30 day period. If this criterion is breached the system will remain locked in state 3, please contact the manufacturer or installer.
1106	Heat pump fault	Warning	The Heat pump operation is abnormal	Please check the heat pump and eliminate the failure in heat pump.
1107	EV charger fault	Warning	The EV Charger operation is abnormal	Please check the EV Charger and eliminate the failure in EV Charger.
1108	Relay fault	Minor	1. Relay Fault 2. The control circuit is abnormal.	1, Wait for the system auto-restart, or 2, Manually power off and on the system
1109	Grid phase sequence error	Minor	The phase sequence of the power grid connected to the AC terminal is wrong	Manually power off the system, and correct the connection with right phase sequence
1110	Bus overvoltage	Minor	1. The PV voltage is too high. 2. The sampling of the inverter BUS voltage is abnormal.	1, Wait for the system auto-restart, or 2, Manually power off and on the system

1111	Cavity overheating	Minor	<p>1.The inverter is installed in a place with poor ventilation.</p> <p>2. The ambient temperature exceeds the upper threshold.</p> <p>3. The inverter is not operating properly.</p>	<p>1.Check the ventilation and ambient temperature at the inverter installation position.2. If the ventilation is poor or the ambient temperature exceeds the upper threshold, please improve the ventilation and heat dissipation.3.If the ventilation and ambient temperature are normal, contact your dealer or technical support.</p>
2001	Power module overtemperature	Major	<p>1. The installation position of the battery power control module is not well ventilated.</p> <p>2. The ambient temperature is excessively high.</p> <p>3. The battery power control module is abnormal.</p>	<p>1. Check the ventilation and whether the ambient temperature of the power control module exceeds the upper threshold.2. If the ventilation is poor or the ambient temperature is excessively high,improve the ventilation and heat dissipation.3. If the ventilation and ambient temperature are normal, contact your dealer or technical support</p>
2002	Low battery DC input bus voltage	Major	<p>1. The DC bus voltage of the battery is low.</p> <p>2. The battery DC switch is OFF.</p> <p>3. The battery cables are not correctly connected.</p>	<p>1. Turn off the inverter AC output switch,inverter DC input switch, and battery DC switch, and wait for 5minutes.2. Check the cable connections to the power control module by referring to the quick installation guide.3. After checking that the battery power cables are correctly connected, turn on the battery DC switch, AC output switch, and inverter DC input switch in sequence.4. If the alarm persists,contact your dealer or technical support.</p>
2003	Battery expansion module undervoltage	Major	The voltage of a battery expansion module is low.	<p>If the sunlight is insufficient or AC reverse charging is allowed, the battery expansion modules can be charged when the inverter is running.</p>
2004	Power module reversely connected	Major	The positive and negative terminals are reversely connected when the power module connects to the inverter.	<p>1. Turn off the inverter AC output switch,inverter DC input switch, and battery DC switch, and wait for 5 minutes.2. Check the cable connections to the power control module by referring to the quick installation guide.3. After checking that the battery power cables are correctly connected, turn on the battery DC switch, AC output switch, and inverter DC input switch in sequence.4. If the alarm persists,contact your dealer or technical support.</p>
2005	Abnormal BMS communication	Major	The power module fails to communicate with the battery expansion modules.	<p>1. Turn off the battery DC switch.2. Check that the power cables and communications cables are correctly connected to the battery expansion modules.3. After checking that cables are correctly connected, turn on the battery DC switch.4. If the alarm persists,contact your dealer or technical support.</p>
2006	Equipment fault	Major	An unrecoverable fault occurs on a circuit inside the device.	<p>Turn off the DC switch, and then turn them on after 5 minutes. If the alarm persists, replace the monitoring board or contact your dealer or technical support.</p>

2007	Black start-up failed	Major	1. The battery level is less than 10%. 2. The energy storage DC switch is not turned on.	1. Disconnect the photovoltaic switch and grid connection switch, and wait for 1 minute for the device to turn off all LED lights. 2. Turn on the photovoltaic switch and grid connection switch, and start black again.
2008	Battery reversal connection	Major	The battery polarity is reversed.	Check whether the battery is reversely connected to the power module. If so, turn off the DC switch and correct the battery polarity.
2009	BMS relay closed failure	Minor	A malfunction or damage of the BMS relay or a problem with the connection between the relay and other circuits.	1. Check the connection of the BMS relay to ensure that it is properly connected to other circuits. 2. Check the working status of the BMS relay and replace it if it has malfunctioned or been damaged. 3. If the alarm persists, contact your dealer or technical support.
2010	BMS failure	Minor	Sensor failure, battery pack imbalance, communication failure, software failure, and so on	1. For sensor failure, check the connection and working status of the sensor, and replace it if necessary. 2. For battery pack imbalance, perform battery balancing operations or check the status of the battery pack, and replace it if necessary. 3. For communication failure, check the communication lines and protocols to ensure that they are working properly. 4. For software failure, check the software program and parameter settings, and reinstall or update the software if necessary. 5. If the alarm persists, contact your dealer or technical support.
2011	DC switch off	Minor	DC switch is disconnected	Manually power off the system, turn on the switch, then power on the system
3001	Battery Pack Undervoltage	Minor	1. The voltage of the battery pack or its cell is too low. 2. The battery pack has been stored for a long period of time. 3. The battery pack has been idle for a long time after grid connection.	1. Connect to the power grid and charge batteries in a timely manner. 2. If the alarm persists after the battery has been charged for one hour, contact your dealer or technical support.
3002	Battery module over temperature	Minor	1. The battery installation position is not well ventilated. 2. The ambient temperature is excessively high. 3. The battery power control module is abnormal.	1. Check the ventilation and whether the ambient temperature of the battery expansion modules exceeds the upper threshold. 2. If the ventilation is poor or the ambient temperature is excessively high, improve the ventilation and heat dissipation. 3. If the ventilation and ambient temperature are normal, contact your dealer or technical support.
3003	Battery module low temperature	Minor	1. The ambient temperature is excessively low. 2. A battery expansion module is abnormal.	1. Check whether the ambient temperature in the installation positions of the battery expansion modules is lower than the lower threshold. 2. If the ambient temperature is excessively low, improve the installation environment. 3. If the alarm persists after the ambient temperature becomes normal, contact your dealer or technical support.

