

# USER MANUAL (INSTALLER) ONLINE MONITORING **AlphaESS APP**

## Alpha ESS Co., Ltd.

☎ +86 513 806 068 91  
✉ info@alpha-ess.com  
🌐 www.alpha-ess.com  
🏠 JiuHua Road 888, Nantong High-Tech Industrial Development Zone, Nantong City, 226300

## Alpha ESS Suzhou Co., Ltd.

☎ +86 512 6828 7609  
✉ info@alpha-ess.com  
🌐 www.alpha-ess.com  
🏠 Level 15,SIPC 158 Wangdun Road SIP Suzhou, 215028

## Alpha ESS Europe GmbH

☎ +49 610 3459 1601  
✉ europe@alpha-ess.de  
🌐 www.alpha-ess.de  
🏠 Paul-Ehrlich-Straße 1a, 63225 Langen, Hessen

## Alpha ESS Italy S.r.l.

☎ +39 599 239 50  
✉ info@alpha-ess.it  
🌐 www.alpha-ess.it  
🏠 Via Loda,17-41013 Castelfranco Emilia(MO)

## Alpha ESS Australia Pty. Ltd.

☎ +61 402 500 520 (Sales)  
+61 1300 968 933 (Technical Support)  
✉ australia@alpha-ess.com  
🌐 www.alpha-ess.com.au  
🏠 Suite 1, Level 1, 530 Botany Road, Alexandria, NSW, 2015

## Alpha ESS Korea Co., Ltd

☎ +82 64 721 2004  
✉ korea@alpha-ess.com  
🏠 2F, 19-4, Nohyeong 11-gil, Jeju-si, Jeju-do, Republic of Korea

## Alpha ESS UK Co., Ltd

✉ uk@alpha-ess.com  
🏠 Drake House, Long Street, Dursley, gl11 4hh



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## Version Information

Version	Date	Content
V01	Jul. 20th, 2018	New

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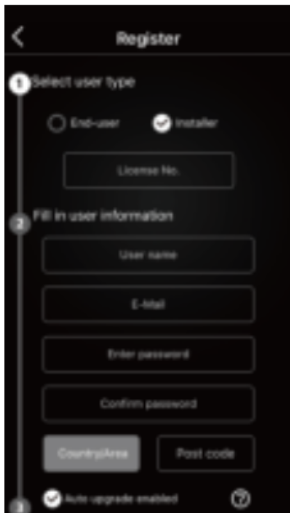
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## 01 LOGIN



- 1 Username (if you already have AlphaCloud account, please use it directly)
- 2 Enter the password (if you already have AlphaCloud account, please enter the password)
- 3 Login
- 4 Register (if you don't have an existing AlphaCloud account, please register one following the steps in section 2.)
- 5 Remember me (If chosen, no need to enter the username and password next time.)
- 6 Forgot password (If you can't remember your password, please click this link and refer to the steps in section 3.)
- 7 Configure the WiFi (If your system has a WiFi module, please let installer to configure it following the steps in section 4)

## 02 REGISTER



- 1 Select user type
  - 1.1 Select end-user or installer
  - 1.2 As an end user, please enter the SN of the inverter. As an installer, please enter the license number.
- 2 Fill in user information
  - 2.1 Username (Enter the registered username)
  - 2.2 Mail address
  - 2.3 Password
  - 2.4 Confirm password
- 3 Select country (Click to enter, select your country)
- 4 Fill in the zip code
- 5 I agree (Please check the "terms of use" and "privacy policy" )
- 6 Register (complete registration after submission)

## 03 FORGOT PASSWORD



- 1 Enter the username (enter the username used for registration)
- 2 Enter the email address (enter the email address used for registration)
- 3 Submit
- 4 After the successful submission, the mailbox will receive the email for resetting password. Click the link, and reset the new password

## 04 WIFI CONFIGURATION

This section is for users who have a system with a WiFi module.

