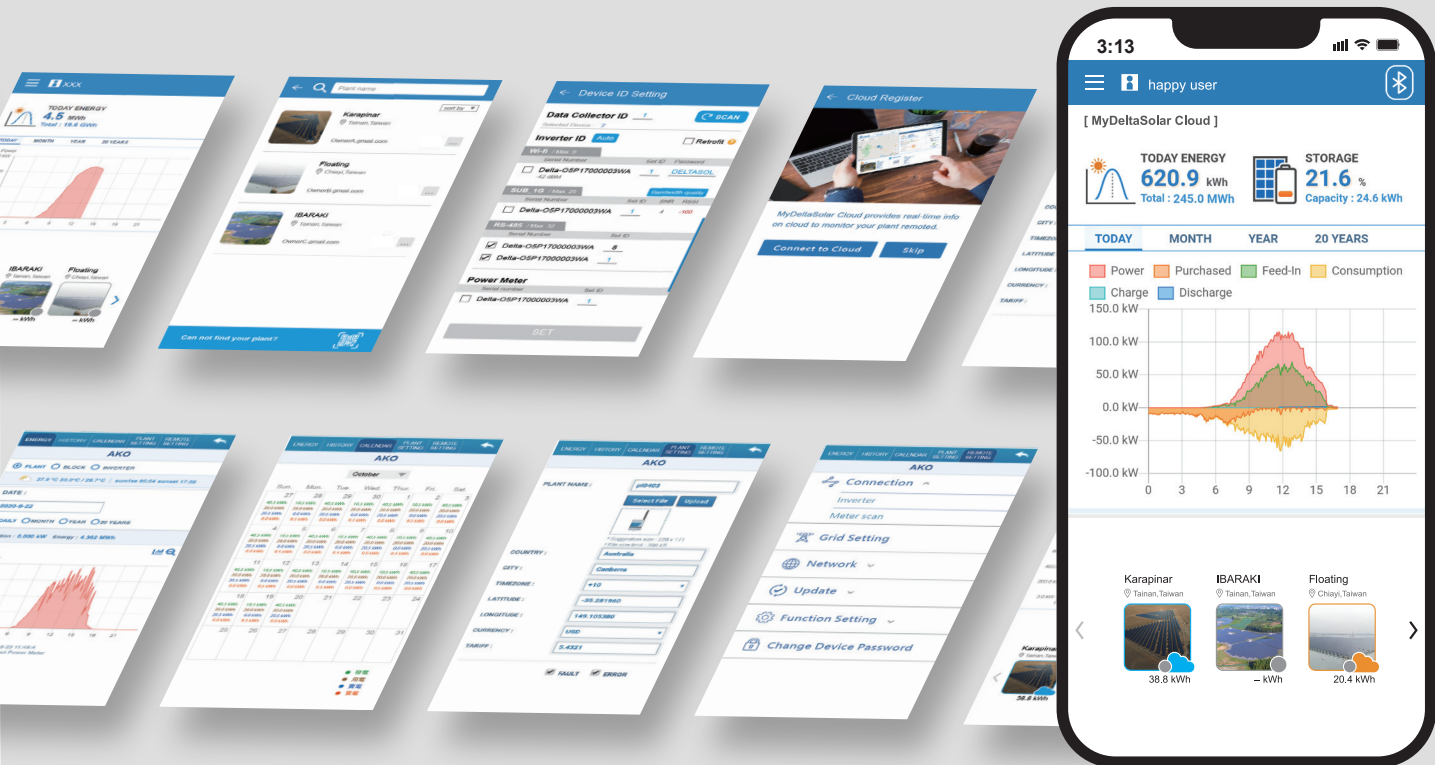


ios

DeltaSolar

DELTA ELECTRONICS, INC.



