

User Manual

Share ECU

Version 1.0

Introduction

Share ECU is a solution that the adjacent families sharing a wireless communication ECU to upload the data of Inverters, but every family has an individual EMA account. This article brings this new solution and give a quick guide to use.

1. Basic conception and usage restriction

1.1 The two different customers of Share ECU

1.1.1 Introduction of the two different customers

Share ECU Sub User : ECU could create accounts for different families who use a same ECU device to monitor the output data of their Inverters. There is no interference between the different accounts which use a same ECU device. Each customer could look over the data of his/her Inverters independently.

Share ECU Master User :

For easy management, installers are allowed to register an additional account to monitor the output power of all the Inverters which are using a same ECU device.

The screenshot shows the APsystems installer registration interface. The top navigation bar includes the APsystems logo, 'USER LIST', 'REGISTRATION', and 'SETTING' tabs. The right side of the header shows 'English | Settings | Sign out' and the user's role 'APSGen2Installer Gen4' with the location 'Jiaxiang,Zhejiang,China'. The main content area is titled 'NEW USER' and contains a form for creating a new user. The 'UserType' section is highlighted with a red box, showing two radio buttons: 'Share ECU Sub User' (which is selected) and 'Share ECU Master User'. Below this, there are input fields for 'UserName', 'Password', 'Confirm Password', 'FirstName', and 'LastName'. On the right side of the form, there are dropdown menus for 'Installer' (set to 'APSGen2Installer'), 'Country' (set to 'China'), and 'State/Province', along with input fields for 'City' and 'Address'.

1.1.2 Registration management

There is a single entry for Share ECU registration and the registration steps are different.

Sub User :

The registration steps are similar to the normal accounts' registration.

Notice inputting the devices' ID numbers belong to the customer while adding inverters.

Master User:

Only need to register customer information and ECU ID number. EMA will automatically associate this account with other Share ECU sub users who use the same ECU device. Notice that the account is optional.

The permission of installers :

Installers could not register the Share ECU account by default. If need to grant this permission, please connect with APSystems.

1.1.3 Systems data monitoring

The output power data has something difference from the normal customers' .

Sub User : Could only look over the data belongs to their own device.

Master User : Could look over the summarized data of Share ECU.

1.2 The restrictions of Share ECU

- Only for Zig-bee communication.
- Make sure the distance less than 300m. Keep the different parts of inverters and ECU connection before sharing.

2. Registration Management

2.1 Share ECU Sub User Registration

The registration procedure is same as the normal users'

Including personal information, registration ECU information, registration inverter information, create system view information (optional), upload drawings (optional).

Registration entry

Select "Registration ", "Add Share ECU Users". This menu is only visible to the administrator account that has been activated for " Add Share ECU Users".

English | Settings | Sign out
APSGenZinstaller Gen4
Jiaxiang,Zhejiang,China

USER LIST REGISTRATION SETTING

STEP 1 : PERSONAL INFO STEP 2 : ECU INFO STEP 3 : INVERTER INFO STEP 4 : GROUP VIEW INFO STEP 5 : UPLOAD DRAWING

Set personal information and password.

NEW USER

UserType Share ECU Sub User Share ECU Master User

*UserName *Installer APSGenZinstaller

*Password *Country China

*Confirm Password *State/Province

*FirstName *City

LastName Address

共享 ECU 分用户

2.1.1 Personal Information

Need to select "Share ECU Sub User". Other information is the same as registering a normal account.

2.1.2 ECU Information Registration

Similar to the registration procedure for normal users. But please notice that modifying or replacing the ECU: The changed ECU ID only affects the current Share ECU sub user account but doesn't affect the ECU ID of the associated Share ECU master user.

If the Share ECU sub user's ECU ID is different from the Share ECU master user's. It will not make any sense of Share ECU.

2.1.3 Inverter Registration

There are two ways registering the inverters in EMA, including "Import from ECU" and "manual Add ". Either way, adding an inverter only need to add the inverter ID number that belongs to the Share ECU sub user.

