

User Guide (Installer)

Online Energy Monitoring & Analysis (EMA)

Rev 4.0 12/16

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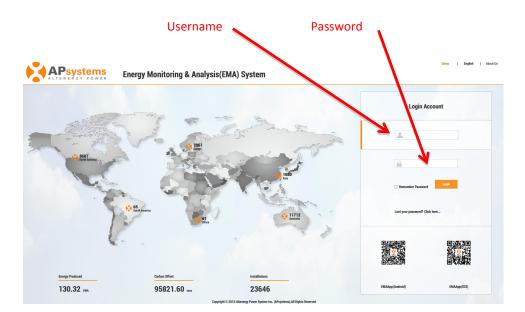
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Log onto EMA Website

1. Go to http://www.apsystemsema.com

The APsystems EMA Login page is displayed.



Note: You are issued a permanent Username, and a temporary Password when you complete Installer Training with APsystems. Contact APsystems Technical Support to register for Installer Training (go to <u>https://usa.apsystems.com/resources/training</u>, or call 1.844.666.7034).

2. Enter your "Username" and "Password".

Note: The Password is case sensitive.

Note: If you forget your password, select "Lost your password? Click here ...".

3. Press the "Login" button.

Your specific Customer List page is displayed.

	ystems RGY POWER USER LIST	REGISTRATION	MANAGEMENT							ings Sign out APS DEMO shington,United States
Customer LIST Dautomer Account v ECU ID Inventer ID Q. Query E Duport										
ID	Customer Account 🚖	ECU ID	💠 True Name 👙	Country 🔶	State 🜲	City 🜲	System Size(KW) 🔶	Register Date 🚖	System Status	Action
1	APSATest	213000019948	Barney Farpalow	United States	Washington	Bainbridge Island		2014-05-02	۲	Delete
Displaying 1 to	1 of 1 items.								Total: 1 , Go	to 1 Go

Note: You won't have any customers in your Customer List the first time you log into the system.

Add a New Customer Installation

Introduction of the two different customers

Inverter User: This is for those who wants to monitor the inverter system. For example, YC500, YC600, YC1000, etc.

OPT700 Series User: This is for those who wants to monitoring OTP700 system.

There are five (5) major steps involved in adding a new installation (registering) in the EMA. All the following introductions take the inverter user as an example, it also applies to the OTP700 Series Users.

Step 1: Entering the customer's personal information.

- Step 2: Configuring the Energy Communication Unit (ECU).
- Step 3: Configuring the inverter information(OTP700 SeriesUsers will display OTP700 series).
- Step 4: Configuring the Group View.
- Step 5: Uploading the installation drawings and/or photo.

Step 1: Entering the Customer's Personal Information

1. Log onto the EMA.

Your specific Customer List page is displayed.

REGISTRATION Icon															
CAPESYSTEMS RECTARDED HARACENERT DE LA CAPESA DE LA CAPES															
CUSTOMER LIST	CUSTOMER LIST														
D			True Name \$		¢		¢	City	¢	System Size(KW)	¢	Register Date	¢	System Status	Action
1	APSATest	213000019948	Barney Farpalow	United States		Washington		Bainbridge Islan	d			2014-05-02		۲	Delete
Digdging 1 to 1 of heat, Sew 1 Ger															

2. Select the REGISTRATION icon at the top of the page.

The New User page is displayed.

Continued ...

			Pro	ocess Steps Indicator			
ALTENERGY POWER	USER LIST REGISTRATION						English Settings Sign out APS DEMO Seattle,Washington,United States
ADD CUSTOMER UNCOMPLETED CUSTOMER	STEP 1 : PERSONAL I	NFO 🖌	STEP 2 : ECU INFO	STEP 3 : INVERTER INFO	STEP 4 : GROUP	VIEW INFO	STEP 5 : UPLOAD DRAWING
INSTALLER MANAGE	Set personal information and password						0
· · · · · · · · · · · · · · · · · · ·	NEW USER UserType (*)	Inverter User 💿 Optimizer U	Jser				
	• UserName			• Ins	taller APS DEMO	•	
	* Password			• Co	United States	v	
	Confirm Password			• State/Pro	vince		
	FirstName				• City		
	LastName		R	Ad	dress		
	*Email			Postal	Code		
	Phone			System	Size ()	KW)	
	Alle	w visitors to access to this system		Re	mark		
	Ser	d Weekly Production Report					Submit
				Registration Field	S		

Note: Optimizer not available in all regions.

3. Fill in the customer details by field, making sure to include all required information.

UserName	This is a single "name" (typically the customer's last name) that identifies this specific customer's installation. The username appears in the customer's area on the EMA. (Required)
	Only "letters", "numeric digits", "underscores", "@", "spaces", and "." Can be used when creating a username.
	Note : A username cannot be modified once it has been submitted.
Password	This is a temporary password that is emailed to your customer so they can access their account on the EMA. Your customer can change their password should they so choose. (Required)

Confirm Password Enter the same password again to confirm. (Required)

Continued ...

Email	This is your customer's email address. (Required)
	APsystems sends your customer their password and all system related notifications to this email address.
First Name	Your customer's first name. (Required)
Last Name	Your customer's last name. (Optional)
Phone Number	Your customer's phone number. (Optional)
Installation Company	This field is automatically generated by the system and can be changed using the pull down selector if necessary. (Required)
Country	This field is automatically generated by the system and can be changed using the pull down selector if necessary. (Required)
State/Province	Customer's state or province. (Required)
City	Customer's city. (Required)
Address	Customer's street address. (Optional)
Postal Code	Customer's postal code. (Optional)
System Size	Calculate the overall system size and enter it here. (Optional)
Remarks	Add any notes that you may find useful at a later date. (Optional)

4. Select whether to "Allow visitors to access this site".

Note: This is an optional selection step. If selected, the system displays an authorization code to be used in embedding this specific customer's EMA data within another website.

5. Select whether to have APsystems "Send a weekly production report".

Note: This is an optional selection step. If selected, the customer will receive an automatically generated production report on a weekly basis.

Continued ...

6. Select the "Submit" button.

Note: Once you have selected either the "*Next*" or "*Submit*" buttons in any of the major registration steps (1-5), your customer information is saved in the system and you can step away from the process and resume by selecting "*Incomplete Customer*" (see page 21 – **Resume an Incomplete Registration**).

The ECU Information page is displayed.

			Add ECU Button			
APsystems		NT			English Settin	ings Sign out APS DEMO shington,United States
1+ ADD CUSTOMER	STEP 1 : PERSONAL INFO	STEP 2 : ECU INFO	STEP 3 : INVERTER INFO	STEP 4 : GROUP VIEW INFO	STEP 5 : UPLOAD D	RAWING
UNCOMPLETED CUSTOMER	•				0	
11 INSTALLER MANAGE ~	At least add one ECU before click [Next] to next step recoverable once deleted.	b. Make sure the ECU id and time zone correct. [Edit] to cor	rect ECU information, [Replace] to replace ECU, the replaced one will be sh	owed in [HISTORY]. Note: Deleting an ECU from the database will	also remove inverters connected to the unit, and the	heir data will not be
	ECU LIST					
					+ Add 🔟 Delete	Export
	ID	ECU ID	Timezome		Action	
	No Records Found					
						Back Next

Step 2: Configure the ECU

7. Press the "Add" ECU button.

The Add ECU window is displayed.

	Add ECU ۱	Vindow		📕 ECU ID F	ield
APsystems	USER LIST REGISTRATION				English Settings Sign out APS DDMO Seattle, Hisshington, United States
L+ ADD CUSTOMER	STEP 1 : PERSONAL INFO	STEP 2 : ECU INFO	STEP 3 : INVERTER INF	STEP 4 : GROUP VIEW INFO	STEP 5 : UPLOAD DRAWING
UNCOMPLETED CUSTOMER				·	0
11. INSTALLER MANAGE ~	At least add one ECU before click [Next] to next step. Make sure the recoverable once deleted.	e ECU id and time zone correct. (Edit) to co	errect ECU internation, [Replace] to replace ECU, the replaced one w	ill be showed in (HISTORY). Note: Deleting an ECU from the database wi	I also remove inverters connected to the unit, and their data will not be
	ECU LIST	1	ADD ECU	×	
			Note: you can add uid by auto imper after add ECU		+ Add 🔟 Delete 🕑 Export
		ECU ID	ECU ID-		Active
	No Records Found		P		
			ECU Timezome• (OMT-08:00) v		
					Back Hent
				ox	

8. Enter the 12-digit ECU UID number(s) into the ECU ID field.

Continued ...

The ECU UID is located on the top of the ECU, as well as on the front flap of the shipping box.



Note: The ECU UID is a unique APsystems "serial number" that is assigned to the ECU during manufacture. It is **NOT** the IP Address of the device.

It is critical that you enter the ECU UID correctly because the EMA uses this number to identify the system it is monitoring and reporting.

- 9. Select the time zone where the ECU is to be installed.
- 10. Press the "OK" button.

Note: Check **Resume an Incomplete Registration** – Page 21 if you get a system message that indicates that the UID already exists while making these entries.

Once you have entered all of the ECU UID numbers to be installed at a specific location ...

11. Press the "Next" button.

The Inverter Information page is displayed.

ECU Selection Field

Add Button

APSystems	USER LIST REGISTRATION	MANAGEMENT					English	Settings Seattle,Washin	a Sign out APS DEMO gton,United States		
ADD CUSTOMER	STEP 1 : PERSONA	LINEO	STEP 2 : ECU INFO	STEP 3 : INVERTER INFO	STEP 4 : GROUP VIEW INFO		STEP 5 : U		WING		
UNCOMPLETED CUSTOMER	•				0		0121 01:0	-0			
11 INSTALLER MANAGE				ck [Next] to fill in group view information and upload drawings. [Edit]	to correct inverter information, [Replace] to replace inverter, th	e replaced one will I	be showed in [HI	ISTORY]. Note:	Deleting an		
	inverter from the database will also re	inverter from the database will also remove its location information, and the data will not be recoverable once deleted.									
	INVERTER LIST										
	ECU ID 204100002641 *	Inverter ID	Q Query			+ Link	+ Add	Delete	Export		
		ID	Inverter ID	Туре	Channel	Action					
	No Records Found										
									Back Next		

Step 3: Configure the Inverters

In this step you are assigning the inverters to their associated ECU(s).

- 12. Select the ECU (ECU Selection field).
- 13. Press the "Add" button.

The Input Inverter IDs page is displayed.

		1	Input ID	s Wind	w		/ Tempor	ary In	verter Lis
1- ADD CUSTOMER	STEP 1 : PE	RSONAL IN O	STEP 2 : EC	U INFO	STEP 3 : INVE	RTER INFO	STEP 4 : GROUP VIEW INFO		STEP 5 : UPLOAD DRAWING
UNCOMPLETED CUSTOMER			•						O
11. INSTALLER MANAGE	There are two ways to add i	overters ansaily or automatically	. The most important is EMA only or	old auto add the inverters reporte	d remotely to EMA by ECU, if y	ou find some one are not pluded, y	ou could add them manually.		
	INPUT IDS	4		INVERTER TEMPORA	RY INFORMATION LIST				
	Import From ECU	Manual ADD		ID	ECU ID	Inverter ID	Type	Channel	Action
	ECU ID	204100002641	¥						Back Submit
			Insert ID to list						

14. Enter the 12-digit inverter ID numbers.

There are two (2) methods for adding inverters to the EMA:

- 1) Importing them from the ECU.
- 2) Manually entering them into the EMA.

Method 1: Importing the IDs from the ECU

Note: When importing the inverter IDs from the ECU, make sure that you have entered all of the inverter IDs into the ECU, and that the ECU is correctly connected to the Internet so that the APsystems server can retrieve the IDs.

INPUT IDS	Import from ECU Tab		ECU ID Pulldown
Import From ECU	Manual ADD		
ECU ID 20	3000006543		
	Insert ID to list		
		Insert	ID to List Button

1) Select the "Import From ECU" tab.

- 2) Select the ECU from the "ECU ID" pulldown.
- 3) Press the "Insert ID to List" button.

The EMA begins importing all of the inverter IDs on the ECU and placing them onto the Temporary

Inverter List.