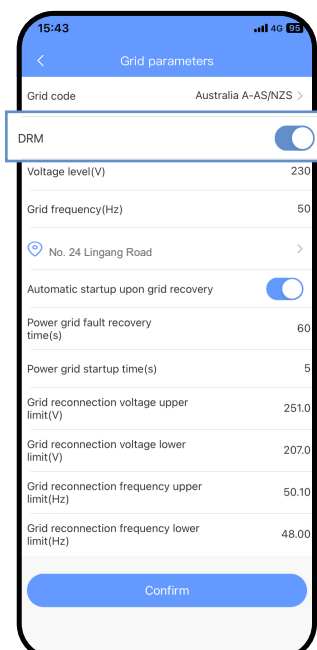
8. Settings

On the home screen, choose Commissioning -> Settings to access the parameter setting screen. The power quality response parameters and grid protection parameters can be viewed and set in this part.



Note

- The list of parameters provided in this document vary from your device Model. Grid codes may also be different. As the app is regularly updated, the images provided might vary.
- The parameters are for example only. The correct parameters depend on the device Model and grid code.
- The parameter names, value ranges, and default values are subject to change.
- When the Australian or New Zealand grid code is selected, the DRM function can be enable in Grid parameters. For further details, please refer to local regulations.



- For Post-commissioning verification: After installation, authorized personnel can verify and adjust critical system configurations via the advanced technical menu here, including: Power quality response parameters, Grid protection parameters

Item	Parameter	Description	Value Range
Grid Parameters	Grid code	Set this parameter based on the grid code of the country or region of the installation and the usage scenario	For detailed information please refer to Appendix 1
	Automatic startup upon grid recovery	Allow the inverter to automatically start after the power grid recovers	<ul style="list-style-type: none"> • Disable • Enable
	Power grid fault recovery time	How long after grid recovery, the inverter should restart	0 - 7 200s
	Power grid startup time	How long after grid recovery, the power should gradually begin to increase	1 - 1 800s
	Grid reconnection voltage upper limit	Country or region dependent: maximum grid voltage for inverter reconnection after inverter shut down	220 - 299.5V
	Grid reconnection voltage lower limit	Country or region dependent: minimum grid voltage for inverter reconnection after inverter shut down	99 - 220V
	Grid reconnection frequency upper limit	Country or region dependent: maximum grid frequency for inverter reconnection after inverter shut down	50 - 60Hz
	Grid reconnection frequency lower limit	Country or region dependent: minimum grid frequency for inverter reconnection after inverter shut down	40 - 50Hz

Grid-Tied Parameters	Feed-in control	Online power restrictions	<ul style="list-style-type: none"> • Disable • Enable
	Limit control	Choose between “Total” or “Per Phase”, for export limitation at grid tie point	<ul style="list-style-type: none"> • All Phase • Per phase
	Maximum feed-in power	Specifies the maximum active power transmitted from the grid tie point to the power grid	0 - 10kW
	Charge from grid	Force compliance with charge from grid regulations comply with the grid charge requirements stipulated in local laws and regulations when this function is Enable	<ul style="list-style-type: none"> • Disable • Enable
	PV String 1 Capacity	Insert the power range of the PV1 string.	0 - 10kW
	PV String 2 Capacity	Insert the power range of the PV2 string.	0 - 10kW
Mode Setting Parameters	Set control mode	Select different control mode for EMS	<ul style="list-style-type: none"> • Self-consumption • Feed-in • Manual • VPP Mode
	Backup mode	Allow standby Mode	<ul style="list-style-type: none"> • Disable • Enable
	Reserve energy for grid outage	Sets the backup power SoCSoC. In grid-tied Mode, the battery does not discharge when it is discharged to the backup power SOC. When the grid fails, the battery supplies power to loads in off-grids Mode until it reaches the end-of discharge capacity.	20 - 90% (When backup Mode is Enable)

