



User Manual

Share ECU

Version 1.0

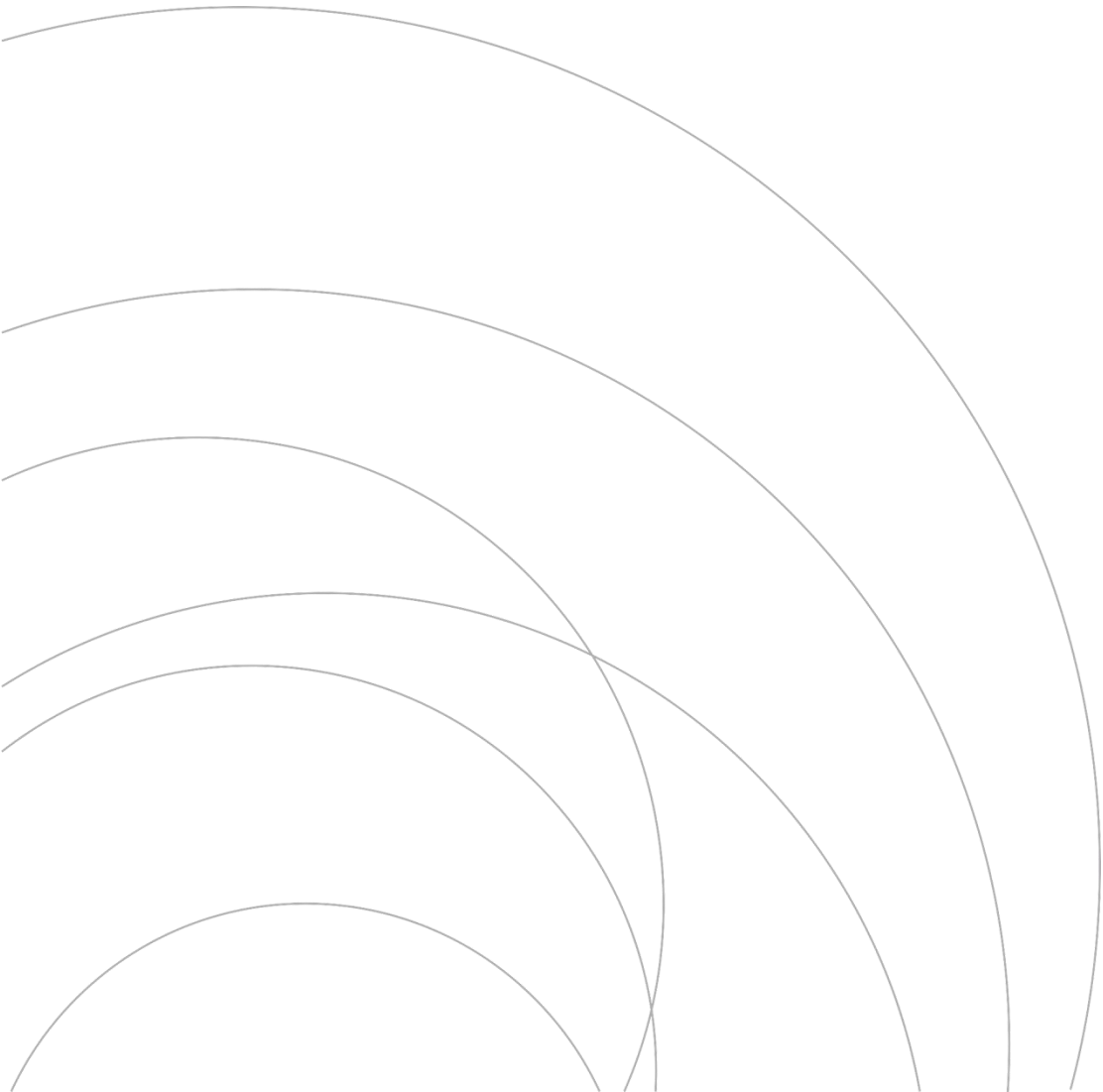


Table of Contents

Basic conception and usage restriction.....	1
The two different customers of Share ECU.....	1
Introduction of the two different customers.....	1
Registration management.....	2
Systems data monitoring.....	2
The restrictions of Share ECU.....	2
Registration Management.....	3
Share ECU Sub User Registration.....	3
Personal Information.....	3
ECU Information Registration.....	4
Inverter Registration.....	4
View Information Adding.....	4
Drawings Uploading.....	5
Share ECU Master User Registration.....	5
Incompleted Customer.....	6
System Data Monitoring.....	7
Different types Of user Login Monitor Content.....	7
Installer Management Share ECU Users.....	8

Basic conception and usage restriction

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.