				/ Tempo	orary Inverter L
L+ ADD CUSTOMER	STEP 1 : PERSONAL INFO	STEP 2 : ECU INFO	STEP 3 : INVERTER INFO	S EP 4 : GROUP VIEW INFO	STEP 5 : UPLOAD DRAWING
UNCOMPLETED CUSTOMER	•	•	•		0
L INSTALLER MANAGE ~	There are two ways to add inverters, manually or automatically	. The most important is EMA only could auto add the inverters n	ported remotely to EMA by ECU, if you find some one are not includ	ed, you concluded them manually.	
	INPUT IDS	INVERTER TEM	PORARY INFORMATION LIST		
	Import From ECU Manual ADD	D	ECU ID Inverter ID	Туре	Channel Action
	ECU ID 204103002541				Back Submit
		Insert ID to list			

- 4) Verify that the temporary list of inverter IDs is complete and correct.
- 5) Press the "Submit" button.

The "permanent" inverter list is displayed.

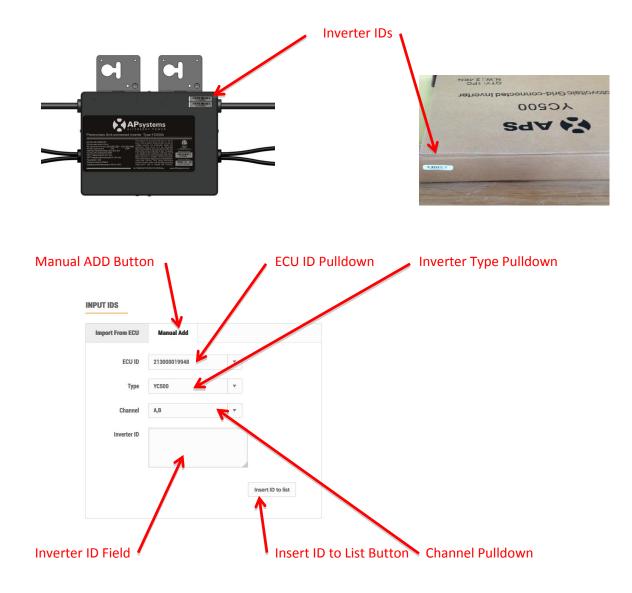
Note: This list can be edited if necessary by selecting either "*Edit*" or "*Replace*" for each inverter and its associated channel.

CUIE	D 20300	0006543 💌 Inverter ID	Q Query	& Link +	Ade 🔟 Delete 📑 Export
	ID	Inverter ID	Туре	Channel	Action
	1	404000056432	YC500	A	Edit Replace
	2	404000056432	YC500	в	Edit Replace
	3	404000056453	YC500	A	Edit Replace
	4	404000056453	YC500	в	Edit Replace

Go to <u>Step 4: Configuring Group View</u> to complete the Registration Process.

Method 2: Manually Entering IDs into the EMA

Each inverter has a unique UID which is located on the front of the inverter, as well as on the back flap of the inverter's shipping box.



- 1) Select the "Manual ADD" button.
- 2) Select the ECU from the "ECU ID" pulldown.
- 3) Select the Inverter type from the "Inverter Type" pulldown.
- 4) Select the Channel(s) for the inverter type.

Note: You'll be presented with a number of inverter types. Select the type you are installing, remembering that the YC500 has two (2) channels (A & B), and the YC1000 has up to four (4) channels (1, 2, 3 & 4).

5) Enter the 12-digit inverter ID numbers.

Tip: You can scan the inverter UIDs into a spreadsheet and then copy and paste the UIDs from the spreadsheet into the EMA, which makes the entry process easier to manage. The EMA does however have a limitation of 20 UIDs per paste.

Note:Check **Resume an Incomplete Registration** – Page 21 if you get a system message that indicates that the UID already exists while making these entries.

6) Press the "Insert ID to List" button.

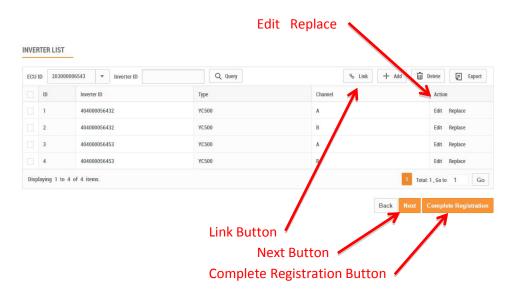
The EMA places the inverter onto the Temporary Inverter List.

				Temp	orary Inverter
ADD CUSTOMER	STEP 1 : PERSONAL INFO	STEP 2 : ECU INFO	STEP 3 : INVERTER INFO	STEP 4 : GROUP VIEW INFO	STEP 5 : UPLOAD DRAWING
UNCOMPLETED CUSTOMER	C	51LF 2. LOO INFO	•		O
INSTALLER MANAGE	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 n	ot included, you could add them manually.	
	INPUT IDS	INVERTER TEM	IPORARY INFORMATION LIST		
	Import From ECU Manual ADD	0	ECU ID	ter ID Type	Channel Action
	ECU ID 204100002541	*			
					Back Submit
		Insert ID to list			

- 7) Verify that the temporary list of inverter IDs is complete and correct.
- 8) Press the "Submit" button.

The "permanent" inverter list is displayed.

Note: This list can be edited if necessary by selecting either "*Edit*" or "*Replace*" for each inverter and its associated channel.



9) Press the "*Link*" button to remotely link the inverters to the ECU.

At this point in the registration process you can decide to "complete the registration", capturing the customer's personal information, ECU configuration, and Inverter IDs, coming back to mapping the inverters at a later time(see page 16 -- <u>Step 4: Configuring Group View)</u> – or – continue to move forward with the inverter mapping before completing the registration.

Note: If you choose to "complete the registration" at this time, you'll still need to return to the customer's account to finish the job by mapping the inverters. Once you have "completed the registration", the customer account will move from "INCOMPLETED" to the standard customer list and your customer will be able to view their account online.

To "complete the registration" process, press the "Complete Registration" button.

To continue with the mapping process before completing the registration, press the "Next" button.

Step 4: Configuring Group View

This step assumes you have pressed the "Next" button after entering the inverter IDs.

The Group View page is displayed.

				Add ۱	/iew Button	<u>۱</u>		
APSystems	USER LIST	REGISTRATION	MANAGEMENT			\mathbf{n}	English S	ettings Sign out apsystems installer JiaXing,ZheJiang,China
ADD CUSTOMER	STEP 1 - I	PERSONAL INFO	STEP 2 : ECU INF	0 ST	EP 3 : INVERTER INFO	STEP 4 : GROUP VIEW	NINEO STEP 5	: UPLOAD DRAWING
UNCOMPLETED CUSTOMER	5121 1.1			0 01			STEL S	O
INSTALLER MANAGE ~		age panels in the view to when the end user see it	match real positions for managi in page [Module].	ng system intelligently	, or you could pass it to next ste	ep or click [Complete Registratio	n] to finish, EMA will arran	ges views for every ECU
	INSTALLAT	ION LAYOUT VIEW L	IST				\ .	
							+ Add 🔟 Dele	ete 📮 Export
		ID ECU ID	View Name	View Angle	Inverter Number	Max Row	Max Column	Action
	No Records	Found						
							Back Next Co	mplete Registration

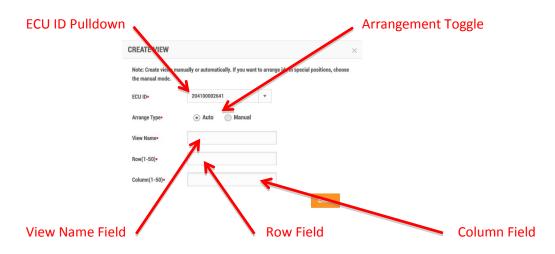
15. Press the "Add" view button.

The Create View window is displayed.

Ci	reate V	'iew Wi	indow 🔨								
APsystems	USER LIST REGIST								Englisi		pa Sign out APS DEMO ington,United States
ADD CUSTOMER	STED 1 - D	ERSONAL INFO	STEP 2 : ECU I	NEO	STEP 3 : INVERTER INFO	STE	P 4 : GROUP VIE	W INFO	STED 5	UPLOAD DR	AWING
INCOMPLETED CUSTOMER	0101111	•	0101 2.0001	in o					0101 0.		
13. INSTALLER MANAGE ~	(Optional) Arrage panels i	in the view to match real position	is for managing system intelligently, or you	could pass it to next stee	ice Complete Repistration to finish. EMA will an	ances views for every ECU auton $ imes$		d user see it in page (Module).			
	INSTALLATION LAY	OUT VIEW LIST		Note: Create views r the manual mode. ECU ID+	anually or automatically. If you want to arrange ids	s in special positions, choose			+ ASS	Delete	E Esport
		ECU ID	View Name				tow	Max Column		Action	
	No Records Found			Arrange Type+	Auto Manual						
				View Name+					Back	Next Corre	piete Registration
				Row(1-50)+							
				Column(1-50)+							
						Creete					

There are two (2) methods for creating a view (inverter layout) in the EMA:

- 1) Having the system do it for you automatically.
- 2) Laying out the panels manually.



Method 1: Creating a view automatically.

Automatic view creation is best for relatively simple layouts.

- 1) Select the ECU from the "ECU ID" pulldown.
- 2) Select the "Auto" arrangement toggle.
- 3) Enter a view name in the View Name field.
- 4) Enter a number (1-50) in the Row field (rows are horizontal).
- 5) Enter a number (1-50) in the Column field (columns are vertical).
- 6) Press the "Create" button.

The EMA arranges the panels (and their associated inverters) are laid out from top-left to bottom right based on their entry into the Inverter List.

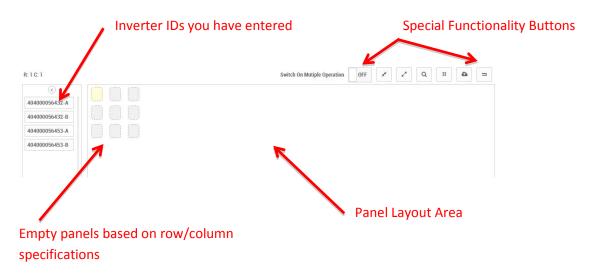
Method 2: Creating a view manually.

Manual view creation is best for more complex installations where you'll want to have complete control of where the panels (and their associated inverters) are laid out.

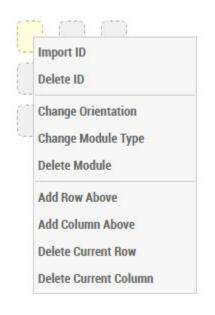
- 1) Select the ECU from the "ECU ID" pulldown.
- 2) Select the "Manual" arrangement toggle.
- 3) Enter a view name in the View Name field.
- 4) Enter a number (1-50) in the Row field (rows are horizontal).
- 5) Enter a number (1-50) in the Column field (columns are vertical).
- 6) Press the "Create" button.

The EMA arranges the panels, without the associated inverters, on a panel layout page based on the rows and columns you have specified.

The panel layout page is displayed.



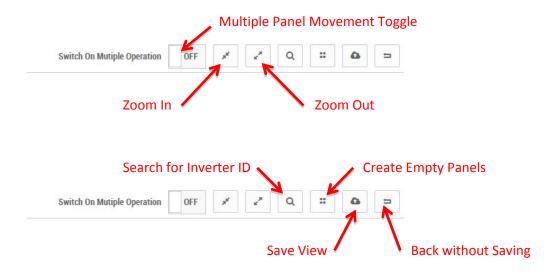
Note: Right clicking on any individual panel exposes a list of possible shortcuts.



Import ID	Import a specific inverter ID to the selected panel.
Delete ID	Delete a specific inverter ID from the selected panel.
Change Orientation	Change panel's orientation to vertical or horizontal.

Change Module Type	Change the module type for the specified panel.
Delete Module	Delete both the inverter ID and panel position.
Add Row Above	Adds a row above the current panel location.
Add Column Above	Adds a column next to the current panel location.
Delete Current Row	Delete the row where the specified panel is located.
Delete Current Column	Delete the column where the specified panel is located.

Special Functionality Buttons



- 7) Drag and drop Inverter IDs onto specified inverters.
- 8) Drag the panels on the layout area as they are arranged on the site.
- 9) Press the "Save" button.

The Upload Drawings page is displayed.