Protection Parameter	Level-1 OV protection threshold	Level 1 overvoltage protection threshold	220 - 330V
	Level-1 OV protection time	Level 1 overvoltage protection duration	50 - 7 200 000ms
	Level-2 OV protection threshold	Level-2 overvoltage protection threshold	220 - 330V
	Level-2 OV protection time	Level-2 overvoltage protection duration	50 - 7 200 000ms
	Level-3 OV protection threshold	Level-3 overvoltage protection threshold	220 - 330V
	Level-3 OV protection time	Level-3 overvoltage protection duration	50 - 7 200 000ms
	Level-1 UV protection threshold	Level-1 undervoltage protection threshold	11 - 220V
	Level-1 UV protection time	Level-1 undervoltage protection duration	50 - 7 200 000ms
	Level-2 UV protection threshold	Level-1 undervoltage protection threshold	11 - 220V
	Level-2 UV protection time	Level-1 undervoltage protection duration	50 - 7 200 000ms
	Level-1 OF protection threshold	Level-1 overfrequency protection threshold	50 - 60V
	Level-1 OF protection time	Level-1 overfrequency protection duration	50 - 7 200 000ms
	Level-2 OF protection threshold	Level-2 overfrequency protection threshold	50 - 60V
	Level-2 OF protection time	Level-2 overfrequency protection duration	50 - 7 200 000ms
	Level-3 OF protection threshold	Level-3 overfrequency protection threshold	50 - 60V
	Level-3 OF protection time	Level-3 overfrequency protection duration	50 - 7 200 000ms
	Level-1 UF protection threshold	Level-1 underfrequency protection threshold	40 - 50V

Protection Parameter	Level-1 UF protection time	Level-1 underfrequency protection duration	50 - 7 200 000ms
	Level-2 UF protection threshold	Level-2 underfrequency protection threshold	40 - 50V
	Level-2 UF protection time	Level-2 underfrequency protection duration	50 - 7 200 000ms
	Level-3 UF protection threshold	Level-3 underfrequency protection threshold	40 - 50V
	Level-3 UF protection time	Level-3 underfrequency protection duration	50 - 7 200 000ms
	Insulation resistance protection Threshold	To ensure device safety, during self-check, the inverter compares the insulation resistance of the input to ground. This is the minimum value to allow grid connection.	0.02 - 1.50MΩ
Feature Parameter	HVRT	High voltage ride through (HVRT). When the grid voltage is abnormally high for a short time, the inverter cannot disconnect from the power grid immediately and has to work for some time.	0: Disable 1: Enable
	LVRT	LVRT is short for Low voltage ride-through (LVRT). When the grid voltage is abnormally low for a short time, the inverter cannot disconnect from the power grid immediately and has to work for some time.	0: Disable 1: Enable
	LVRT trigger threshold	Threshold for triggering LVRT. The threshold settings should meet the local grid standard.	110 - 220 V
	LVRT cut-off voltage	Low voltage ride through cutoff voltage	5 - 220 V
	LVRT trigger voltage time	Set the time for low voltage traversal to enter the voltage	100 - 30 000 ms

Feature Parameter	LVRT cut-off voltage time	Set low voltage ride through cut-off voltage time	100 - 30 000 ms
	Shutdown gradient	Speed of change when shutting the inverter down expressed as percentage per second	0.1 - 2500 %/s
	Voltage rise suppression	Country or region specific. If required, Enable the suppression of voltage increase by using the inverter to output reactive power and reduce active power	<ul style="list-style-type: none"> • Disable • Enable
	Number of P-U curve points	number of P-U curve points	2-10
	U value at the first point of PU curve	Ratio of voltage to rated voltage (first point).	50 - 120%
	P/Pn value at the first point of P-U curve	Ratio of power to rated power (first point)	0 - 100%
	U value at the second point of P-U curve	Ratio of voltage to rated voltage (second point)	50 - 120%
	P/Pn value at the second point of P-U curve	The second point of the P (U) curve function, the ratio of power to rated power	0 - 100%
	U value at the third point of P-U curve	The third point of the P (U) curve function, the ratio of voltage to rated voltage	50 - 120%
	P/Pn value at the third point of P-U curve	The third point of the P (U) curve function, the ratio of power to rated power	0 - 100%
	U value at the fourth point of P-U curve	The fourth point of the P (U) curve function, the ratio of voltage to rated voltage	50 - 120%
	P/Pn value at the fourth point of P-U curve	The fourth point of the P (U) curve function, the ratio of power to rated power	0 - 100%

Feature Parameter	U value at the fifth point of P~U curve	The fifth point of the P (U) curve function, the ratio of voltage to rated voltage	50 - 120%
	P/P _n value at the fifth point of P~U curve	The fifth point of the P (U) curve function, the ratio of power to rated power	0 - 100%
	U value at the sixth point of P~U curve	The sixth point of the P (U) curve function, the ratio of voltage to rated voltage	50 - 120%
	P/P _n value at the sixth point of P~U curve	The sixth point of the P (U) curve function, the ratio of power to rated power	0 - 100%
	U value at the seventh point of P~U curve	The seventh point of the P (U) curve function, the ratio of voltage to rated voltage	50 - 120%
	P/P _n value at the seventh point of P~U curve	The seventh point of the P (U) curve function, the ratio of power to rated power	0 - 100%
	U value at the eighth point of P~U curve	The eighth point of the P (U) curve function, the ratio of voltage to rated voltage	50 - 120%
	P/P _n value at the eighth point of P~U curve	The eighth point of the P (U) curve function, the ratio of power to rated power	0 - 100%
	U value at the ninth point of P~U curve	The ninth point of the P (U) curve function, the ratio of voltage to rated voltage	50 - 120%
	P/P _n value at the ninth point of P~U curve	The ninth point of the P (U) curve function, the ratio of power to rated power	0 - 100%
	U value at the tenth point of P~U curve	The tenth point of the P (U) curve function, the ratio of voltage to rated voltage	50 - 120%
	P/P _n value at the tenth point of P~U curve	The tenth point of the P (U) curve function, the ratio of power to rated power	0 - 100%