- 1 Make sure that the Power light of the WiFi module is always on and connect the mobile phone to the hotspot named as the SN of the inverter.
- 2 Select the router you are using, enter the password, complete the router configuration and submit.



### 3 Set basic parameters after configuration



- 3.1 PV installed capacity
- 3.2 Meter selection
- 3.3 Safety regulation
- 3.4 Submit

### 4 Running Information



1. SN
2. Working status
3. System Time
4. Inverter power
5. Grid power
6. Grid-tied power
7. Battery power

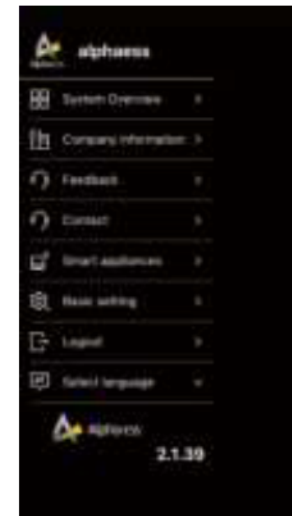
### 5 System Information



1. SN
2. Model
3. Safety regulations
4. Battery installed capacity
5. PV installed capacity
6. Meter
7. Inverter version
8. EMS version
9. BMS version

Confirmation (return to login screen after success)

## 05 SIDEBAR



- 1 Overview
- 2 View system related parameters  
Company information
- 3 Feedback  
Question list (customer complaint submission)
- 4 Contact us  
Company information and contact information
- 5 Smart home appliances
- 6 Basic settings
- 7 Associate new devices (Installer)
- 8 Safe exit  
Click this option to exit the current account.
- 9 Change the language  
> Chinese  
> English  
> Deutsch  
> Automatic (Click this option, APP language follows the system language)
- 10 Software version

## 5.1 Smart appliances



- 1 Smart appliances
- 2 Charging pile
- 3 Electric vehicle



**Note:**

If you need this special feature, you need to contact us to open the port.

## 5.2.2. Change password



- 1 Enter the old password
- 2 Enter new password (new password cannot be the same as old password)
- 3 Confirm new password
- 4 Save the submission

## 5.2 Basic settings

### 5.2.1. User information



- 1 User name
- 2 Country (Click to select)
- 3 Mail address
- 4 Zip code
- 5 Provinces, city
- 6 Detailed address
- 7 Contact number
- 8 Whether or not to allow automatic update: The automatic upgrade function is to actively accept the latest push program to improve the function of the device (end user authority) when the system is running on the network.
- 9 Whether or not to allow remote dispatch (end user authority)
- 10 Save Submission

### 5.3 Associate new device



- 1 SN (scan or manually input the SN)
- 2 Check code (six-digit check code below the QR code)
- 3 License (enter the installer license)
- 4 Submit

## 5.4 Problem Feedback



- 1 Title
- 2 Type of problem
- 3 Status
  - 3.1 Open: Just submitted, not yet received
  - 3.2 Accepted: Receive Confirmation
  - 3.3 Processing: The problem is processing
  - 3.4 Completed: Processed
  - 3.5 Evaluated: Evaluated
- 4 Evaluation
  - 4.1 Whether or not the problem has been solved?
  - 4.2 Processing time satisfaction
  - 4.3 Service attitude satisfaction
  - 4.4 Suggestions or comments
- 5 Click on the "+" in the upper right corner to create a new Problem.