Drawing Nam	e Field	1	Drawing Type Pulldo	own	Drawing I	List
ALTENERGY POWER	USER LIST RE ESTRATION	MANAGEMENT			English	Settings Sign out apsystems installer JiaXing,ZheJiang,China
ADD CUSTOMER	STEP 1 : PERSON L INFO	STEP 2 : ICU INFO	STEP 3 : INVERTER INFO	STEP 4 ; GROUP V	IEW INFO	STEP 5 : UPLOAD DRAWING
UNCOMPLETED CUSTOMER	•		•			•
INSTALLER MANAGE ~	(Optional) EMA could keep the installat	ion drawings or size photos uploaded	, the site photos will be showed in page [Dashb	oard], the instal ation drawings	will be showed in pa	ge [Module].
	UPLOAD DRAWING		DRAWING LIST	- 4		
	• Name		ID	View Name	Туре	Action
	• Type Installation	Drawing			Back Com	aplete Registration
	This drawing will b jpeg,jpg,png,pdf.	e showed in page [Module], Limit 0-3	30M,		1	
	Path No file selecter	ed Scan				
		Upload				
Uplo	ad Button	- -	Complete Registratio	on Button		

Step 5: Uploading the installation drawings and/or photo

The installation drawings are displayed on the customer's Module Performance page, and the site photo is displayed on the customer's Dashboard.

Only the following drawing and photo formats are supported:

- jpeg jpg
- png
- pdf

16. Enter the drawing's name in the "Drawing Name" field.

- 17. Select drawing type in the "Drawing Type" pulldown.
- 18. Locate the file you want to upload (Scan button functions just like a Browse button)..
- 19. Press the "Upload" button.

The drawings you want uploaded to the EMA are reflected in the Drawing List.

20. Press the "Complete Registration" button.

Resume an Incomplete Registration

Once you have selected either the "*Next*" or "*Submit*" buttons in any of the major registration steps (1-5), your customer information is saved in the system and you can step away from the process and resume by selecting "*Incomplete Customer*" under *Registration*.



1. Log onto the EMA.

Your specific Customer List page is displayed.

- 2. Select the "*REGISTRATION*" icon.
- 3. Select the "INCOMPLETE CUSTOMER" in the left side bar.

A list of your incomplete customer registrations is displayed.

ALTENERGY	OWER	USER LIST								apsystems ins (ing,ZheJiang,
ADD CUSTOMER		CUSTOMER L	IST							
INCOMPLETED CU	TOMER	First Name	Custom	er Account	C	Query				
INSTALLER MANA	εv									
- (i) -		ID	Customer Account	Customer Name 🜲	Country 🔶	State 🜲	City 🜩	System Size(KW) 🖨	Register Date 🔻	Action
		1	testuser7872	testuser7872	China	testuser7872	testuser7872		2016-11-25	Delete
		2	12	12	China	ĩ	1		2016-11-25	Delete
		3	sissi011	sissi	China	Zhejiang	Jiaxing		2016-11-24	Delete
		4	zsyTest2016111701	222	United States	afsd	fat		2016-11-17	Delete

- 4. Select the customer account you want to complete.
- 5. Continue where you left off following the steps in the previous section.

Edit an Existing Customer's Password

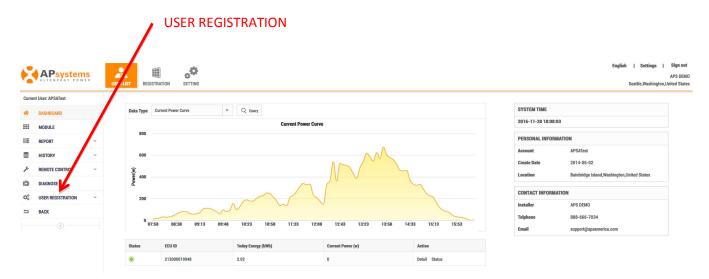
Note: Your customer can change their own password by going into the Setting section on their account page.

1. Log onto the APsystemsEMA website.

Your specific Customer List page is displayed.

2. Select the customer that wants to have their password changed.

The customer's Dashboard is displayed.



3. Select "USER REGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.



4. Select "BASIC INFORMATION" under "USER REGISTRATION".

The user's basic information page is displayed.

					Edit Password Fields
ł.	APsysten	ns	USER LIST REGISTRATION		Baglish Settings Bign out AP SEND Sentin-Qualityina, Chink Tatom
Curren	nt User: APSATest		Customer Inform	ation Configuration	
ñ	DASHBOARD		Set customer information or passw		
ш	MODULE		CUSTOMER INFORMATION		EDIT PASSWORD
=	REPORT	×		_	
60	HISTORY	×	UserName	APSATest	Password
×	REMOTE CONTROL	~	• Ernail	support@apsamerica.com	Confirm Password
(C)	DIAGNOSE			-	
¢\$	USER REGISTRATION		FirstName	Barney	Sum
	BASIC INFORMATION	•	LastName	Farpelow	
	ECU CONFIGURATIO		Phone	206855291	
	VIEW CONFIGURATIO	DN	• Installer	APS DEMO V	
	INSTALLATION DRAV	VING	* Country	United States v	
=	BACK		,		
			State/Province	Washington	
			• City	Bainbridge Island	
			Address	600 Erickson	
			Postal Code	98110	

- 5. Enter the new password in the "Password" field.
- **6.** Confirm the new password.
- 7. Press the "Submit" button.

Modify an Existing User Account

Adding an ECU

1. Log onto the EMA website.

Your specific Customer List page is displayed.

2. Select the customer account you want to modify.

The customer's DASHBOARD is displayed.



3. Select "USERREGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.

		/	ECU CONFIGURATION
Q0 US	SER REGISTRATION	~	
	BASIC INFORMATION		
	ECU CONFIGURATION		
	INVERTER CONFIGURATIO	DN	
	VIEW CONFIGURATION		
	INSTALLATION DRAWING)	
⇔ B/	ACK		

4. Select "ECU CONFIGURATION" under "USER REGISTRTATION".

The ECU information page is displayed.

		Add Button	
APsystems			English Settings Sign out AFS DEMO Seattle, Washington, United States
Current User: APSATest	ECU Information Configuration		
# DASHBOARD	Add, edit, replace or delete ECU. Note: Deleting an ECU from the database will also remove Inverters com	nected to the unit, and their data will not be recoverable once deleted.	
III MODULE			
E REPORT ~	ECULIST		4
HISTORY -			+ Add 👔 Delete 🔄 Export
🔎 REMOTE CONTROL 🗸	ID ECUID	Timezome	Action
ICI DIAGNOSE	1 213000019948	US/Pacific	Edit Replace
Q ⁶ USER REGISTRATION ~	Displaying 1 to 1 of 1 items.		1 Tetal: 1,60 to 1 Go
BASIC INFORMATION			
ECU CONFIGURATION			
INVERTER CONFIGURATION			
VIEW CONFIGURATION			
INSTALLATION DRAWING			
to BACK			

5. Press the "*Add*" button.

The ADD ECU window is displayed.

	ADD ECU Wind	ow		
APsystems				English Settings Sign out APS DEMC Seattle, Washington, United States
Durrent User: APSATest	ECU Information Configuration			
# DASHBOARD	Add, edit, replace or delete ECU. Note: Deleting an ECU from the database will also remov	e Inverters connected to the unit, and their data will not be recoverable once deleted.		
MODULE				
REPORT ~	ECULIST	.		
HISTORY -		N N		+ Add 🗇 Delete
🔎 REMOTE CONTROL 🗸	ID ECU ID	ADD ECU	×	Action
DI DIAGNOSE	1 21300019948	Note: you can add uid by auto import after add ECU		Edit Replace
O ^D USER REGISTRATION ~	Displaying 1 to 1 of 1 items.			Total: 1, Go to 1 Go
BASIC INFORMATION		ECU ID-		
ECU CONFIGURATION		ECU Timezoner (SMT-08:00) v		
INVERTER CONFIGURATION		ECO IIIIEZONI* (UMI-06:04)		
VIEW CONFISURATION			ox	
INSTALLATION DRAWING			UK .	
D BACK				

- 6. Enter the 12-digit ECU UID number(s) into the ECU ID field.
- 7. Select the time zone where the ECU is to be installed.
- **8.** Press the "OK" button.

Editing an ECU

1. Log onto the EMA website.

Your specific Customer List page is displayed.

2. Select the customer account you want to modify.

The customer's DASHBOARD is displayed.

3. Select "USERREGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.

4. Select "ECU CONFIGURATION" under "USER REGISTRTATION".

The ECU information page is displayed.

		Edit Button	
APsystems			English Settings Sign out APS DENO Seattle, Washington, United States
Current User: APSATest	ECU Information Configuration		
# DASHBOARD	Add,edit,replace or delete ECU. Note: Deleting an ECU from the database will also remove invertee	rs connected to the unit, and their data will not be recoverable once deleted.	
III MODULE			
E REPORT ~	ECULIST		
HISTORY -			+ Add 🖬 Deline 🔄 Export
🔎 REMOTE CONTROL 🗸	ID ECU ID	Timezone	Action
CI DIAGNOSE	1 213000019948	US/Pacific	Edit Replace
Q [®] USER REGISTRATION ~	Displaying 1 to 1 of 1 items.		1 Tetak 1,00 to 1 Go
BASIC INFORMATION			
ECU CONFIGURATION			
INVERTER CONFIGURATION			
VIEW CONFIGURATION			
INSTALLATION DRAWING			
to BACK			

5. Press the "Edit" button.

The EDIT ECU page is displayed.

EC	DIT ECU	Window 🐧				
APsystems						English Settings Sign out APS DEMO Seattle, Mashington, Linkod States
Current User: APSATest	FCU Informati	ion Configuration				
# DASHBOARD		U. Note: Deleting an ECU from the database will also remove I	in ters connected to the unit, and th	sir data will not be recoverable once deleted.		
III NODULE	ECU LIST					
III REPORT ~	ECOLIST		M			
🛢 HISTORY 🗸						+ Add 🗊 Delete 📮 Expert
差 REMOTE CONTROL 🗸 🗸	ID	ECU ID	EDIT ECU		×	Action
IDI DIAGNOSE	1	213000019948	Note: in this dialog	, you could edit ECU ID and timezone. This is only for correct	t input errors, the ECU	Edit Replace
O ₀ User registration ~	Displaying 1 to 1 of 1 i	tens.	will not be found a	t "History" after modify; if you replaced a ECU actually, please	e select "Rplace".	1 Total: 1, Go to 1 Go
BASIC INFORMATION			ECU ID+	213000019948		
ECU CONFIGURATION			6.0 ib*	213000019946		
INVERTER CONFIGURATION			ECU Timezome•	US/Pacific v		
VIEW CONFIGURATION					ок	
INSTALLATION DRAWING						
to BACK						

- **6.** Edit the ECU UID and/or the time zone.
- 7. Press the "OK" button.

Note: Editing the ECU does not update the system "History", so no record of the changes are made. Go to Replace an ECU (see below) if you have replaced an ECU and want it recorded in the system "History".

Replacing an ECU

1. Log onto the EMA website.

Your specific Customer List page is displayed.

2. Select the customer account you want to modify.

The customer's DASHBOARD is displayed.

3. Select "USERREGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.

4. Select "ECU CONFIGURATION" under "USER REGISTRTATION".

The ECU information page is displayed.

					Re	place Button 🔪 👘		
ŧ.	APsystems	USER LIS		N SETTING			English Settings Sign ov Ars Dis Sentile, Minshington, United Star	NO
Curre	nt User. APSATest	FCU	Informatio	on Configuration				
*	DASHBOARD			Note: Deleting an ECU from the database will also remove lover	ters connected t	to the unit, and their data will not be recoverable once deleted.		
=	MODULE							
=	REPORT ~	ECU LIS	ST					
	HISTORY ~						Add 📋 Delete 🐺 Export	
ŗ	REMOTE CONTROL ~		8	ECU ID		Timezome	tion	
(ĈI	DIAGNOSE		1	213000019948		US/Pacific	Edg Replace	
0 \$	USER REGISTRATION	Display	ying 1 to 1 of 1 iter	ns.			1 Tetak 1, Go to 1 Go	
	BASIC INFORMATION							
	ECU CONFIGURATION							
	INVERTER CONFIGURATION							
	VIEW CONFIGURATION							
	INSTALLATION DRAWING							
⊐	BACK							

5. Press the *"Replace"* button.

The REPLACE ECU window is displayed.