Power Adjustment Parameter	Over frequency derating	If Enabled, the active power of the inverter will be derated when the grid frequency threshold is exceeded.	0: Disable 1: Enable
	Remote power schedule	If Enabled, the inverter will follow the remote port schedule.	• Disable • Enable
	Underfrequency lift-off switch	Underfrequency and load up function control	• Disable • Enable
	Reactive power compensation	Reactive power compensation	-100 - +100PF
	Reactive power compensation	Reactive power compensation	-100 - +100Q/S
	Max. active power	Output upper threshold for active power	0 - 65535
	Plant active power gradient	Rate of active power rise due to sunlight changes.	5 - 3 000%/min
	Average active power filtering time	Period of active power rise due to sunlight changes. This parameter is used with Plant active power gradient	20 - 300 000 ms
	Active power change gradient	Rate of change of the inverter active power	0.1 - 100%/s
	Reactive power change gradient	Rate of change of the inverter reactive power	0.1 - 100%/s
	Trigger frequency of overfrequency derating	Country and region specific. The grid frequency threshold at which the output of active power from the inverter must be derated	50 - 60Hz
	Exit frequency of over frequency derating	Frequency threshold for exiting overfrequency derating	50 - 60Hz
	Overfrequency derating droop coefficient	Droop coefficient of the frequency derating function (slope) Over frequency derating droop coefficient, setting the slope of the over frequency derating function	3 - 20%

	Cut-off power of overfrequency derating	Power threshold for cutting off overfrequency derating	0 - 100%
	Power recovery gradient of overfrequency derating	Recovery rate of the overfrequency derating power	1 - 6 000%/min
	Underfrequency and load rise opening frequency	Underfrequency and load up opening frequency	40 - 50Hz
	Underfrequency lifting droop coefficient	Underfrequency load up droop coefficient, setting the slope of the underfrequency load up function	3 - 20%
Power Adjustment Parameter	Reactive power control Mode	reactive power output Mode at the grid-tied point	<ul style="list-style-type: none"> • Given reactive power • Given power factor • Q-U characteristic curve • $\cos \phi$- P/Pn characteristic curve
	Given reactive power	When selecting the given reactive power in the given method of reactive power, set the given reactive power through this parameter	-5 000 - 5 000
	Given power factor	When selecting a given power factor for the given method of reactive power, set the given power factor through this parameter	-10 - -0.8 0.8 - 10
	Q-U characteristic curve Mode Q-U	reactive power compensation Mode of the inverter output	0 - 10
	Q-U dispatch trigger power percentage	Threshold of apparent power of the inverter, expressed as a percentage, at which the QU curve scheduling function is triggered	0 - 100%
	Q-U dispatching exit power	Minimum power threshold at which the system exits from the Q-U curve function	0 - 100%

	Minimum PF limit of Q-U characteristic curve	Minimum power limitation in reactive power Mode controlled by Q (U) curve	0 - 1
	Number of Q-U characteristic curve points	Number of Q (U) curve points	2 - 10
	U/Un value at the first point of Q-U curve	The first point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the first point of Q-U curve	The first point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the second point of Q-U curve	The second point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the second point of Q-U curve	The second point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the third point of Q-U curve	The third point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the third point of Q-U curve	The third point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the fourth point of Q-U curve	The fourth point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the fourth point of Q-U curve	The fourth point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the fifth point of Q-U curve	The fifth point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the fifth point of Q-U curve	The fifth point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the sixth point of Q-U curve	The sixth point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%

	Q/S value at the sixth point of Q-U curve	The sixth point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the seventh point of Q-U curve	The seventh point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the seventh point of Q-U curve	The seventh point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the eighth point of Q-U curve	The eighth point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the eighth point of Q-U curve	The eighth point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the ninth point of Q-U curve	The ninth point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the ninth point of Q-U curve	The ninth point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	U/Un value at the tenth point of Q-U curve	The tenth point of the Q (U) curve, the ratio of voltage to rated voltage	80 - 136%
	Q/S value at the tenth point of Q-U curve	The tenth point of the Q (U) curve, the ratio of reactive power to rated power	-0.6 - 0.6
	Cos ϕ - P/Pn characteristic curve points	Cos ϕ (P) Number of curve points	2 - 10
	P/Pn value at the first point of cos ϕ - P/Pn curve	Cos ϕ (P) The ratio of the power at the first point of the curve to the rated power	0 - 100%
	cos ϕ value at the first point of cos ϕ - P/Pn curve	Cos ϕ (P) Power factor at the first point of the curve	-10 - -0.8 0.8 - 10