DeltaSolar Application

Operation Manual for **ios** system

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1.DeltaSolar

1.1. Download

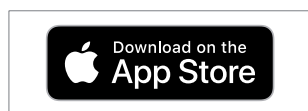


DeltaSolar

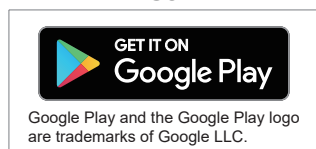
1. This APP should collocate with Delta Inverter.
2. If inverter is not connected to cloud, you still can monitor inverter by APP.



QR Code



iOS



Android

Where can search for DeltaSolar APP?

- QR Code: Please scan the QR code to DeltaSolar cloud.
- IOS system: Please search "DeltaSolar" in App store.
- Android system: Please search "DeltaSolar" in Google Play.



About OS version

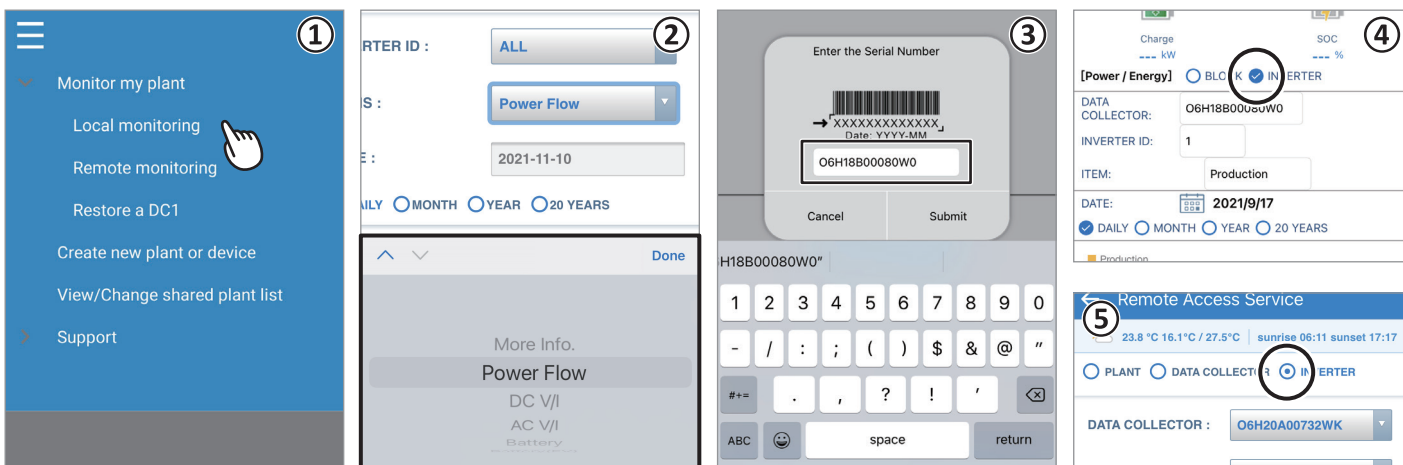
iOS: 8.0 and above
Android OS: Android 8.0 and above

ATTENTION



- Please ensure the smart phone is connected to the Internet and the communication is good.
- Before setting up, please registered and sign in once in an internet-connected environment.

1.2. Basic operation



① Touch selection

Press the item with your finger to move to the next screen.

② Pull-down menu

The screen where the options are displayed in a list is called a pull-down menu.

③ Text bar

When you press a number or text, the system keyboard will be displayed to enter new character.

(The typing interface depends on the device you are using.)