RE	EPLACE ECU Window		
APsystems			English Settings Sign out APS DEMO Seattle, Washington, United States
Current User: APSATiest	ECU Information Configuration		
# DASHBOARD	Add,edit,replace or delete ECU. Note: Deleting an ECU from the database will also remove inverters of	onnected to the unit, and their data will not be recoverable once deleted.	
III NODULE			
HE REPORT ~	ECULIST	M	
HISTORY V			+ Add 🛱 Delete 🔄 Expert
🔎 REMOTE CONTROL 🗸	ID ECU ID	REPLACE ECU ×	Action
EDI DIAGNOSE	1 213000319948	Note: in this dialog, you could replease ECU.If the ECU breakdown and to be replaced, the information	Edit Replace
O ₀ [®] User registration	Displaying 1 to 1 of 1 items.	of the replaced ECU could be found at "History"; If you want to correct input errors, please select "Edit".	1 Total: 1 , Go to 1 Go
BASIC INFORMATION ECU CONFIGURATION INVERTER CONFIGURATION VIEW CONFIGURATION		Selected (DJ) D 21320001948 Replace (D)+	
INSTALLATION DRAWING			

- **6.** Select the ECU you want to replace.
- 7. Enter the new 12-digit ECU UID number into the "Replace ECU" field.
- **8.** Press the "*OK*" button.

Deleting an ECU

1. Log onto the EMA website.

Your specific Customer List page is displayed.

2. Select the customer account you want to modify.

The customer's DASHBOARD is displayed.

3. Select "USERREGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.

4. Select "ECU CONFIGURATION" under "USER REGISTRATION".

The ECU information page is displayed.

		Delete Bu	tton 🥿	
APsystems	USER LIST REGISTRATI	°0		English Settings Sign out APS DEMO Seattle, Washington, United States
Current User: APSATest	ECU Informatio	on Configuration		
# DASHBOARD		J. Note: Deleting an ECU from the database will also remove inverters connecte	d to the unit, and their data will not be recoverable once deleted.	
III MODULE				
E REPORT ~	ECU LIST			
HISTORY -				+ Mdd 🗍 Delete 🕞 Export
🔎 REMOTE CONTROL 🗸	D	ECU ID	Timezome	Action
IDI DIAGNOSE	I 1	213066019948	US/Pacific	Edit Replace
OC USER REGISTRATION ~	Displaying 1 to 1 of 1 its	ana.		Tetak 1,69 to 1 Go
EASIC INFORMATION CCU CONFIGURATION INVERTER CONFIGURATION VIEW CONFIGURATION INSTALLATION BUAWING ENCK				

5. Press the "Delete" button.

The DELETE ECU confirmation window is displayed.

DELETE EC	J Cor	nfirmation Wi	ndow		
APsystems	USERLIST				English Settings Sign out APS OEMO Seattle, Washington, Urined States
Current User: APSATest	ECU Infe	ormation Configuration			
M DASHBOARD			ill also remove Inverters connected to the wit, and their data will not be recovera	ble ence deleted.	
III MODULE	-				
III REPORT ~	ECU LIST		A A		
🗧 HISTORY					+ Add 🗊 Delete 📮 Daport
🔑 REMOTE CONTROL 🗸	ID ID	ECU ID	DELETE ECU	×	Action
IDI DIAGNOSE	✓ 1	213000019948		e the selected ECU, the opt,group view below the ECU will	Edit Replace
O ⁰ USER REGISTRATION ~	Displaying 1	to 1 of 1 items.	also delete!!		T Tetal: 1, Go to 1 Go
BASIC INFORMATION				_	
ECU CONFIGURATION				ox	
INVERTER CONFIGURATION					
VIEW CONFIGURATION					
INSTALLATION DRAWING					
to BACK					

- **6.** Select the ECU you want to delete.
- **7.** Press the "OK" button.

Adding an Inverter

1. Log onto the EMA website.

Your specific Customer List page is displayed.

2. Select the customer account you want to modify.

The customer's DASHBOARD is displayed.



3. Select "USERREGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.



4. Select "*INVERTER CONFIGURATION*" under "*USER REGISTRATION*". OPT700 Series User will display "OPT700 CONFIGURATION".

The Inverter Information page is displayed.

							Add But	ton 🔨					
ALTENERGY POWER		USER		REGISTRATION	MANAGEMENT						Engli	sh Setti	ngs Sign out 沈倩 zhufenghu: 嘉兴,浙江,Chin;
Current User: TIC		Inve	erter	Informati	on Conf	inuration							
A DASHBOAR	RD	Add,eid	it,replace	or delete inverters. N		verter will remove its relate	d location information	i in view as well, and th	e data will not be	ret werable.	[Replace] inver	er will produce	a record in page
MODULE		[INVER	TER HISTO	IRY].									
REPORT	~	INVEF	TER LIS	т							N		
HISTORY	~		_	_									
ECU HIS	STORY	ECU	ID 2031	₩ 000000746	Inverter ID		Q Query			% Link	+ Add	Delete	Export
INVERT	ER HISTORY		ID	Inverter ID		Тур	e		Channel			Actio	n
F REMOTE CO	ONTROL ~		1	100606060	506	YC	00		A			Edit	Replace
	ON DATA		2	1006060600	606	YC	00		В			Edit	Replace
DIAGNOSE			3	100606060	509	YC	00		A			Edit	Replace
QS USER REGI	STRATION		4	100606060	609	YC	00		В			Edit	Replace
	INFORMATION		5	100606060	510	YC	00		A			Edit	Replace
	INFIGURATION		6	100606060	510	YC	00		В			Edit	Replace
	ER CONFIGURATION		7	100606060	511	YC	00		Α			Edit	Replace
	ONFIGURATION		8	100606060	511	YC	00		в			Edit	Replace

5. Press the "Add" button.

The Input Inverter IDs page is displayed.

		Input ID	s Wind	ow		Tempor	rary Inv	erter Li
2- ADD CUSTOMER	STEP 1 : PERSONAL IN O	STEP 2 : EC	J INFO	STEP 3 : INVERTI	ER INFO	STEP 4 : GROUP VIEW INFO	ST	EP 5 : UPLOAD DRAWING
UNCOMPLETED CUSTOMER	There are two ways to add inverters famually o	r automatically. The most important is EMA only co	uld auto add the inverters repor	ted remotely to EMA by ECU, if you f	ind some one are not cluded, y	cu could add them manually.		0
			INVERTER TEMPO	RARY INFORMATION LIST	K			
	Import From ECU Manual ADD		ID	ECU ID	Inverter ID	Туре	Channel	Action
	ECU ID 204100002641	¥						Back Submit
		Insert ID to list						

There are two (2) methods for adding inverters to the EMA:

- 1) Importing them from the ECU.
- 2) Manually entering them into the EMA.

Method 1: Importing the IDs from the ECU

Note: When importing the inverter IDs from the ECU, make sure that you have entered all of the additional inverter IDs into the ECU, and that the ECU is correctly connected to the Internet so that the APsystems server can retrieve the IDs.

	Import from ECU Tab	ECU ID Pulldown	
IPUT IDS			
Import From ECU	Manual ADD		
ECU ID 2	03000006543		
	Insert ID to list		
		Insert ID to List Bu	+-

- 1) Select the "Import From ECU" tab.
- 2) Select the ECU from the "ECU ID" pulldown.
- 3) Press the "Insert ID to List" button.

The EMA begins importing all of the inverter IDs on the ECU and placing them onto the Temporary

Inverter List.

								/ Tem	porar	y Inverte
ADD CUSTOMER	STEP 1 : PERS	SONAL INFO	STEP 2 : ECU	INFO		STEP 3 : INVERT	FR INFO	S EP 4 : GROUP VIEW INFO		STEP 5 : UPLOAD DRAWING
UNCOMPLETED CUSTOMER	•									O
1. INSTALLER MANAGE	There are two ways to add inve	erters, manually or automatically. The	most important is EMA only con	ald auto add the	e inverters reporte	ed remotely to EMA by ECU, if you	ind some one are not included, you o	add them manually.		
	INPUT IDS			INVER	TER TEMPOR/	ARY INFORMATION LIST				
	Import From ECU	Manual ADD			ID	ECU ID	Inverter ID	Type	Channel	Action
	ECU ID	204100002541 ×								Back Submit

- 4) Verify that the temporary list of inverter IDs is complete and correct.
- 5) Press the "Submit" button.

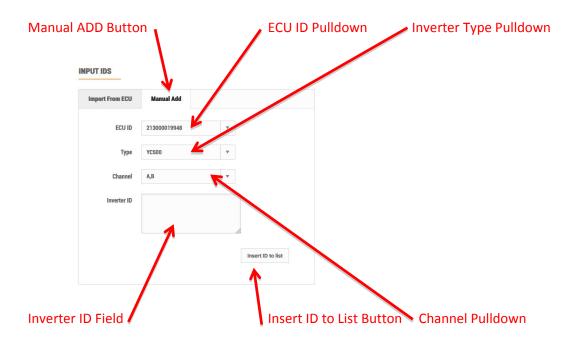
The "permanent" inverter list is displayed.

Note: This list can be edited if necessary by selecting either "*Edit*" or "*Replace*" for each inverter and its associated channel.

IVEF	RTER LIST		Edit	: Replace	
ecu	ID 203000	0006543 🔻 Inverter ID	Q Query	% Link + Ar	dd 🔟 Delete 📑 Export
	ID	Inverter ID	Туре	Channel	Action
	1	404000056432	YC500	А	Edit Replace
	2	404000056432	YC500	В	Edit Replace
	3	404000056453	YC500	A	Edit Replace
	4	404000056453	YC500	В	Edit Replace
	laying 1 to				_

Method 2: Manually Entering IDs into the EMA

Each inverter has a unique UID which is located on the front of the inverter, as well as on the back flap of the inverter's shipping box.



- 1) Select the "Manual ADD" button.
- 2) Select the ECU from the "ECU ID" pulldown.
- 3) Select the Inverter type from the "Inverter Type" pulldown.
- 4) Select the Channel(s) for the inverter type.

Note: You'll be presented with a number of inverter types. Select the type you are installing, remembering that the YC500 has two (2) channels (A & B), and the YC1000 has up to four (4) channels (1, 2, 3 & 4).

5) Enter the 12-digit inverter ID numbers.

Tip: You can scan the inverter UIDs into a spreadsheet and then copy and paste the UIDs from the spreadsheet into the EMA, which makes the entry process easier to manage. The EMA does however have a limitation of 20 UIDs per paste.

Note: Check **Resume an Incomplete Registration** – Page 21 if you get a system message that indicates that the UID already exists while making these entries.

6) Press the "Insert ID to List" button.

The EMA places the inverter onto the Temporary Inverter List.

					Temporary Inverter Li			
L+ ADD CUSTOMER	STEP 1 : PERSONAL INFO	STEP 2 : ECU INFO	STEP 3 : INVERTER	INFO	STEP 4 : GROUP VIEW INFO	STEP 5 : UPLOAD DRAWING		
UNCOMPLETED CUSTOMER	•	•	•	/	0	0		
🔝 INSTALLER MANAGE 🗸 🗸	There are two ways to add invertees, manually or automatically. The most important is EMA only ocold auto add the invertees reported remotely to EMA by ECU, if you find sognifies are not included, you could add them nanually.							
	INPUT IDS	INVERTI	ER TEMPORARY INFORMATION LIST					
	Import From ECU Manual ADD		ID ECU ID	Inverter ID	Type	Channel Action		
	ECU ID 204100002641	×				Back Submit		
		Insert ID to list						

- 7) Verify that the temporary list of inverter IDs is complete and correct.
- 8) Press the "Submit" button.

The "permanent" inverter list is displayed.

Note: This list can be edited if necessary by selecting either "*Edit*" or "*Replace*" for each inverter and its associated channel.

Туре УС500	Channel	Action
YC500		
	A	Edit Replace
YC500	в	Edit Replace
YC500	А	Edit Replace
YC500	P	Edit Replace
		1 Total: 1 , Go to 1 G
	В	ack Next Complete Registrati
Link Button		
	YC500	чс500 А ус500 В

- 9) Press the "Link" button to remotely link the inverters to the ECU.
- 10) Press the "Next" button.