	P/P _n value at the second point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the second point of the curve to the rated power	0 - 100%
	cos ϕ value at the second point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the second point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the third point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the third point of the curve to the rated power	0 - 100%
	cos ϕ value at the third point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the third point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the fourth point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the fourth point of the curve to the rated power	0 - 100%
	cos ϕ value at the fourth point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the fourth point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the fifth point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the fifth point of the curve to the rated power	0 - 100%
	cos ϕ value at the fifth point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the fifth point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the sixth point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the sixth point of the curve to the rated power	0 - 100%
	cos ϕ value at the sixth point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the sixth point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the seventh point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the seventh point of the curve to the rated power	0 - 100%

	cos ϕ value at the seventh point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the seventh point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the eighth point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the eighth point of the curve to the rated power	0 - 100%
	cos ϕ value at the eighth point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the eighth point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the ninth point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the ninth point of the curve to the rated power	0 - 100%
	cos ϕ value at the fourth point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the ninth point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the tenth point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the tenth point of the curve to the rated power	0 - 100%
	cos ϕ value at the tenth point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the tenth point of the curve	-10 - -0.8 0.8 - 10
	P/P _n value at the sixth point of cos ϕ - P/P _n curve	Cos ϕ (P) The ratio of the power at the sixth point of the curve to the rated power	0 - 100%
	cos ϕ value at the sixth point of cos ϕ - P/P _n curve	Cos ϕ (P) Power factor at the sixth point of the curve	-10 - -0.8 0.8 - 10

Common Charge-Discharge Parameter	max charge power(total)	Maximum battery charging power.	0 - 10kW
	max discharge power(total)	maximum battery discharging power	0 - 10kW
	Grid charging	If Charge from AC is Disabled by default, comply with the grid charge requirements stipulated in local laws and regulations when this function is Enabled	0 - 255
	Grid charging cut-off SoC (total)	grid charge cutoff SoC	20 - 100%
	Charge cut-off SoC (total)	end-of-charge SoC	90 - 100%
	Discharge cut-off SoC (total)	end-of-discharge SoC	0 - 15%
	Maximum grid charging power (Charge-Limit)	Specifies Maximum grid charging power	0 - 5kW

Web Manual

1. Register an Account

If you already have an installer account, please skip this step. Go to <https://energy.mhelios.com/> and login to the app using your phone number or email address.

Alternatively, create a new account, ensuring that you have the company number at hand, provided by the supplier. Follow the directions as per the website to create your account.

MHELIOS Household Energy Management System

User | **Installer**

User Name

Password






Account registration | [Forgot password?](#)

Sign in





☒ I had read and agreed on [Privacy Policy](#) and [Software License and User Service Agreement](#)

2. Home

If two or more plants are bounded to the installer, the list view is displayed by default after the installer logs in to the system.

Status	Colour	Description
Normal		The device is running properly.
Standby		The device is on standby or on command.
Off-Grid		The system does not depend on the power grid.
Warning		The device is faulty.
off-line		The communication is interrupted.

Status



Plant name

Energy Management 1

Energy Management 2

Energy Management 3

Energy Management 4

3. User Functions

For user functions, such as:





- Status of the Energy System
- Failure Messages
- Energy Flow Diagram
- Daily Summary and Information (Including Revenue)
- Energy Curve
- Analysis (of energy generation and consumption)

please refer to the User Manual.

4. Installer Functions

4.1 Alarms

Choose Monitoring > Alarms, enter the Alarms settings menu to view the device's Active Alarms information and Historical Alarms information.

Alarm	Colour	Description
Critical		Failure to handle it will develop into a safety related fault.
Major		Faults that cannot be self recovered and cannot be repaired by ordinary users.
Minor		Failures that can be self recovered or recovered by ordinary users.
Warning		Does not affect the main functions of the product.

4.1.1 Active Alarms

Enter the Active Alarms setting and select the device to obtain real-time alarm information for the device.

Active Alarms

Historical Alarms

Device Type

All

Device name

SN

Alarm Code

Alarm ID

Severity

Search

Reset

Major

Minor

Warning

ALI

Major

Minor

Warning

<input type="checkbox"/>	Alarm severity	Device SN	Device Type	Alarm Code	Alarm name	Description
<input type="checkbox"/>	<div><div></div><div>Major</div></div>	SN2022030200100	battery	2002	high string input voltage	The PV array is not prop...
<input type="checkbox"/>	<div><div></div><div>Major</div></div>	SN2022030200100	battery	2002	high string input voltage	2023/01/23 14:00 The PV array is not prop...
<input type="checkbox"/>	<div><div></div><div>Minor</div></div>	SN2022030200100	battery	2002	high string input voltage	2023/01/23 14:00 The PV array is not prop...
<input type="checkbox"/>	<div><div></div><div>Warning</div></div>	SN2022030200100	battery	2002	high string input voltage	2023/01/23 14:00 The PV array is not prop...

Total records: 4

1

2

3

4

4.1.2 Historical Alarms

Enter the Historical Alarms settings and select the device to obtain the historical alarm information for that device.

Active Alarms

Historical Alarms

Device Type

All

Device Name

SN

Alarm Code

Alarm ID

Date

start time - end time

Severity





Search

Reset

Major

Minor

Warning

<input type="checkbox"/>	Alarm severity	Device SN	Device type	Alarm Code	Alarm name	Occurence Time	End Time	Cause	Solution	Operation
<input type="checkbox"/>	<div><div></div><div>Major</div></div>	SN2022030200100	battery	2002	high string input voltage	2023/01/23 14:00	2023/01/23 14:00	xxxxx	Solution is xxxxxxxxxxxxxxxx	
<input type="checkbox"/>	<div><div></div><div>Minor</div></div>	SN2022030200100	battery	2002	high string input voltage	2023/01/23 14:00	2023/01/23 14:00	xxxxx	Solution is xxxxxxxxxxxxxxxx	
<input type="checkbox"/>	<div><div></div><div>Warning</div></div>	SN2022030200100	battery	2002	high string input voltage	2023/01/23 14:00	2023/01/23 14:00	xxxxx	Solution is xxxxxxxxxxxxxxxx	
<input type="checkbox"/>	<div><div></div><div>Warning</div></div>	SN2022030200100	battery	2002	high string input voltage	2023/01/23 14:00	2023/01/23 14:00	xxxxx	Solution is xxxxxxxxxxxxxxxx	