The screenshot shows the 'REGISTRATION' page in the APsystems EMA system. The interface is divided into five steps: STEP 1: PERSONAL INFO, STEP 2: ECU INFO, STEP 3: INVERTER INFO (current step), STEP 4: GROUP VIEW INFO, and STEP 5: UPLOAD DRAWING. A navigation bar at the top includes 'English', 'Settings', and 'Sign out'. The user is identified as 'APSGenZinstaller Gen4' from 'Jiaxiang,Zhejiang,China'. The left sidebar contains options: 'ADD CUSTOMER', 'ADD SHARED ECU USERS', 'INCOMPLETED CUSTOMER', and 'INSTALLER MANAGE'. The main content area has a heading 'INPUT IDS' and a sub-heading 'INVERTER TEMPORARY INFORMATION LIST'. Below the heading, there are two tabs: 'Import From ECU' and 'Manual Add'. The 'Import From ECU' tab is active, showing an 'ECU ID' field with the value '204000954354' and a dropdown arrow. Below the field is a button labeled 'Insert ID to list'. The 'Manual Add' tab is also visible. To the right of the input fields is a table with columns: ID, ECU ID, Inverter ID, Type, Channel, and Action. Below the table are 'Back' and 'Submit' buttons. Two red arrows point to the 'Import From ECU' and 'Manual Add' tabs, with Chinese labels '从 ECU 导入' (Import from ECU) and '手动添加' (Manual Add) respectively.

2.1.4 View Information Adding

Optional step. The register method is divided into "Automatic Adding" and "Manually Adding ", which is same as normal users' .

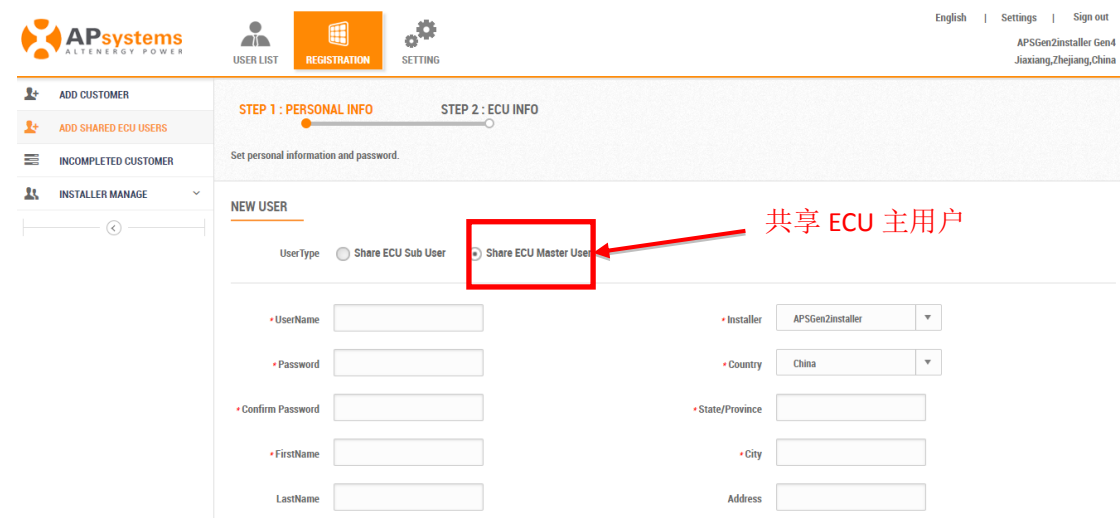
2.1.5 Drawings Uploading

Use to save uploaded installation drawings or photos of the system. It is an optional step for registration. The procedure is the same as normal users' .

2.2 Share ECU Master User Registration

Share ECU Master user registration includes personal information and ECU registration information.

The registration procedure is similar to the normal users'. But notice that selecting the Share ECU master user as the user type.



The screenshot shows the APsystems user registration interface. The top navigation bar includes the APsystems logo, 'USER LIST', 'REGISTRATION' (highlighted), and 'SETTING'. The right side of the header shows 'English | Settings | Sign out' and 'APSGenZinstaller Gen4 Jiaxiang,Zhejiang,China'. The main content area is titled 'STEP 1: PERSONAL INFO' and 'STEP 2: ECU INFO', with a progress indicator. Below this, it says 'Set personal information and password.' The 'NEW USER' section has two radio buttons for 'UserType': 'Share ECU Sub User' and 'Share ECU Master User'. The 'Share ECU Master User' option is selected and highlighted with a red box. A red arrow points to this box with the Chinese text '共享 ECU 主用户' (Shared ECU Master User). Below the radio buttons are several input fields: 'UserName', 'Password', 'Confirm Password', 'FirstName', 'LastName', 'Installer' (dropdown menu), 'Country' (dropdown menu), 'State/Province', 'City', and 'Address'.