### 5.4.1. Submit a problem



- 1 Title
- 2 SN (default)
- 3 Problem type: Inverter / Battery / Meter / EMS Backup Box / Monitoring / APP / Other
- 4 Mailbox (default)
- 5 Contact number
- 6 Description: describe the detailed problem
- 7 Upload image: Click to enter album and select picture/video or take a new picture, maximum up load 3 pictures
- 8 Submit

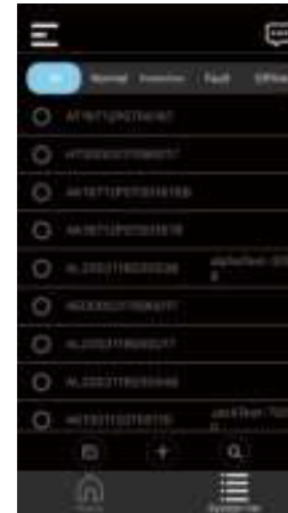
## 06

## HOMEPAGE



- 1 Number of systems in Normal/Fault/Protection/Offline state (circle)
- 2 PV generation: the total power generation of all the energy storage systems
- 3 Feed-in: the total feed-in electricity
- 4 Grid consumption: the total electricity from the grid
- 5 Total consumption: total electricity consumed by the load
- 6 CO2 reduction: PV power generation (kWh) × 0.86 (kg / kWh)
- 7 Trees planed: CO2 (kg) ÷ 5.023 (kg / tree)
- 8 Installed power: PV total installed power
- 9 Installed capacity: total installed capacity of the battery
- 10 System list (click to view all systems of this installer)

### 6.1 System list



- 1 System      Status      Bar  
(All/Normal/Protection/Fault/Offline)  
All: All system SN/end users under the installer account  
Normal/Protection/Fault/Offline: System SN/End User in Corresponding Status
- 2 Click the corresponding SN/end user to view the running data of the SN/end user system and set related parameters for the system.
- 3 Check the SN and click the feedback button in the lower left corner to ask questions/customer feedback.
- 4 Click the middle button to add a new device  
Click the button on the right to pop up the search box, enter SN, and quickly find the relevant SN.

## 6.2 Install new device

### 6.2.1.Fill in the information

- 1 SN (scan or manual input SN)
- 2 Check code (six-digit check code below the bar code)
- 3 License
- 4 Customer name (the name of the customer in the Server installation record, regardless of the registered end user name)
- 5 Contact address
- 6 Contact number
- 7 Date
- 8 Next step

### 6.2.2.Parameter settings

- 1 Operation mode (AC/DC/Hybrid)
- 2 Energy storage PV capacity: PV installed capacity connected to the energy storage system
- 3 Grid-tied capacity: PV installed capacity connected to the PV grid-tied system
- 4 Max. Feed-in: Maximum percentage of power allowed to feed into grid (total PV installed capacity)
- 5 Power factor: the factor to adjust the quality of the grid
- 6 Time zone
- 7 Save

- 8 Device upgrade: Automatically check whether there are updated versions of the 3 system firmware. If there is, click one button to upgrade to complete the related version upgrade.



## 07 HOMEPAGE (END USER)

(The installer must select SN to enter this page)



- 1 PV generation: the total amount of generated electricity in a day.
- 2 Feed-in: today's feed-in electricity
- 3 Grid consumption: today's electricity from the grid
- 4 Total consumption: today's electricity consumed by the load
- 5 CO2 reduction:  $\text{PV generation (kWh)} \times 0.86 \text{ (kg / kWh)}$
- 6 Trees planted:  $\text{CO2 (kg)} \div 5.023 \text{ (kg / tree)}$
- 7 Profit: Income from FIT, self-consumption and from load shifting
- 8 Self-consumption:  $\frac{\text{The day's (total energy generated by the equipment - total energy sold to the grid) / total energy generated by the equipment}}$
- 9 Self-sufficiency:  $\frac{\text{The day's (the total energy consumed by the load - the total energy purchased from the grid) / the total energy consumed by the load}}$
- 10 PV / grid / battery / load / SOC real-time data display
- 11 Click on the inverter icon: you can view the device details
- 12 When the installed capacity of the end user is greater than or equal to 2, you can select the specified SN from the top of the home page to view the data. When "All" is selected, the current interface displays the total data of all the systems under this end user.