Total records: 4

1

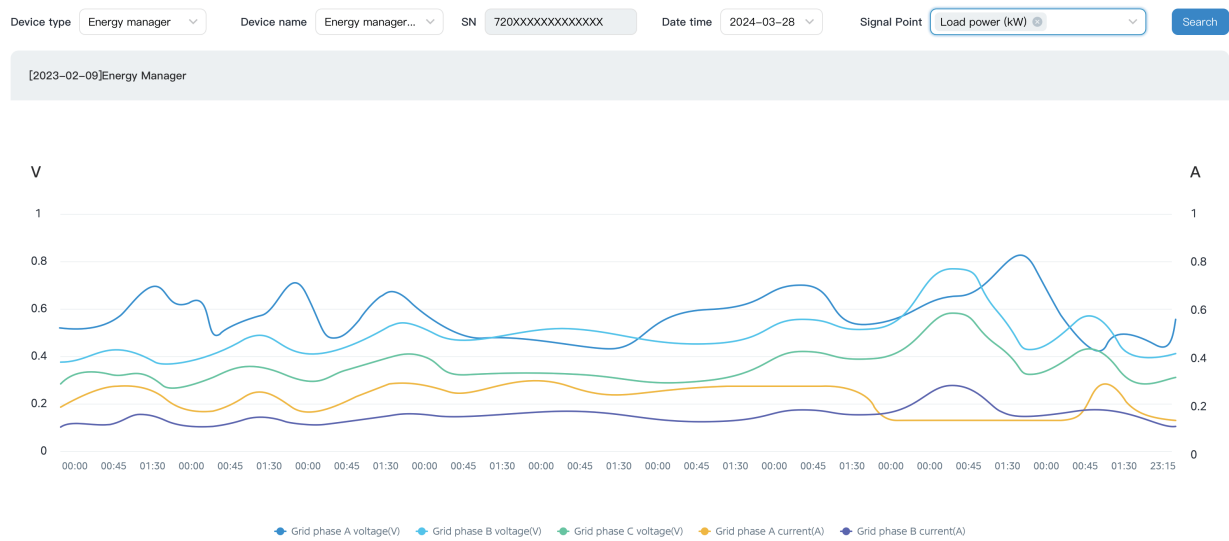
2

3

4

4.2 History

Enter the History to monitor and analyze the performance of Energy Manager, Storage, or Battery device by selecting different signal points or indicator items.



4.3 Settings

4.3.1 Device Management

From the Overview screen you can see the current status of the HEMS: Normal, Standby, Off Line, Warning or Off-Grid.Choose Monitoring > Settings > Device Management Click on the available fields to modify parameters.

Device status	Device name	Device type	Hardware version	SN	Model
<div></div>	Energy Manager1	<div></div> Inverter	V100R001C00SPC118	2102312xxxxxxxxxxxxxxxx	SDongleA-03
<div></div>	Energy Manager2	<div></div> Inverter	V100R001C00SPC139	2102312xxxxxxxxxxxxxxxx	SUN2000-10KTL-M1
<div></div>	Energy Manager3	<div></div> energy storage	—	—	—
<div></div>	Energy Manager4	<div></div> electricity...	—	—	—

4.3.1.1 Parameters Setting

In the parameter setting module, the maximum charging power, maximum discharge power, end of charging SOC, and end of discharging SOC of energy storage can be set.

Parameter Settings (Storage_1)

Parameters setting

Forced charge/discharge

max charge power (kW) :

5.0

Parameter value range [0-5.0]

max discharge power (kW) :

5.0

Parameter value range [0-5.0]

end of charge SOC (%) :

95

Parameter value range [90-100]

end of charge SOC(%) :

15

Parameter value range [0-15]

Set

Cancel

4.3.1.2 Forced charge/discharge

When the inverter connects to a battery, set battery parameters.

The main purpose of forced charge and discharge is to execute planned energy storage energy dispatch. Therefore, the control strategy aims to quantitatively charge and discharge as much as possible according to the forced target SoC within the specified time. After reaching the target SoC or when the specified time ends, the original mode is restored.

Parameter Settings (Storage_1)

Parameters setting

Forced charge/discharge

charge flag:
disable

set charge power (kW):
0
Parameter value range [0-5.0]

set discharge power (kW):
5.0
Parameter value range [0-5.0]

target soc (%):
50
Parameter value range [0-100]

Reminder: The execution results of charge flag(charge/discharge/disable) are influenced by the backup mode, on/off-grid status, control mode, end of charge soc/end of discharge soc and so on.

Set Cancel

There are three modes for forced charge and discharge:

- **Forced Charge Mode**
The charging power and charging cut-off SoC are set. The system will then forcibly charge the energy storage at the set power.
- **Forced Discharge Mode**
The discharging power and discharging cut-off SoC are set. The energy storage will then forcibly discharge to the system at the set power.
- **Stop Mode**
The battery will stop forced charging and discharging and return to its original working mode.