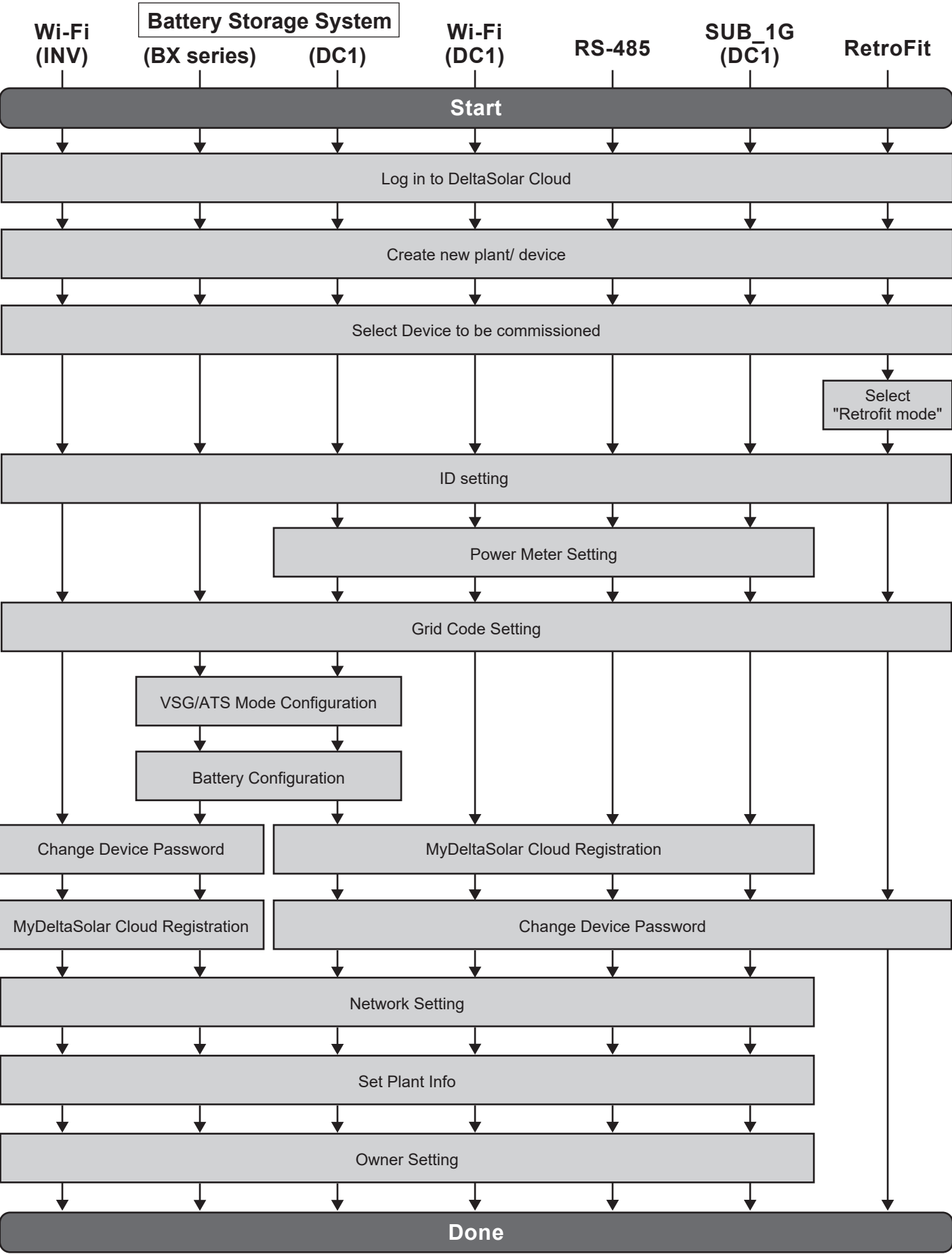
④ Check box

Click and marked a "V" (check mark) to select the item is called a check box.