The two different customers of Share ECU

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 displays the APsystems user registration interface. The top navigation bar includes 'English', 'Settings', and 'Sign out'. The user profile section shows 'APSGenZinstaller Gen4' and 'Jiaxiang,Zhejiang,China'. The main content area is titled 'NEW USER' and includes a 'User Type' section with two radio buttons: 'Share ECU Sub User' (selected) and 'Share ECU Master User'. Below this are input fields for 'UserName', 'Password', 'Confirm Password', 'FirstName', 'LastName', 'Installer', 'Country', 'State/Province', 'City', and 'Address'. The 'Installer' dropdown is set to 'APSGenZinstaller' and 'Country' is set to 'China'. The page also features a left sidebar with navigation options: 'ADD CUSTOMER', 'ADD SHARED ECU USERS', 'INCOMPLETED CUSTOMER', and 'INSTALLER MANAGE'. The main content area is titled 'NEW USER' and includes a 'User Type' section with two radio buttons: 'Share ECU Sub User' (selected) and 'Share ECU Master User'. Below this are input fields for 'UserName', 'Password', 'Confirm Password', 'FirstName', 'LastName', 'Installer', 'Country', 'State/Province', 'City', and 'Address'. The 'Installer' dropdown is set to 'APSGenZinstaller' and 'Country' is set to 'China'.

Basic conception and usage restriction

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.

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.

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.

Registration Management

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".

The screenshot shows the APsystems 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 profile 'APSGen2installer Gen4, Jiaxiang,Zhejiang,China'. The main content area is titled 'NEW USER' and features a progress bar with five steps: 'STEP 1: PERSONAL INFO', 'STEP 2: ECU INFO', 'STEP 3: INVERTER INFO', 'STEP 4: GROUP VIEW INFO', and 'STEP 5: UPLOAD DRAWING'. Below the progress bar, the instruction 'Set personal information and password.' is displayed. The 'User Type' section has two radio buttons: 'Share ECU Sub User' (which is selected and highlighted with a red box) and 'Share ECU Master User'. A red arrow points from the text 'Share ECU Sub User' to the selected radio button. Below this, there are input fields for 'UserName', 'Password', 'Confirm Password', 'FirstName', and 'LastName'. On the right side, there are dropdown menus for 'Installer' (set to 'APSGen2installer'), 'Country' (set to 'China'), and 'State/Province', along with input fields for 'City' and 'Address'.

Personal Information

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

Registration Management

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.

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 APsystems EMA registration interface. The top navigation bar includes the APsystems logo, 'USER LIST', 'REGISTRATION', and 'SETTING' tabs. The right side of the top bar shows 'English | Settings | Sign out' and user information: 'APSGen2installer Gen4, Jiaxiang, Zhejiang, China'. The main content area is titled 'STEP 3: INVERTER INFO' and contains a progress bar with five steps: 'STEP 1: PERSONAL INFO', 'STEP 2: ECU INFO', 'STEP 3: INVERTER INFO', 'STEP 4: GROUP VIEW INFO', and 'STEP 5: UPLOAD DRAWING'. Below the progress bar, there is a text box stating: 'There are two ways to add inverters, manually or automatically. The most important is EMA only could auto add the inverters reported remotely to EMA by ECU, if you find some one are not included, you could add them manually.' The main content area is divided into two sections: 'INPUT IDS' and 'INVERTER TEMPORARY INFORMATION LIST'. The 'INPUT IDS' section has two buttons: 'Import From ECU' and 'Manual Add'. A red arrow points to the 'Import From ECU' button with the label 'Input From ECU'. The 'Manual Add' button is also highlighted with a red arrow and the label 'Manual Add'. Below the buttons, there is an 'ECU ID' input field with the value '204000954354' and an 'Insert ID to list' button. The 'INVERTER TEMPORARY INFORMATION LIST' section contains a table with columns: 'ID', 'ECU ID', 'Inverter ID', 'Type', 'Channel', and 'Action'. At the bottom right of the 'INPUT IDS' section, there are 'Back' and 'Submit' buttons.