4.3.2 Grid Setting

4.3.2.1 Feed-In Control

This function is for controlling the amount of power feed to the grid from EMS. When this function is enable, the maximum grid feeding power range can be set from 0 to the inverter's rated power.

When "disable" is selected, there is no limit to the power fed back to the grid, but the maximum value is less than or equal to the inverter's rated power.

Feed-In Parameters

Feed-In Control ☒

Limit Control ☐

Maximum Feed-In Power

4.3.2.2 Charge from Grid Control

The decision determines whether the battery can charge from grid.

When "disable" is selected, there is no limit to the maximum grid charging power (Charge-Limit), but the maximum value is less than or equal to the rated power of the energy storage.

When "enable" is selected, the maximum grid charging power (Charge-Limit) can be set between 0 and the rated power of the energy storage.

Feed-in control	limit control	maximum feed-in power	
<div>enable</div>	<div>total</div>	<div>2.0</div>	kw
charge from grid control	maximum charge power from grid		
<div>enable</div>	<div>2.0</div>		
		<div>Set</div>	<div>Refresh</div>

4.3.3 Price Setting

- Click on the Setting tab and choose Price Settings. From the dropdown box select Electricity price type. Single rate is selected by default.
- Enter a numerical value in the electricity price input box, and click the Set button to complete the price set.
- The default price unit is Euro but all major currencies are supported.

Rate plan	<div>Single Rate</div>		
Buy Price:	<div>0</div>	<div>\$</div>	/kWh
Sell Price:	<div>0.5</div>	<div>\$</div>	/kWh
		<div>Set</div>	<div>Cancel</div>

4.3.4 Mode Setting

4.3.4.1 Set Control Mode

- Installer can set different control mode here. The manual mode need to be set in user's APP. For Virtual Power Plant mode, please contact the corresponding grid suppliers.

Set Control Mode

The PV will always support your home first. Should excess energy be first diverted to

- ☐ **Virtual Power Plant**
Battery charging and discharging are controlled by grid.
- ☐ **Manual**
Set a schedule for the charging and discharging of the battery.
- ☒ **Self Consumption**
PV power is first used for home usage. If there is excess solar, the batteries will be charged, and discharged to power your home after sunset.
- ☐ **Feed-In**
Maximize PV and battery power output. When the PV power is greater than the maximum output capacity of the Energy Manager, the batteries will be charged.
- ☐ **Commissioning**
Models used by installers when commissioning energy storage equipment.
- ☐ **AI Optimised**
The system will now use AI to optimise the charging and discharging of the battery based on weather, tariff and usage data.

4.3.4.2 Backup Mode

This module is only available if an energy storage battery is installed.

It is disabled by default, with Reserve Energy for Grid Outage set to 0% and the value cannot be modified.

When enabled, the user can adjust the percentage of reserve energy by dragging the small circle. The range is from 20% to 90%, and the Reserve Energy for Grid Outage value updates accordingly.

When a reserve energy percentage is set, the battery's state of charge (SOC) cannot drop below that percentage in any grid-connected operating mode (controlled by the power electronics).

Backup mode Disable

Set backup reserve, Energy storage system provides you with energy security during a grid outage.



4.3.4.3 Peak Shaving

This feature limits the power drawn from the grid when household demand is too high. Users can set a maximum power limit (Peak Limit) for grid consumption. When household power usage exceeds this limit, the battery will discharge to cover the additional demand, reducing reliance on the grid.

Peak Shaving Enable Peak Limit 10 [0-50]

Override the max kW limit on the battery to avoid exceeding peak limit from grid

4.4 Details

Choose Monitoring > Details

Select a device to see key attributes such as PV, battery and grid data.

PV Data	Battery Data	Grid Data	Heat pump Data
PV1 Voltage xxxV	SOC xx%	Grid phase A voltage xxxV	Room temperature °C
PV1 Current xxxA	Charge and discharge power xx kW	Grid phase B voltage xxxV	Tankt emperature °C
PV2 Voltage xxxV	Total discharge energy xx kWh	Grid phase C voltage xxxV	Outdoor unit current xxxV
PV2 Current xxxA	Battery voltage xx V	Grid phase A current xxxA	Outdoor unit voltage xxxA
PV1 Power xxkW	Battery current xx A	Grid phase B current xxxA	Load output /
PV2 Power xxkW		Grid phase C current xxxA	Power on or off /
Total PV Power xxkW		Grid frequency xxxHz	Setting the mode /
		Power factor - -	Setting air temperature °C
		Power factor	Tankt setting emperature °C

4.5 Plants

From the after-sale system, click on “Plants” to view summary information grouped by site (owner).

Plant name

Energy Management 1

Search

Reset

Plant name	Installation Time	Address	Installer-Email	Contact Phone	Owner-ID
Energy Management 1	2022/03/02 12:00:12	xx Road, xx District, xx City, xx State	xxxx@gmail	+12 345 67890	123456
Energy Management 1	2022/03/02 12:00:12	xx Road, xx District, xx City, xx State	xxxx@gmail	+12 345 67890	123456

Total records: 4

1

2

3

4

4.6 System

4.6.1 Installer Management

From the after-sale system, click on “System” > “Installer Management” to view summary information grouped by installer account.