⑤ Option button

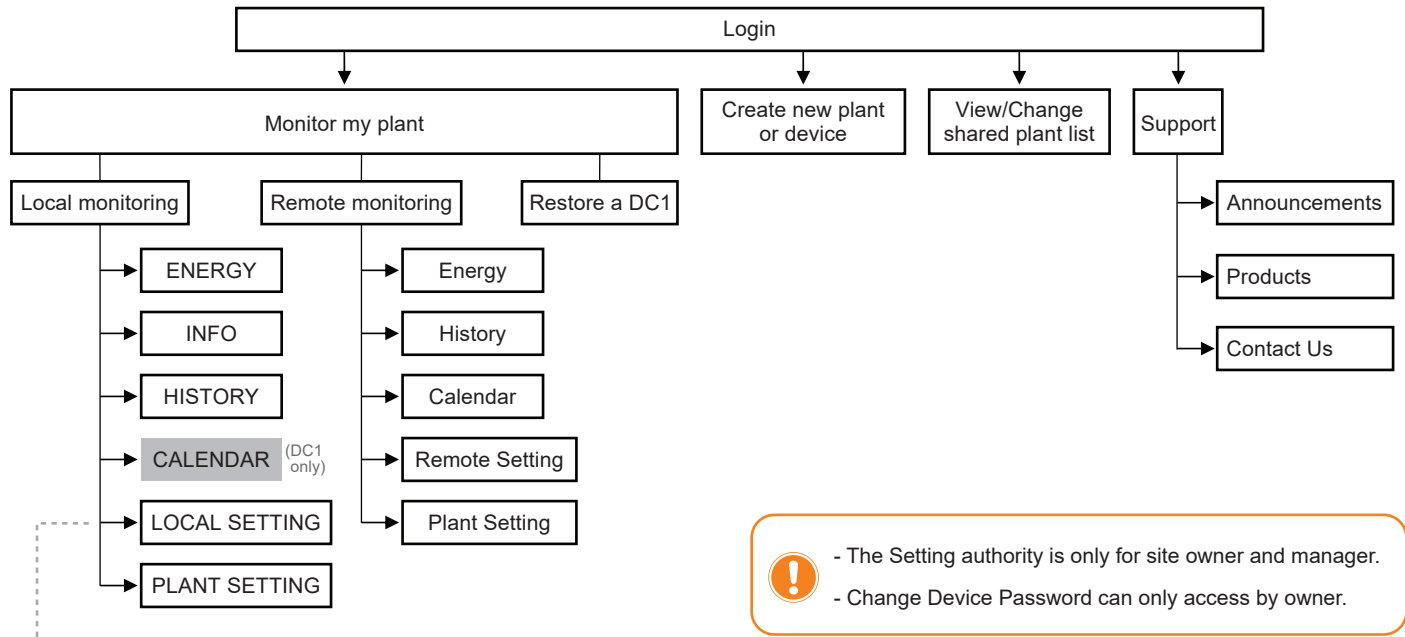
A screen that changes color when you press a round frame is called a option button.

1.3. Workflow



1.4. List of APP Pages

The following figure shows the APP operation flow. For detailed screen content, please refer to **Chapter 4**.