AP systems			FIGURATION		Englas I Setting I September Artistation The Non-Neuropaul And Tabase					
Current line: APSATest	Inverter Informati	on Configuration								
OKLIBELMO R	An and a second se									
III HOOMLE										
II NPOR -	INVERTER	NRRETS A								
B HSTOP ~	62 1100070948 * keeske Q See									
🖈 намота сонтнов. — —	/ -	levels 0	794		Artim					
D OWNERSE	1	56300008667	101308-3	1	Edit Replace					
00 USER REGISTRATION		SEX0000BMFT	101300-3	2	Tall Regime					
INSIC OF ORMATION	0.1	SE300000BWFT	101300-3	1	Tall Region					
ED CONTRUE OF		SE300000964T	101300-0	4	Edit Region					
MARKA DE	4	503000000754	101000-0	1	Edit Region					
VEW CONTRACTOR	4	563000068754	101000-3	2	Ddt Repier					
INSTALLATION DRAWING		5E300000E754	101000-0	3	Dill Region					
10 0406		963000008754	101300-3	4	Edit Replace					
	Displaying 1 to 8 of 8 Harms.				5 5at1,6m 1 de					

11) Select "VIEW CONFIGURATION" under "USER REGISTRATION".

The View Configuration page is displayed.



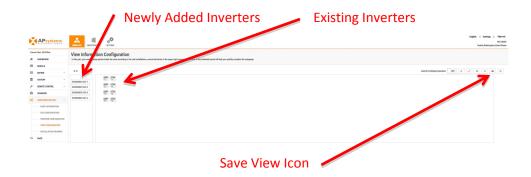
6. Select "Edit".

The EDIT VIEW Window is displayed.

			EDIT V	IEW W	/indow 🔨					1	Detailed Toggl	e
۲	APsystems	1										English Suttings Sign eet AFS DEMD Seattle, Washington, United Dates
Current II	iver APG/Deal		View Information Confi	ouration								
	OKABHEAKO				adds page will arrange and display the investors automatically for each	A EDA						
	3,000		INSTALLATION LANDATI VIEW LIST									
8.1	- TRONE		INSTALLATION LAYOUT VIEW LIST									
0.0	esroer -						EDIL AIEM		/ ×			+ AM 🗇 DANN 🕑 Equal
1	REMOTE CONTROL			ECU ID	Ver Hane	Ver	a Note: Fyou want to -	att individual mediairi positian, d	-4	Nam Row	Mine Colores	Action
0	NAINCIE		1	2120000110-0	1		Anange Type-	C Single @ Detailed	P	4	1	661
o; (AND RECEIPTION -		Displaying 1 to 1 of 1 items.				View Name*					1 Section 1 De
	BASIC INFORMATION											
	EDU CONFISURATION						Leyout Angle*	1				
	INVERTER CONFIGURATION								Sec. 1			
	VIDW CONFIGURATION											
	INSTALLATION OBAINING											
-	NCK											

- **7.** Select the "*Detailed*" toggle.
- 8. Press the "Submit" button.

The panel layout page is displayed.



- 9. Drag and drop the new inverters into position on the layout map.
- **10.** Press the "Save View" icon.

Editing an Inverter

1. Log onto the EMA website.

Your specific Customer List page is displayed.

2. Select the customer account you want to modify.

The customer's DASHBOARD is displayed.

3. Select "USERREGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.

4. Select "INVERTER CONFIGURATION" under "USER REGISTRATION".

The Inverter Information page is displayed.

			Edit				
APsystems		0 			Kaglish Sontiaga Sign end Art 2000 South, Washington, Dirice Dates		
Current Diser APGADest	Inverter Information	Configuration					
OKABHONO W			ints will not be resummable. [Replace] investor will produce a record in page [WVIRTER HEITORY].				
III MODULE	INVERTER LIST						
HE MPORT ~	UNITER LIST						
— натан —	ECU 10 1133000179548 × b	Q Gury			N 100 + 100 € 2000 € 2000		
差 ядмоте сомпкод —	•	levels: B	See .	Canad	Artim		
D OWDER	0 I	sicaccocomier	101200-2	1	tale region		
OC USER RECEIPTION -	 a 	SE300000864Y	101000-0	2	talk hepton		
BASIC INFORMATION	•	SE3000000647	101005-3	1	Edit Region		
EDU DOMPROUNTEDM	□ 4	56300008667	901408-3	4	talk fugioer		
WYORKS INCOMING	4	56300008754	901308-3	1	Ddt Regiser		
VEW CONFIGURATION		\$6300008754	9C1809-3	1	Tall Teglare		
INSTALLATION DRAWING	· · ·	5E3000008754	101300-3	1	Talk Region		
10 BHOS	I 1	SE3000008754	101305-3	4	full: Replace		
	Displaying 1 in 8 of 8 Hamm.				1 bel1, bra 1 de		

5. Select "*Edit*" for the inverter you want to edit.

The EDIT INVERTER window is displayed.

APsystems	-							Kagdob Sentinga Sign en 1971 to Santi Description (Labor Da			
arrent User APSATest	Inve	Inverter Information Configuration									
EAD-BOARD		VELOC INTO INTRODUCTION OF INTERNATION									
MODULE											
ii arroar -	INVE	TEN LIST									
Hatow -	* EDIB 200001994 * InveterB Q Inv		EDIT INVERT		5 LIA + AN (2 DEC) (2 Eput						
F REMETE CONTROL -			lawrise 0	Type	Rear Distant	write number and shared information.		Action			
DWONOSE		1	5030000068*	E-00012W				fall Auglaux			
		1	50200000647	YE1000-3	CDU B+	213008(19548		ER Aylax			
BASIC INFORMATION		1	50300000687	YE1000-3	Type	AE1008-3		Life Asplace			
ICE CENFIGURATION		4	503000000487	AE 1000-3	Channel	3		Edit Replace			
			803800000754	£ 000129	Investor D*	803000000887		Tali Replace			
INCIDE CONTRACTOR			\$23800000F54	£-000129				Tall Topian			
NUMBER CONTRACTOR											
		1	300000001%4	£-000129			_	fill Poplace			

- 6. Edit the inverter information.
- 7. Press the "Submit" button.

<u>Replacing an Inverter</u>

1. Log onto the EMA website.

Your specific Customer List page is displayed.

2. Select the customer account you want to modify.

The customer's DASHBOARD is displayed.

3. Select "USERREGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.

4. Select "INVERTER CONFIGURATION" under "USER REGISTRATION".

The Inverter Information page is displayed.

				Replace 🔨					
APsystems		0 [©]			English Seminya Siya vet Arti 2000 Senfo Navingkou, kiving land				
Current line: APERCent	Inverter Information Configuration								
OKABHEAKO 👫	Add_calluplates or defet invertion. Note: Defet as inverter will resort to added basedue information in rank and [] and far fails will not be reasonable. [Papilorg] inverter will pedient as resort in page [] PETERS 10007].								
111 HOODLE	INVERTER LIST								
- TROM	NVERTER LIST								
— натам —	ECU ID 11300072548	* Investor ID Q. Gary			N Link + Add 🗇 Banne 🕞 Banne				
A REMOTE CONTROL -	•	levelse B	See .	Canad					
C DACHOSE	CI. •	SE3000009MIRT	101300-3	1	appine -				
00 USER RECEIPTION	1	SE30000006FT	101000-0	1	Lift region				
BASIC INFORMATION	•	SED000000GET	101000-0	1	Edit Auginor				
EDJ COMPROUNTED	□ 4	SED0000006ET	901000-3	4	Dift Replace				
WALKER DRIVERSON	4	55300008754	901000-3	1	Diff. Replace				
VEW CONFIGURATION	•	86300008714	901000-0	2	Tall Regime				
INSTALLATION DRAWING	0 T	963000008754	107300-3	1	Tall Region				
10 BHOK		563000000754	101300-3	4	Edit Register				
	Displaying 1 to 8 of 8 Harm				1 batt, bro 1 de				

5. Select "Replace" for the inverter you want to replace.

The REPLACE INVERTER window is displayed.

APsystems	USER LIST	≣ оФ					English Settings Sign o Arti co Sectio, Nuclington, United Sta				
weet line: APSATest © OKSHIDEARD		er Information Co as a délets invertes. Note: Johns	onfiguration as investor will reacted its adard location beformation is size as well, and the data will not be recover	able. Jinplace] inverter will produce a sp	in page (Investment Histophy).						
II HODULE											
E REPORT V	INVERTER	INVESTIGALIST									
HISTORY -	609.00	113000011048 * Investo	C, two		-		5 UR + AR 🗄 New 🖲 Spec				
F REMOTE CONTROL ~			levelar D	Type	REPLACE INVERTER	×	Action				
B OLASHOSE			55300000467	Y01680-3	Hate: Replace the Inverter. By default all channels have been completed.		Lit Inpinx				
USIN RECEIPTING -			8C300808487	Y51880-3	C240- 21300017048		bit Injan				
BASIC INFORMATION			1623000008#T	Y21080-0			bit Replace				
EDU DOMINISURATION			5C30000004FT	Y21080-0	784* 901000-3		till Replace				
INVERTIR CORPOLINATION	0.1		SE30000081754	Y01000-3	Investor B- BODDODDODRAT		falt Replace				
			56.5008998.154	Y01080-3			Edit Replace				
VIEW CONTIGURATION											
VEN CONTRUBATION INSTALLATION ORIGINAL			56.5000008154	A01080-3			Lift Replace				

- 6. Enter the new/replacement inverter's ID in the Inverter ID field.
- 7. Press the "Submit" button.

<u>Deleting an Inverter</u>

1. Log onto the EMA website.

Your specific Customer List page is displayed.

2. Select the customer account you want to modify.

The customer's DASHBOARD is displayed.

3. Select "USERREGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.

4. Select "INVERTER CONFIGURATION" under "USER REGISTRATION".

The Inverter Information page is displayed.

			Dele	te Button	
APsystems		0 ⁰			English Settings Seyroor AF2.00 Tooth/Natiops.climed.too
Current line: APGADest	Inverter Informatio				
OKABISKO W	Add, eidt, replace or delete investers. No	de Oelete an investor will remove its related boation information in view as well, and t	the data will not be recoverable. [Register] investor will produce a record in page [INVESTR HETCHY].		
111 HODULE	INVERTER LIST				
III NEPORT -	INTOICE COT	· · · · · · · · · · · · · · · · · · ·			
натри -	ECU ID 113000178548 *	America ID			"s son 🕂 and 🗍 been (2) heart
A REMOTE CONTROL -	•	levels: 0	See .	Canad	Action
D DADADESE	[1]	SC300000MillT	101300-3	1	full Replace
00 USER RECEIPTION	1	SE300000M647	101000-0	1	full higher
BASIC INFORMATION		563000008647	101008-0	1	talk higher
EDJ CONFIGURATION	4	56300008667	901000-3	4	Diff: Traphon
INVERTER DISCOMPLICATION	4	56300008754	NC1000-3	1	Ddx Replace
VEW CONFIGURATION	•	88300008714	101000 3	8	Tell Teglare
INSTALLATION DRAWING	II. I	SCROODDER'SH	101300-3	1	Talk Toglass
D 8408	I 1	SE3000008754	101300-3	4	Edit Register
	Displaying 1 to 8 of 8 items.				1 Section 1 de

- 5. Select the inverter you want to delete.
- **6.** Press the "*Delete*" button.

A confirmation message is displayed.

7. Press the "Submit" button.

Editing Basic Customer Information

1. Log onto the APsystemsEMA website.

Your specific Customer List page is displayed.

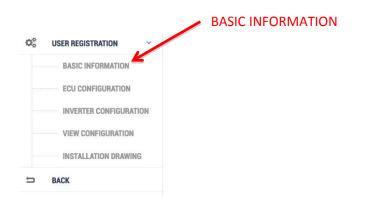
2. Select the customer that wants to have their password changed.

The customer's Dashboard is displayed.



3. Select "USER REGISTRATION" in the left side bar.

The USER REGISTRATION pulldown is displayed.



4. Select "BASIC INFORMATION" under "USER REGISTRATION".

The user's basic information page is displayed.