Company number

Company Name

Installer Account

Registration Time

Search

Reset

Company number	Company Name	Installer Account	Registration Time	Role	Operation
EK001	Partner	12347xxx@partner.com	07/12/2023	Administrator	modify
EK001	Partner	12347xxx@partner.com	07/12/2023	Installer	modify
EK001	Partner	12347xxx@partner.com	07/12/2023	Installer	modify
EK001	Partner	12347xxx@partner.com	07/12/2023	Installer	modify

Total records: 4

1

2

3

4

Accounts with administrator permissions can manage the permissions of individual installer accounts at modify.

Modify

Email:

123456@pater.com

Installer Account:

Installer

Company:

Company name

OK

Cancel

4.6.2 Device Management

From the after-sale system, click on “System” > “Device Management” to view information on all of the company’s device .

Device SN

Device SN

Search

Reset

Name	Device SN	Installation Time	Status	Operation
Energy Manager1	0054314565655xxxxxxxxxx14455	06/01/2024	off-line	<div>modify</div>
Energy Manager2	0054314565655xxxxxxxxxx14456	06/02/2024	off-line	<div>modify</div>

Total records: 4

1234

Accounts with administrator permissions can specify the corresponding installer for the device at modify.

Modify

Email:

123456@pater.com

Installer Account:

Installer

Company:

Company name

OK

Cancel

4.6.3 Company Management

From the after-sale system, click on “System” > “Company Management” to modify the company name.

Modify

Company Name:

Midea partner

Company Code

xxxxxxx

Creation Time:

12/06/2024 10:38:24

OK

Cancel

4.6.4 Operating Log

From the after-sale system, click on “System” > “Operating Log” to retrieve the operating records of all installers or devices of the company.

Menus

All

Operating Time

Start time - End time

Registration Account

Search

Reset

Operation Time	Registration Account	Menus	Operation Content	IP
22/05/2024 10:37:24	Partner	Device Management	XXXXXXXXXXXXXX	2.18.13468444
12/06/2024 10:37:24	Partner	Installer Management	XXXXXXXXXXXXXX	2.18.13468444

Total records: 4

1

2

3

4


Appendix 1: Grid Codes

No.	Region	Grid Code	Description
1	EU	EN50549-1	EU General power grid
2	Netherlands	EN50549-NL	Netherlands power grid
3	Belgium	C10/11	Belgium power grid
4	UK	UK-G98	UK G98
5	Northern Ireland	G98/NI	Northern Ireland G98
6	UK	UK-G99	UK G99
7	Northern Ireland	G99/NI	Northern Ireland G99
8	Australia	Australia A-AS/NZS 4777.2:2020	Australia power grid
9	New Zealand	New Zealand-AS/NZS 4777.2:2020	New Zealand power grid
10	Spain	NTS 631	Spain power grid
11	Greece	EN50549-GR	Greece power grid
12	Italy	CEIO-21	Italy power grid
13	Cyprus	EN50549-CY	Cyprus power grid
14	Portugal	EN50549-PO	Portugal power grid
15	General	IEC61727-50Hz	IEC 61727 low-voltage grid-connection (50 Hz)
16	General	IEC61727-60Hz	IEC 61727 low-voltage grid-connection (60 Hz)
17	Germany	VDE-AR-N-4105	Germany power grid
18	Austria	TOR EZA Type A	Austria power grid
19	Poland	Poland-LV230/380	Poland power grid
20	Sweden	EN50549-SE	Sweden power grid
21	Hungary	EN50549-HU	Hungary power grid
22	Croatia	EN50549-CR	Croatia power grid
23	Denmark	EN50549-DK	Denmark power grid
24	Czech Republic	EN50549-CZ	Czech power grid

Note

- This table shows all the supported grid codes in the App.
- Please select the corresponding grid code based on local regulatory requirements. For more details, please contact the distributor.

Trademarks, Copyrights and Legal Statement

The  Midea logo, trademark, name and all versions thereof are valuable assets of Midea Group (“Midea”) and/or its affiliates, Midea owns the trademarks, copyrights, intellectual property rights and all goodwill derived from using any part of a Midea trademark. Use of Midea trademark for commercial purposes without the prior written consent of Midea may constitute trademark infringement or unfair competition in violation of relevant laws.

This manual is created by Midea and Midea reserves all copyrights thereof. No entity or individual may duplicate, modify, distribute in whole or in part this manual, or bundle or sell with other products without the prior written consent of Midea.

All the described functions and instructions were up to date at the time of printing this manual. However, the actual product may vary due to improved functions and designs.

Data Protection Notice

For the provision of the services agreed with the customer, we agree to comply without restriction with all stipulations of applicable data protection law, in line with agreed countries within which services to the customer will be delivered, as well as, where applicable, the EU General Data Protection Regulation (GDPR).

Generally, our data processing is to fulfil our obligation under contract with you and for product safety reasons, to safeguard your rights in connection with warranty and product registration questions. In some cases, but only if appropriate data protection is ensured, personal data might be transferred to recipients located outside of the European Economic Area.

Further information will be provided on request. You can contact our Data Protection Officer via **MideaDPO@midea.com**. To exercise your rights such as right to object to your personal data being processed for direct marketing purposes, please contact us via **MideaDPO@midea.com**. For further information please refer to the Midea website.

The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for details.

Any updates to the manual will be uploaded to the service website, please check for the latest version.

Importer:

Manufacturer: GD Midea Air-Conditioning Equipment Co.,Ltd.
Lingang Road Beijiao Shunde Foshan Guangdong
People's Republic of China 528311



make yourself at home



www.midea.com

© Midea 2023 all rights reserved

20250214