## 7.1 Device details



- 1 Inverter information
  - 1.1 Model
  - 1.2 Rated installed capacity
  - 1.3 Rated output power
  - 1.4 EMS SN
  - 1.5 Inverter SN
- 2 Battery information
  - 2.1 Battery model
  - 2.2 Battery installed capacity
  - 2.3 Battery usable capacity
  - 2.4 Control box
  - 2.5 Battery SN
- 3 Meter information
  - 3.1 Meter model
  - 3.2 Meter CT ratio
- 4 Firmware information
  - 4.1 EMS version number
  - 4.2 BMU version number
  - 4.3 BMS version number
  - 4.4 Inverter version number
  - 4.5 Backup box version number
- 5 Fault, protection information
  - 5.1 Fault type
  - 5.2 Type of protection
  - 5.3 Description



## 08 SETTINGS (END USER)

(The installer must select SN to enter this page)



## 8.1 Charging and discharging



- 1 Grid charging (on/off)
  - 1.1 Set the charging time period 1
  - 1.2 Set the charging time period 2
  - 1.3 Set the charging cut-off SOC



- 2 Discharge (on/off)
  - 2.1 Set the discharge time period 1
  - 2.2 Set the discharge time period 2
  - 2.3 Set the discharge cut-off SOC

- 3 Select the date of the charging and discharging period that needs to be used during the week (Monday to Sunday, multiple choices)
- 4 Charging and discharging time period logic description
  - 4.1 The battery is forcibly charged during the charging period. When the charging cut-off SOC is reached, the battery stops forcibly charging, and the battery will not be forcibly charged outside the charging period.
  - 4.2 The battery is allowed to discharge during the discharging period. When the discharging cut-off SOC is reached, the battery will stop discharging, and the battery won't discharge outside the discharging period.
  - 4.3 When the charging period overlaps with the discharging period, the charging period priority is higher than the discharging period.
- 5 Charging and discharging time period setting can set 2 options of schemes at the same time, scheme 1 / scheme 2 runs the same logic.
- 6 Submit

## 8.2 UPS



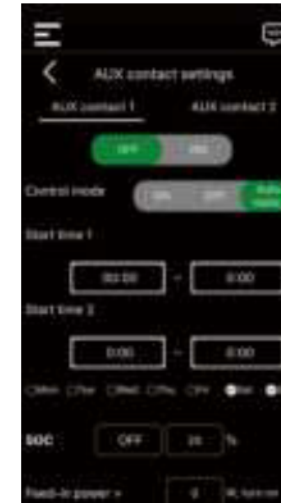
- 1 UPS reservation SOC: Discharging cut-off SOC
- 2 Charging power: Charging power during charging period

## 8.3 Backup Box



- 1 On/off: If you have Backup Box and what to use the load management function, please click "on".
- 2 L1 strategy priority, L1 strategy execute minimum SOC
- 3 L2 strategy priority, L2 strategy execute minimum SOC
- 4 L3 strategy priority, L3 strategy execute minimum SOC
- 5 Backup Box logic description
  - 5.1  $L1 > L2 > L3$  ( $SOC1 < SOC2 < SOC3$ )
  - 5.2 System discharges, when the set value of SOC3 is reached, cut off L3
  - 5.3 System discharges, when the set value of SOC2 is reached, cut off L2
  - 5.4 System discharges, when the set value of SOC1 is reached, cut off L1
- 6 Submit

## 8.4 Aux contact



- 1 On: To use the aux contact function
  - 1.1 Control mode on: In the set periods the aux contact will be switched on, outside the set periods the aux contact will be switched off.
  - 1.2 Control mode off: In the set periods the aux contact will be switched off, outside the set periods the aux contact will be switched on.
  - 1.3 Control mode Auto:
 

It means the aux contact will be switched automatically on and off according to the following logic:

Under auto mode, the period control function doesn't work. In this mode the following further specifications should be set.