¢,	APsyster	ns	USER LIST	SETTING		English Settings Sign out APS (EMO Seattis, Washington, United States
Cun	ent User: APSATest		Customer Inform	nation Configuration		
*	DASHBOARD		Set customer information or passw			
	MODULE		CUSTOMER INFORMATION		EDIT PASSWORD	
10	REPORT	~	COSTOMER INFORMATION		EDITPROSMOND	
80	HISTORY	~	UserName	APSATest	Password	
×	REMOTE CONTROL	×	• Email	support@apsamerica.com	Confirm Password	
(ĈI	DIAGNOSE					
o;	USER REGISTRATION		FirstName	Barney	Submit	
	BASIC INFORMATIO	0	LastName	Farpalow		
	ECU CONFIGURATIO		Phone	2068555291		
	VIEW CONFIGURATI	2N	• Installer	APS DENO Y		
	INSTALLATION DRA	VING	• Country	United States *		
	BACK					
			State/Province	Washington		
			• City	Bainbridge Island		

- **5.** Edit the information you want changed.
- 6. Press the "Submit" button.

Monitoring and Analysis

Reviewing the Customer's Dashboard

Note: There are five (5) major steps involved in adding a new installation (registering) in the EMA. All the following introductions take the inverter user as an example, it also applies to the OTP700 Series Users.

1. Log onto the APsystemsEMA website.

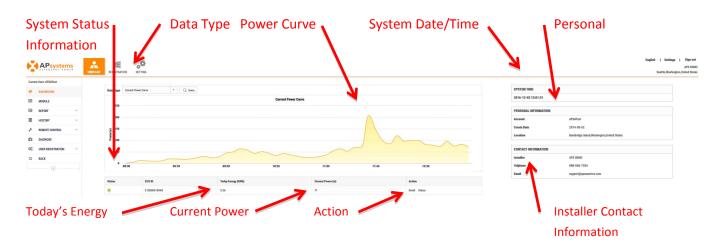
Your specific Customer List page is displayed.

	Systems USER LIST	REGISTRATION	MANAGEMENT							tings Sign out APS DEMO ashington,United States
CUSTOMER LI		ECU ID	Inverter ID	Q, Query	Export					
ID	Customer Account	ECU ID \$	True Name 🔶	Country	State \$	City \$	System Size(KW) 🜲	Register Date	System Status	Action
1	APSATest	213000019948	Barney Farpalow	United States	Washington	Bainbridge Island		2014-05-02	۲	Delete
Displaying 1 to	o 1 of 1 items.								1 Total: 1 , Go	to 1 Go

2. Select the customer you want to review from the customer list.

The installer's view of the customer's Dashboard is displayed.

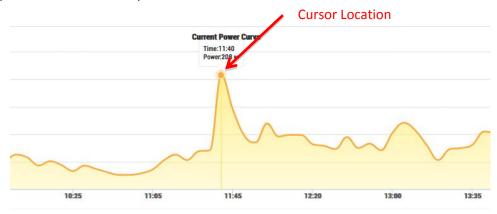
Note: While you are viewing the customer's system data, it is presented differently than the System Owner's view.



Customer View for Comparison

	и ма ша
O Normal types Total	19.51 3.33 Co 2.45 Max Mark Mark
System Status	Working normally.
🖲 No Data – System not report	ing in as expected. System requires attention.
	System configured without Internet connection.
Data Type	Data reporting period; Power for the current day, daily power for the current month, monthly for the current year, and yearly for the lifetime of the system.
Power Curve	Graphic representation of each of the data types.
System Date/Time	The date and time at the array location.
Personal Information	The customer's personal information.
Today's Energy	The amount of energy produced for today's date – expressed in kWh.
Current Power	The amount of energy being produced at this given time – expressed in watts.
Action	A short cut to ECU reporting (Detail) and reviewing the ECU status (Status).
Installer Contact Information	The installer's contact information. This information shows up on your customer's view of their account.
	Continued

Note: You can check power production at any given point along the "Power Curve" graphs by moving the curser to the specific time or date in question.



Reviewing the Customer's Modules

1. Log onto the APsystemsEMA website.

Your specific Customer List page is displayed.

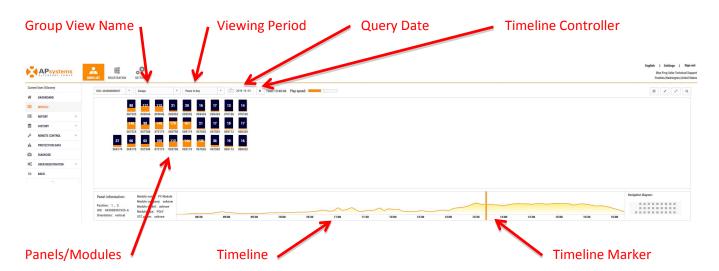
2. Select the customer you want to review from the customer list.

The installer's view of the customer's Dashboard is displayed.

			NODI	JLE									
APsystems		°0										English Settings	p Sign out
ATTENDED FORE	URAL RESIDENCE	SETTING										Seattle, Washin	ngton, United Stat
Corrent User APGATest													
-	Data Type Co	Bala Tages Consectivance Conse											
III MODALE		Connect Foreiro								2016-12-02 12:01:21			
E REPORT Y	258									PERSONAL INFORMATION			
HISTORY -	200						A			Account	APSATest		
A NEMCTE CONTROL	0.19									Create Date	2014-05-02		
	1									Location	Suindaridge Industry Washington, United Status		
C DINANCIE	2 100												
O, USEN RECISTINGION -	50									CONTACT INFORMATION			
D MOX										installer	APS 0DH0		
	1 100	1	95.18	85.50	10.25	15.05	11.45	12.20		Telphone	888-666-7234		
										fault	support/papamerica.com		
	Status	009 80		Toolog Energy (1981)		Carnet Power (n)		Action					
		213000019548		9.25		n		Betal Status					

3. Select "*MODULE*" in the left side bar.

The Module Performance page is displayed.



Group View Name	Pulldown of the group names associated with this account.
Viewing Period	Viewing period selection; Power for the current day, and daily energy over the last 30 days.
Query Date	Select date you want to review.
Timeline Controller	Advances the Timeline Marker on the timeline.
Panels/Modules	A graphic representation of how the array is laid out. The number in the center of each module represents the power being generated by the module at the current time – expressed in watts/DC.
System Performance the Timeline	Graphic representation of the power being generated by the entire system during current viewing period.
Timeline Marker	Time indicator for timeline. Power is simultaneously displayed on the panels/modules. There are two ways to display power across time; One, select the time period and Press the "Timeline Controller", and two dragging the timeline marker across the timeline to view a specific production time.

Note: Detailed information on each module can be reviewed by clicking on the module.



Reviewing the Customer's Systems Reports

1. Log onto the APsystemsEMA website.

Your specific Customer List page is displayed.

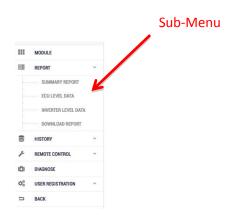
2. Select the customer you want to review from the customer list.

The installer's view of the customer's Dashboard is displayed.

			📕 REPO	ORT							
APsystems		00								English Setting	p Sign out APS DEMS Inglan, United States
Current User: APSADext											
# EASIBOARD	and Type Comm	d Prese Garant * Q. 6	47 F					SYSTEM TIME			
III MODULE 🖉 🦽				Cornent Power Carne				2016-12-0212:01:21			
II NOT	258							PERSONAL INFORMATION			
B HSTORY -	280					A		Account	APSATest		
A NIMETI CONTROL V	o 198							Constite Dutie	2934-05-02		
	Î							Location	Baindaridge Island;Mathington,United Status		
	2 100										
O, USEN RECISTIVITION ~								CONTACT INFORMATION			
D MOX								Installer	APS 0DH0		
	00.30	9538	89.50	10.25	11.05	11.45	12.20	Telphone	888-666-7238		
								fault	support@apsanerica.com		
	Status	609 KD	Today Courge (InNt)		Carnet Power (n)		Action				
		213000078548	9.25		n		beal Stear				

3. Select "*REPORT*" in the left side bar.

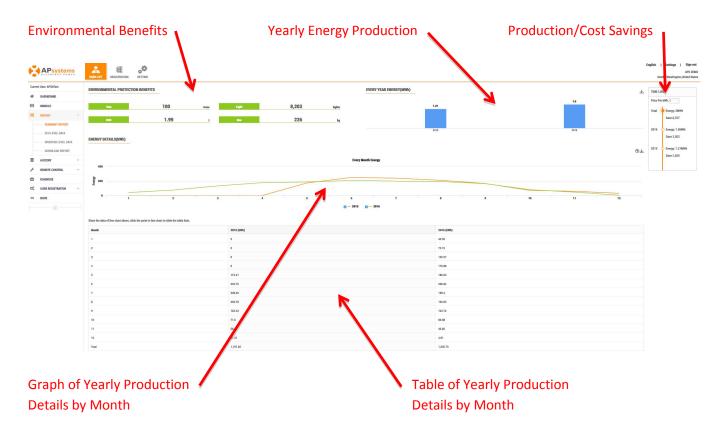
The sub-menu areas are displayed under "REPORT".



Summary Reports

1) Select "SUMMARY REPORT" under "REPORT" in the left side bar.

The Summary Report page is displayed.

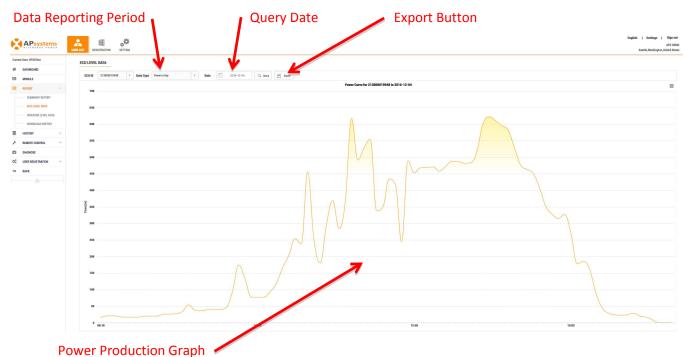


Note: The savings reflected in the Production/Cost Savings timeline are calculations based on the utilitycompany's price per kWh at this location. The price per kWh is entered in the "Price Per kWh" field in the timeline.

ECU Reports

1) Select "ECU LEVEL DATA" under "REPORT" in the left side bar.

The ECU level data page is displayed.



- Data Reporting PeriodData reporting period; Power for the current day, daily power for the
current month, monthly for the current year, and yearly for the
lifetime of the system.Query DateSelect date you want to review.Export ButtonExports the data in a spreadsheet format.Power Production GraphGraphic representation of the system's power production over time.

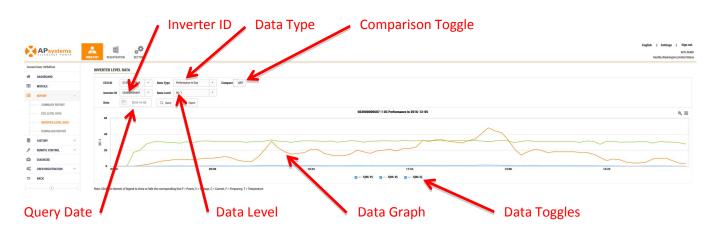
Inverter Reports

Tip: This reporting area is extremely useful in troubleshooting inverter problems.

The Inverter Level reports are used to analyze module power (DC – power/watts, volts, and current/amps), grid parameters (AC volts, frequency, and temperature).

1) Select "INVERTER LEVEL DATA" under "REPORT" in the left side bar.

The inverter level data page is displayed. OPT700 Series User will display OPT700 SERIES DATA .



2) Select inverter ID you want to review from the Inverter ID pulldown.

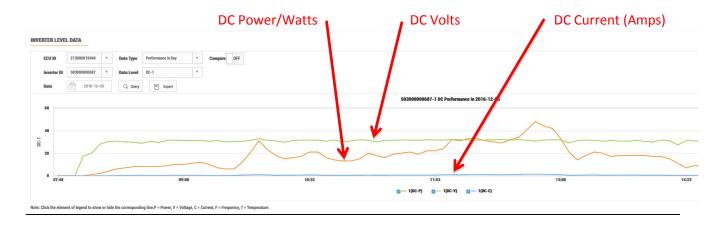
The data graphic for the selected inverter ID is displayed.

Inverter ID	Pulldown field for viewing and selecting the inverter IDs associated with the account.
Data Type	Data reporting period; Power for the current day, daily power for the current month, monthly for the current year, and yearly for the lifetime of the inverter.
Comparison Toggle	ON and OFF toggle for comparing the data/performance of more than one inverter or data level (see directions for comparisons page 52).
Query Date	Select date you want to review.