View Information Adding

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

Registration Management

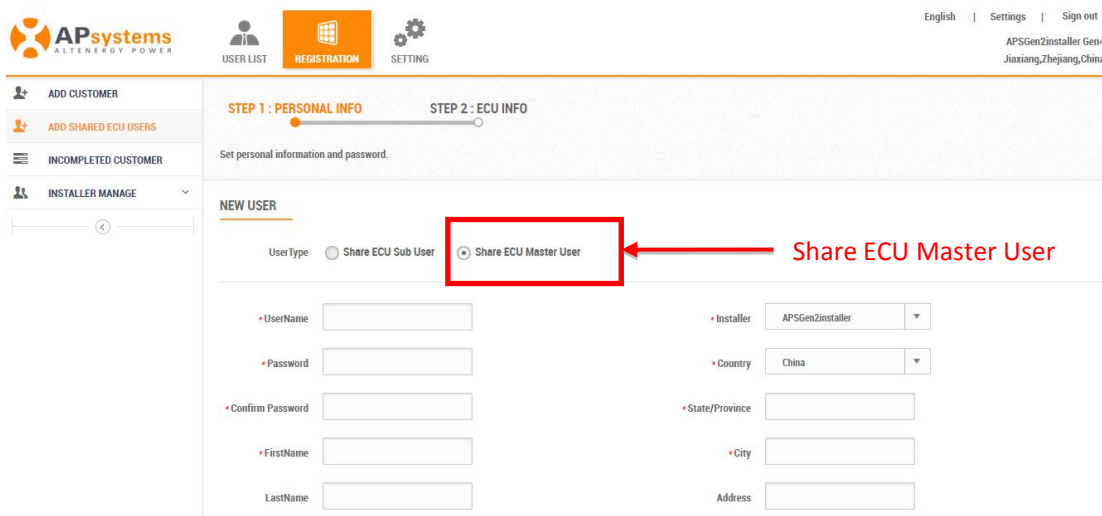
Drawings Uploading

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' .

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 registration interface. The top navigation bar includes the APsystems logo, 'USER LIST', 'REGISTRATION' (highlighted), and 'SETTING'. On the right, there are links for 'English', 'Settings', and 'Sign out', along with the text 'APSGen2Installer Gen4 Jiaxiang,Zhejiang,China'. The main content area is titled 'NEW USER' and shows a progress bar with 'STEP 1: PERSONAL INFO' and 'STEP 2: ECU INFO'. Below the progress bar, it says 'Set personal information and password.' The 'UserType' section has two radio buttons: '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 from the text 'Share ECU Master User' to this box. Below the radio buttons are several input fields: 'UserName', 'Password', 'Confirm Password', 'FirstName', 'LastName', 'Installer' (dropdown), 'Country' (dropdown), 'State/Province', 'City', and 'Address'.

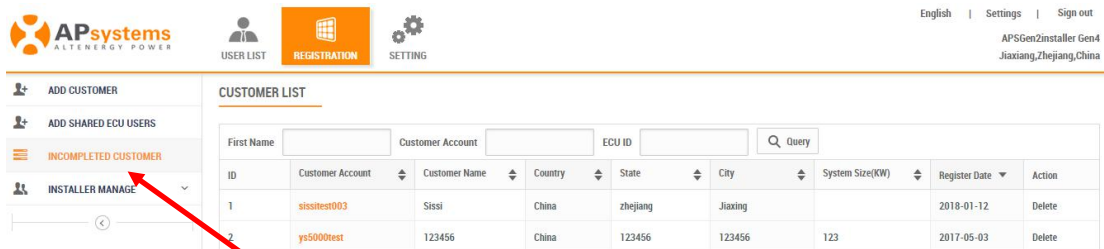
After the registration procedure has been completed, EMA will automatically find all Share ECU sub user accounts corresponding to the ECU ID number according to the ECU ID number and associate the registered inverters, views information, installation drawings and other information to this account.

Registration Management

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 "Registration", search the unfinished registration customers in "Incompleted Customer" list and follow the reminders to continue the registration.



The screenshot shows the APsystems software interface. The top navigation bar includes the APsystems logo, 'USER LIST', 'REGISTRATION', and 'SETTING' tabs. The 'REGISTRATION' tab is active. The main content area displays the 'CUSTOMER LIST' table. A red arrow points to the 'INCOMPLETED CUSTOMER' menu item in the left sidebar.

ID	Customer Account	Customer Name	Country	State	City	System Size(KW)	Register Date	Action
1	sissitest003	Sissi	China	zhejiang	Jiaxing		2018-01-12	Delete
2	ys5000test	123456	China	123456	123456	123	2017-05-03	Delete

Incompleted Customer

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.

Different types Of user Login Monitor Content

Objects	Sub User	Matser User	Normal User
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	Displaythe 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 information maintenance)	Only the current Share ECU Sub User account basic information is displayed Only the historical data of the current Share ECU Sub User system is displayed	Display the Share ECU Master User account information Display the Share ECU Master User 's ECU history and all Share ECU Sub User 's inverter history data	Display user basic information Display system history

System Data Monitoring

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