    - 1.3.1 You can set the SOC condition. There are three modes that can be set:
      1. " $\geq$ ", namely when  $SOC \geq$  given value, it works.
      2. " $\leq$ ", namely when  $SOC \leq$  given value, it works.
      3. "off", namely the Aux contact control is not related to the SOC value.
    - 1.3.2 You can also set surplus energy range, namely the feed-in condition.
 

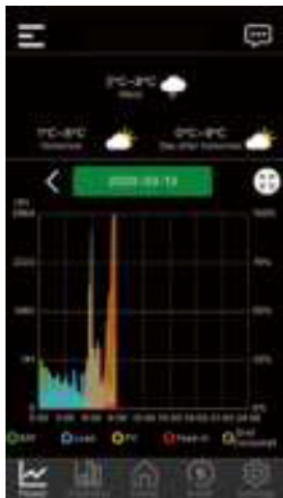
When the feed-in power  $>$  given value (1st row), the Aux contact will be switched on. When the feed-in power  $<$  given value (2nd row), the Aux contact will be switched off (or back to the initial situation).

- 2 Off: Disable aux contact setting function
- 3 UPS mode: Can be turned on/off when the control mode is automatic
- 4 Waiting time Delay (delay): The Aux contact will work (be switched on/off) after the given time if some condition is fulfilled.
- 5 Duration: After the Aux contact being switched on, it will not be switched off before the given time.
- 6 Pause: After the Aux contact being switched off, it will not be switched on before the given time.

In this mode the normal self-consumption logic will be used

## 09 POWER (END USER)

(The installer must select SN to enter this page).



- 1 The weather bar, left, center and right corresponds to tomorrow's, today's weather, and the weather of the day after tomorrow (the correct country and zip code must be set to show the weather conditions)
- 2 System operation power diagram
  - 2.1 Date selection:
    - a. Click the left/right arrow to quickly switch the date to the previous day/the next day
    - b. Click on the date to select the power diagram for the specified date in the bullet box.
  - 2.2 Click the Battery/Load/PV/Sell/Buy button to select whether or not to display the battery/load/ PV/ electricity selling/ electricity buying graph.
- 3 Horizontal screen switching (zooming available for horizontal screen)

## 10 STATISTICS (END USER)



- 1 Self-consumption ratio: Within the selected time period (PV total generation- total electricity sold) / total PV generation
- 2 Self-sufficiency ratio: Within the selected time period (Load total consumption – total grid consumption) / total Load consumption
- 3 Select Day: To check the energy graph of the last 7 days.
- 4 Select Month: To check the energy graph of the last 6 months.
- 5 Select Year: To check the energy graph of the last 2 years.
- 6 Select Since-installation: To check the energy graph from the installation date.

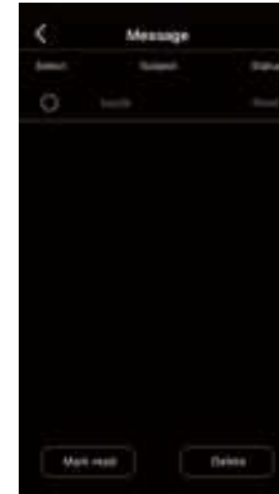
## 11 PROFIT (END USER)

(The installer must select SN to enter this page)



- 1 Total income and investment of this period
- 2 Select Day: To see the income graph of the last 7 days.
- 3 Select Month: To see the income graph of the last 6 months.
- 4 Select Year: To see the income graph of the last 2 years.
- 5 Choose Since-installation: To see the income graph from the installation date.
- 6 Description: To set the price of buying/selling electricity to see the income (with log-in to the website)

## 12 MESSAGE (UPPER RIGHT CORNER)



- 1 Choose
- 2 Topic: Click to view the message content
- 3 Status: Unread/Read
- 4 Mark as read: Select the message, click to mark the message as read
- 5 Delete: Select the message you want to delete and click delete

## 13 ACCOUNT SHARING

- 1 Use the sharing feature on the web to share
- 2 Register a shared account
- 3 Log in with the shared account on the app.  
After log-in, you can only read the data, no edit is allowed