Data Level	Pulldown field for selecting AC or DC data by channel.
Data Graph	Graphic representation of the selected data types and data levels over time.

Data Toggles Used to toggle Data Levels graphs ON or OFF.

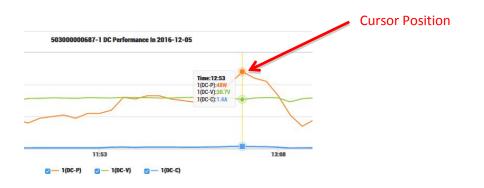
Examples of Inverter Data Graphs



Note the following in the example above:

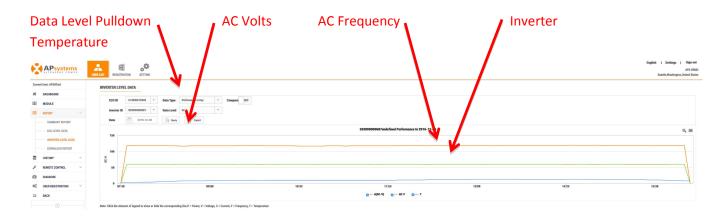
ECU ID: 21300019948 – Because of 213 prefix, it is a zigbee based ECU Inverter ID: 50300000687 – Because of 503 prefix, it is a YC1000 inverter, which will have up to four (4)Channels identified as 1, 2, 3, and 4 Query Date: Dec 5, 2016 (2016-12-05 in international date format) Data Type: Power for the current day Data Level: DC Power/Watts, Volts, Current (Amps) Comparison: OFF (so only seeing one inverter channel and/or data level)

You can see power levels for a specific time by dragging the cursor along the graph.



To view the AC (grid) parameters on the same channel for the same inverter:

1) Select "AC-1" in the "Data Level" pulldown.



You can see parameters for a specific time by dragging the cursor along the graph.



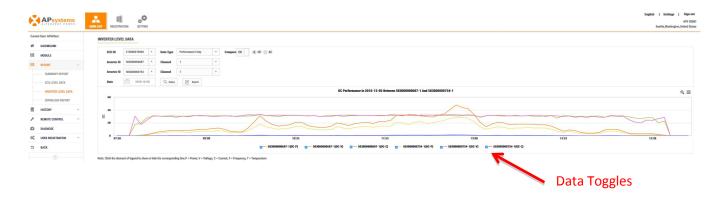
To compare the data levels for two different inverters:

- 1) Turn ON the "Compare" toggle.
- 2) Select the inverters you want to compare.

Note: You can select the same inverter and compare different channels if required.

- 3) Select the Channels you want to compare.
- 4) Select whether you want to compare DC or AC.

The graph with both inverter data levels is displayed.



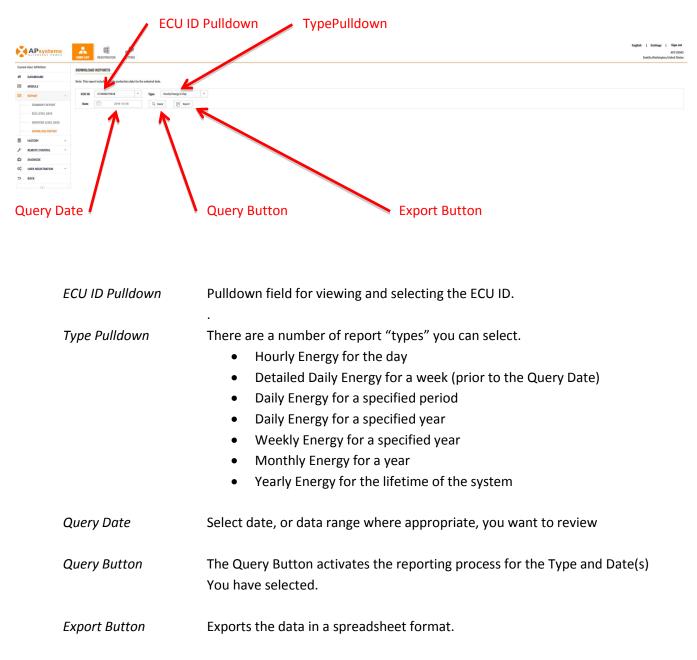
Note: You can toggle graph data elements ON and OFF by using the Data Toggles if needed for clarity of the data.

Download Reports

The reports in this area are detailed numeric reports that can be exported to a spreadsheet.

1) Select "DOWNLOAD REPORT" under "REPORT" in the left side bar.

The Download Reports data page is displayed.



Please contact the local area technical support if any questions.

Reviewing System Maintenance History

1. Log onto the APsystemsEMA website.

Your specific Customer List page is displayed.

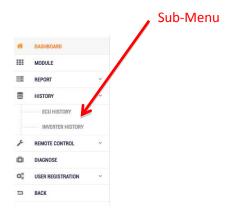
2. Select the customer you want to review from the customer list.

The installer's view of the customer's Dashboard is displayed.

			🖌 HIST	ORY								
APsystems		0 0									Kaglink Setting Sectio, Hashi	ga Sign out APS DEMO Ington, United States
Carnet User APGADest	-											
# EASIBOARD	Die Carro	i Peer Gree Y Q. Berg							SYSTEM TIME			
III MODULE				Current Power Car				3	2016-12-0212:01:21			
II NOT	150								PERSONAL INFORMATION			
B HETOPY	200					A			Account	APSADet		
A NINCTI CONTROL	8 199								Create Date	2914-05-02		
0 000000	Î								Location	Enishridge Island;Washington,United States		
	£ 100											
O [®] USER RECISTIVITION ~	54								CONTACT INFORMATION			
D MOX									installer	APSIDBO		
	0830	95.38	85.50	18.35	11.05	TLAS	12.20		Telphone	888-666-7234		
									fault	support@apsanerica.com		
	Status	603-10	Today Courge (1995)		Carrent Power (v)		Action					
		213000079548	9.25		n		Detail Status					

3. Select "*HISTORY*" in the left side bar.

The sub-menu areas are displayed under "HISTORY".



1) Select "ECU HISTORY" under "HISTORY" in the left side bar.

The ECU History page is displayed.

ECU ID L	ist	Create Date	1	Replac	e Date	Lifetime Energy
APsystems		Ср. Ттмс				Englisch Sentinge Sign owt XPE 2020 Senthy/Kenbington/Johand States
Durrent User: APSATest	ECU History					
# DASHBOARD	The ECU list displays the customer's use a	The Create Date or the Replace Date is the one you register or modify this ECU for your cust	amer in D software. You can display total energy produced by the ECU over its lifetime, and	d whether the unit by seen removed or replaced. Select each ECU ID to see performance data		
III MODULE	ECU HISTORY LIST		V	V		
III REPORT ~	Leo histori List		•			
HISTORY Y	10	ECU ID	Create Date	Replace Date	Lifetime Energy(ktth)	Directions
ECU HISTORY	1	203000010487	2014-05-02	2014-05-15	222.50	Replaced by 203000012890
INVERTER HISTORY	2	203000013890	2014-05-15	2014-12-11	36.76	Replaced by 213000017037
差 REMOTE CONTROL 🗸	3	213000017037	2014-12-11	2015-03-12	0.00	Replaced by 213000010394
IBI DIAGNOSE	ă.	212000010354	2015-03-12	2015-03-14	0.00	Replaced by 203000010394
O ^O USER REGISTRATION ~	5	203000010394	2015-03-14	2015-05-08	0.00	Replaced by 233000015948
D BACK	6	202000019548	2015-05-08	2015-05-08	0.00	Replaced by 213000019948
	Displaying 1 to 6 of 6 items.					Tetat 1, 5e to 1 Oo

ECU ID List	A list of all of the ECU that have been on the system.
Create Date	The date the ECU was activated on the EMA.
Replace Date	The date the ECU was replaced and edited on the EMA.
Lifetime Energy	A history of the amount of energy (expressed in kWh) produced while the ECU was on the system.

Note: Clicking on the ECU ID in the ECU ID List allows you to review power production from the date the ECU was first activated on the EMA.

Inverter History

1) Select "INVERTER HISTORY" under "HISTORY" in the left side bar.

The Inverter History page is displayed. OPT700 Series User will display OPT700 SERIES HISTORY.

Inve	rter ID List	Create Date		Replace Dat	te
APsystems	USER LIST REGISTRATION SETTING				English Settings Sign out APS DBMD South, Washington, United States
Current User: APSATest	Inverter History				
# DASHBOARD		Creat Cate or the Replace Date is the one you register or modify this inverter for your customer in EMA solution	n. Click on the Inverter id, you could get more details of this Inverter.		
III MODULE		1		N.	
E REPORT	INVERTER HISTORY LIST	N			
HISTORY		leverier ID	Create Date	Replace Date	Directions
ECU HISTORY	1	\$03000000003-3	2014-05-02	2014-12-06	Delete
INVERTER HISTORY	2	454000048690-A	2014-05-02	2314-08-08	Delete
F REMOTE CONTROL	a	50300000018-4	2014-05-02	2015-00-12	Delete
DIAGNOSE	á.	50300000001-2	2014-05-02	2814-12-06	Delete
Q ₀ ⁰ USER REGISTRATION	5	454000048596-8	2014-05-02	2814-12-66	Delete
D BACK	6	454000048644-A	2014-05-02	2314-12-06	Deleta
	7	50300000014-4	2014-05-02	2314-12-06	Deleta
	8	404000048364-8	2014-05-02	2314-12-06	Deleta
	4 ·	5030000002-3	2014-05-02	2014-12-06	Delete
	10	404000048321-A	2014-05-02	2014-12-06	Delete
	11	50300000018-2	2014-05-02	2015-03-12	Delete
	12	454500018489-0	2014-05-02	2014-12-06	Delete
	13	404000048556-A	2014-05-02	2014-08-06	Delete
	м	60300000000-4	2014-05-02	2014-12-06	Delete
	15	404000048690-8	2014-05-02	2314-08-68	Delete
	Displaying 1 to 15 of 88 items.				1 2 3 4 5 6 3 3 Table 6, Go to 1 Go

Inverter ID List	A list of all of the inverters that have been on the system.
Create Date	The date the inverter was activated on the EMA.
Replace Date	The date the inverter was replaced and edited on the EMA.

Remote ECU Management

The ECU has been designed with remote connection and management functionality. You can access this remote functionality through the EMA website, using your installer login credentials. Changes made remotely through the EMA do not take affect until the ECU's next reporting cycle.

The ECU must first be installed with verified Power Line Communication [PLC] and Internet connectivity.

Refer to the ECU Installation/User Manual for detailed ECU installation and operation instruction.

The ECU remote functionality allows you to do the following:

- Set the ECU Status
- Set Time Zones
- Manage Inverter UIDs

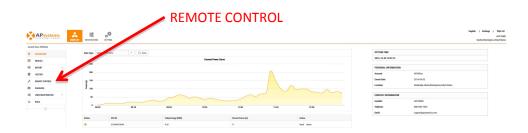
Managing the ECU Remotely

1. Log onto the APsystemsEMA website.

Your specific Customer List page is displayed.

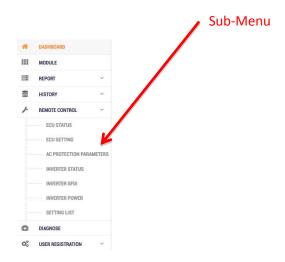
2. Select the customer you want to review from the customer list.

The installer's view of the customer's Dashboard is displayed.



3. Select "*REMOTE CONTROL*" in the left side bar.

The sub-menu areas are displayed under "REMOTE CONTROL".

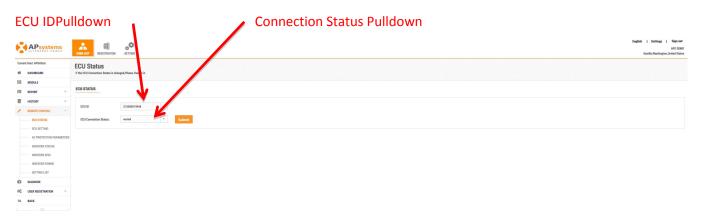


ECU Status

Entering the ECU Status is for "information only".

1) Select "ECU STATUS" under "REMOTE CONTROL" in the left side bar.

The ECU status page is displayed.