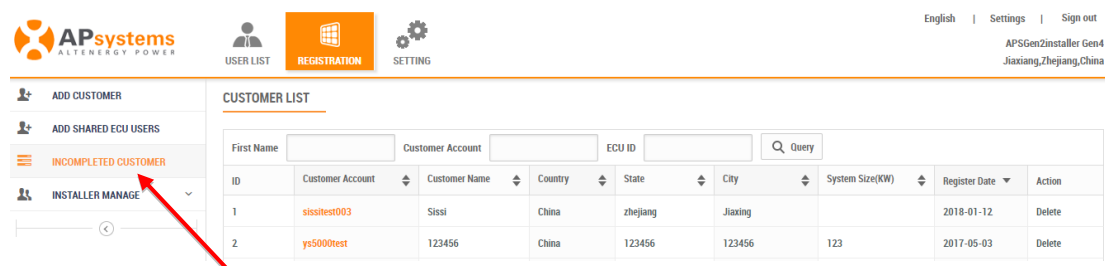
After the registration procedure has been completed, EMA will automatically find all Share ECU sub user accounts corresponding to the ECU ID number according to the ECU ID number and associate the registered inverters, views information, installation drawings and other information to this account.

2.3 Incompleted Customer

Registration procedure may be interrupted due to special reasons. EMA will retain the unfinished registration information for the customers who

can continue registering after completing other works.

The procedure is the same as normal users'. In the "register manager", search the unfinished registration customers in "uncompleted customer" list and follow the reminders to continue the registration.



未完成注册用户

3. System Data Monitoring

The data monitoring content of the share ECU is basically same as normal users'. The following tables list the differences between them.

3.1 Different types Of user Login Monitor Content

Objects	Sub User	Matser User	Normal Users
System energy	Only display the power generation data of the inverter which belongs to current Share ECU sub user account	Display the power generation data of all the inverters under this ECU. When there are several ECUs, it is the summary value of all ECUs	Display the power generation data of all the inverters under this ECU. When there are several ECUs, it is the

			summary value of all ECUs
Module	Only display the layout of the current Share ECU sub user account view and the power generation data of corresponding component	Display the inverter layout view for all Share ECU Sub User and the power generation data of corresponding component	Display the current user layout view and the power generation data of corresponding component
Report (including system overview, ECU level data, power generation data report download)	Only display the current Share ECU Sub User's inverter power generation data and the corresponding environmental benefits	Display the all Share ECU Sub User's inverter power generation data and the corresponding environmental benefits	Display all the inverter under the ECU power generation data and the corresponding environmental benefits, when there are several ECUs, it is the summary of the value
Setting (including system information, system	a) Only the current Share ECU Sub User account basic information is displayed	a) Display the Share ECU Master User account information b) Display the Share ECU Master User 's	a) Display user basic information b) Display system

information maintenance)	b) Only the historical data of the current Share ECU Sub User system is displayed	ECU history and all Share ECU Sub User 's inverter history data	history
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3.2 Installer Management Share ECU Users

Object	Share ECU Sub User	Share ECU Master User	Normal User
User generation information: Such as system energy, component power, system reports, etc.	See "3.1 Different Types Of User Login Monitoring Content Difference"		
History (ECU history data, inverter history data)	Only displays the current Share ECU Sub User's ECU and inverter history	Display the Share ECU Master User 's ECU history and all Share ECU Sub User 's inverter history data	Display system ECU and inverter history
Remote control	Both user actions operate on the entire ECU range		Acting on the entire ECU

			range
Diagnose	Only show Share ECU Sub User's information and working condition of registered inverter	Display the Share ECU Master User information, working condition of Share ECU Sub User's inverter has been registered and the report of the unregistered but have reported data inverter	Display system user information, the working condition of the inverter has been registered and the inverter has not been registered but reported data