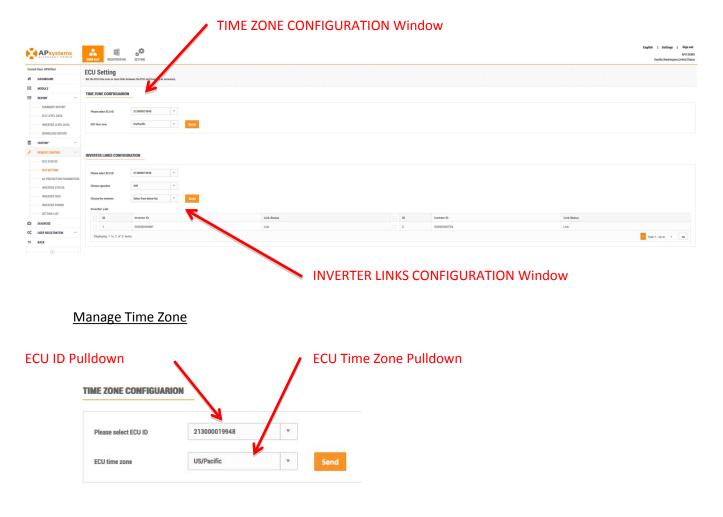


- 2) Select the ECU ID from the ECU ID pulldown.
- 3) Select the current connection station from the pulldown.
- 4) Press the "Submit" button.

ECU Settings

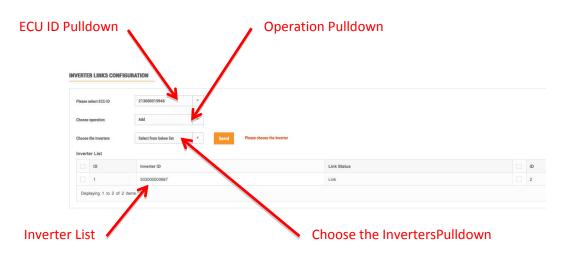
1) Select "ECU STETTINGS" under "REMOTE CONTROL" in the left side bar.

The ECU settings page is displayed.



- 1) Select the ECU ID from the ECU ID pulldown.
- 2) Select the correct time zone corresponding to the ECU's location.
- 3) Press the "Send" button.

Manage Inverter Links



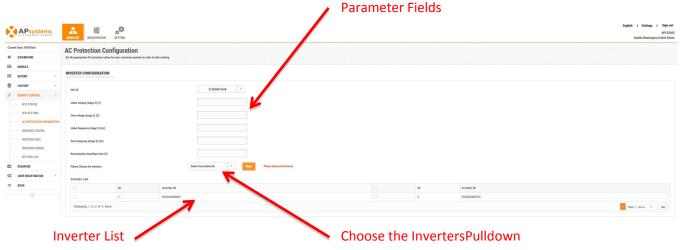
- 1) Select the ECU ID from the ECU ID pulldown.
- 2) Select the operation (Add, Clear, or Delete) from the Operation pulldown.
- 3) Select the inverter from the Inverter List, or input the inverters.
- 4) Press the "Send" button.

AC Protection Parameters

The AC protection parameters are preset at the factory, but can be adjusted to meet the specific local grid requirements.

1) Select "AC PROTECTION PARAMETERS" under "REMOTE CONTROL" in the left side bar.

The AC Protection Configuration page is displayed.



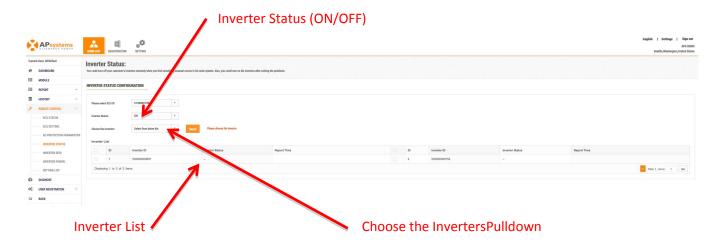
- 2) Select the ECU ID from the ECU ID pulldown.
- 3) Enter the parameters that need to be adjusted.
- WARNING: Be extremely careful when adjusting these parameters. All APsystemsmicroinverters are factory-set to inherently meet IEEE 1547 / UL 1741 by-design and do-not require adjustment by the site owner or installation team. APsystemsmicroinverters monitor voltage disturbances, frequency disturbances, loss of synchronization and/or loss of phase. If required, please consult your local Authorities Having Jurisdiction (AHJ) and APsystems Technical Support before adjusting any parameters.
 - 4) Using the "*Choose the Inverters*" pulldown, decided whether you want to adjust all of the inverters, or specific ones from the Inverter List.
 - 5) Press the "Send" button.

Inverter Status

The Inverter Status area is for turning ON and OFF the inverters.

1) Select "INVERTER STATUS" under "REMOTE CONTROL" in the left side bar.

The Inverter Status page is displayed.



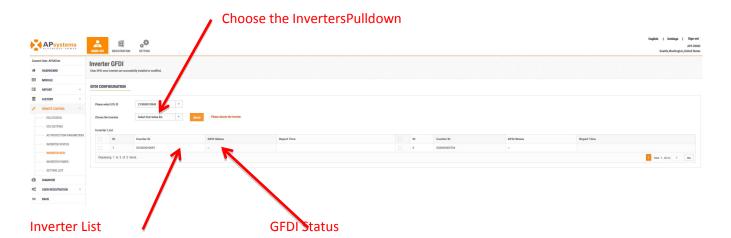
- 2) Select the ECU ID from the ECU ID pulldown.
- 3) Select either ON or OFF.
- 4) Using the "*Choose the Inverters*" pulldown, decide whether you want to turn ON or OFF all of the inverters, or specific ones from the Inverter List.
- 5) Press the "Send" button.

Inverter GFDI

Check the GFDI status to see if the GFDI protection has been tripped. If so, you can reset.

1) Select "INVERTER GFDI" under "REMOTE CONTROL" in the left side bar.

The Inverter GFDI page is displayed.



- 2) Select the ECU ID from the ECU ID pulldown.
- 3) Check the GFDI Status for each of the inverters in the Inverter List.
- 4) Using the "*Choose the Inverters*" pulldown, decide whether you want to reset all of the inverters, or specific ones from the Inverter List.
- 5) Press the "Send" button.

Inverter Power

Can adjust the internal power (DC/Watts) based on panel and utility requirements – up to the design limitations of the inverter.

1) Select "INVERTER POWER" under "REMOTE CONTROL" in the left side bar.

The Inverter Power page is displayed.



- 2) Select the ECU ID from the ECU ID pulldown.
- 3) Enter the adjusted maximum power rating (in Watts) into the Maximum Power field.
- 4) Using the "*Choose the Inverters*" pulldown, decide whether you want to adjust all of the inverters, or specific ones from the Inverter List.
- 5) Press the "Send" button.

Setting List

This page is used to confirm that a remote control command has indeed been send to the APsystems server, and that the ECU has "replied" that the command has been received.

1) Select "SETTING LIST" under "REMOTE CONTROL" in the left side bar.

The Setting List page is displayed.

APsystems					Explicit Settings Sign APS D Seattle, Mischington, United St
vent User: APGATest	Setting List				
DASHEGARD		oer command configurations on the customer's sympter. Select [Send Time] or [Reply Time] to preview.			
MODULE	ECU CONTROL COMMA				
REPORT ~	ECO CONTROL COMMA				
HISTORY	ECU ID 213000019348	Command All of the Configuration T Send Time Raply Time Q, Garay			E 60
REMOTE CONTROL ~		Command	Send Yese	Reply Yime	
ECU STATUS	1	Inverter Links Configuration	2016-01-13 08.40.15	2016-01-13-08:49:27	
ECU SETTING	2	Inverter Links Configuration	2015-01-13 08:24:47	2016-01-13 08:34:24	
AC PROTECTION PARAMETERS INVERTER STATUS INVERTER GFDI INVERTER POWER		Ĵ	1	1	

- 2) Select the ECU ID from the ECU ID pulldown.
- 3) Select the command that you want confirmed from the Command pulldown.

The Send and Reply times are displayed once the commands have been sent and received.

Note: It can take a few reporting cycles for the commands to be reflected in the monitoring sections of the EMA.

Managing Your Installer Account Information

1. Log onto the EMA.

Your specific Customer List page is displayed.

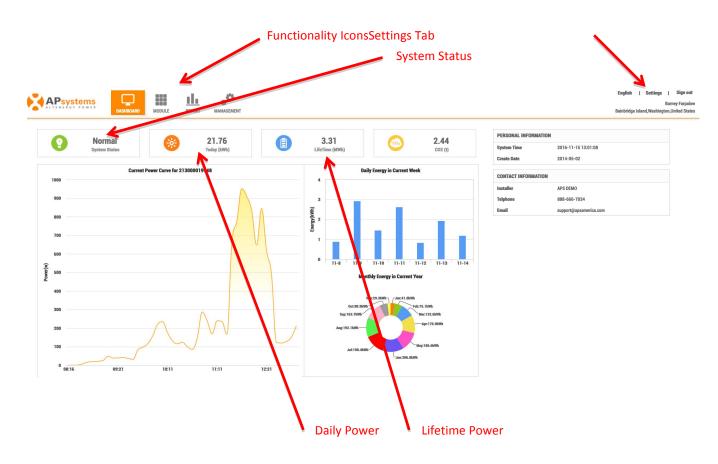
			Sett	ting Icon			Setting	Tab ———		
CUSTOMER LIST									Elipe	Settings Sign out APS DEMO Seattle, Mashington, United States
Custamer Account	Y ECU ID	Inverter ID	Q Garry T Expert							
	Costomer Account	ECU ID \$	True Hame \$	Country \$	State \$	City \$	System Size(KW) \$	Register Date	\$ System Status	Action
1	APSReet	213000019948	Damey Farpalow	United States	Washington	Bainbridge Island		2014-05-02		Delete
Displaying 1 to 1 of 1 iter	85.									Total: 1, Go to 1 Go

2. Select either the "Setting Icon" or "Setting" tab (they both do the same thing).

The Installer Account Personal Information Configuration page is displayed.

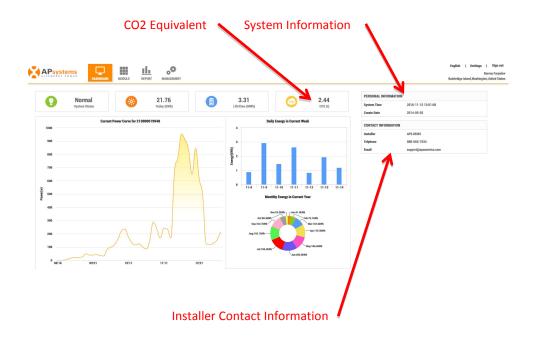
APsystems	USER LIST REGISTRATION			English Settings Sign APS Seattle, Mashington, United S
SETTINGS HELP	Personal Information Cor Set personal information or your password.	nfiguration		
0	PERSONAL INFORMATION		EDIT PASSWORD	
	• UserName	APS DEMO	Password	
	• Email	support@aptamerica.com	Confirm Password	
	FirstName	APS DEMO	and a second	
	LastName			
	Phone	888-868-7034		
	+ Country	United States *		
	State/Province	Washington		
	+City	Seatio		
	Address	9723 Coppertop Loop, Suite 102		
	Postal Code	96110		
	Remark			
		Same .		

- 3. Edit the Personal Information form, or change your password.
- 4. Press the "Submit" button.



Introduction to Your Customer's System Dashboard

Functionality Icons	Select area of the EMA site that you want to review: DASHBOARD, MODULE, REPORT, or
	MANAGEMENT.
System Status	Green (Normal) – The system is operating and reporting as expected.
	Grey (No Data) – There is a system malfunction that should be investigated. No
	Production data is being communicated to the EMA server. Check the ECU connection to see
	if you can isolate the problem. If not, contact your installer.
Settings Tab	Where you can change your personal information, including your password.
Daily Power	The amount of power generated during the current day.
Lifetime Power	The amount of power the system has generated during its lifetime.



CO2 Equivalent	The equivalent amount of CO2 (expressed in tons) benefit the system has provided in its lifetime.
System Information	The current date and time for the system, and the date the original account was created.
Installer Contact Information	Your installer's company name, phone number and email address.



Current Daily Power Graph	Graphic representation of the power being generated during the current day.
Current Weekly Power Graph	Graphic representation of the energy that has been generated each day during the current seven day period.
Yearly Energy by Month Graph	Graphic representation of the energy that has been generated each month during the last 12 month period.