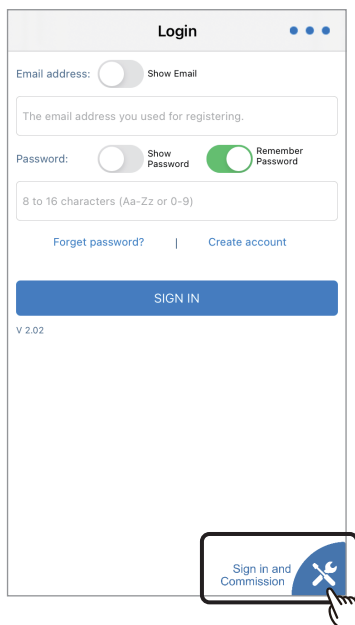
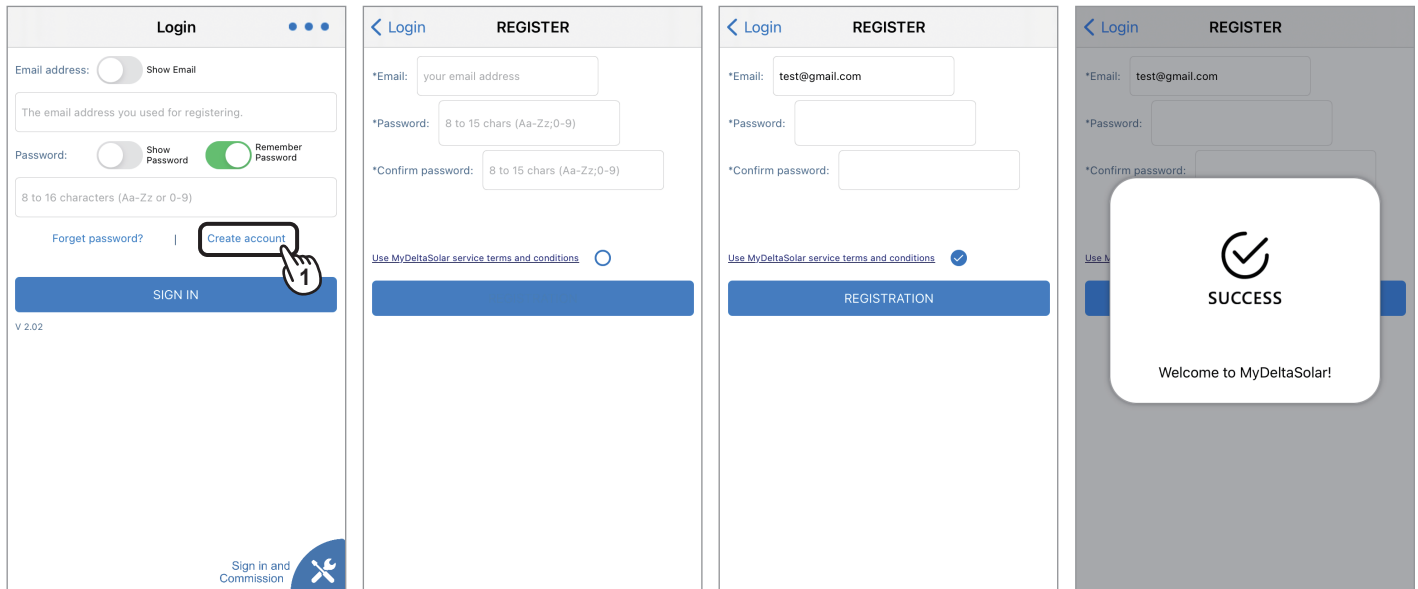
LOCAL SETTING

Wi-Fi INV	DC1 (Wi-Fi / RS485 / SUB_1G)	BX Series	Battery Storage System (DC1)
Grid Setting Grid Setting Network Connect to Internet Maintenance Inverter Firmware Upgrade Function Setting DRM0 Partial/Zero Export Dry Contact Change Device Password	Connection Inverter Meter Grid Setting Grid Setting Network Network Setting Connect to Internet Time Maintenance Inverter Firmware Upgrade DC1 Firmware Upgrade Forwarding Backup a DC1 Replace Device Reset Function Function Setting DRM0 Partial/Zero Export Dry Contact Test Mode Phase Interlock IV Curve Change Device Password	Battery Control Battery Control Battery SN/SOH Grid/VSG/ATS Setting Grid Setting VSG/ATS Setting Network Connect to Internet Maintenance Inverter Firmware Upgrade Function Setting DRM0 Dry Contact Change Device Password	Hybrid Control Hybrid Control Hybrid System Configuration Connection Inverter Meter Grid/VSG/ATS Setting Grid Setting VSG/ATS Setting Network Network Setting Connect to Internet Time Maintenance Inverter Firmware Upgrade DC1 Firmware Upgrade Forwarding Backup a DC1 Replace Device Function Setting DRM0 Dry Contact Phase Interlock Change Device Password

Wi-Fi / RS-485 only
 SUB-1G only

1.5. Create account

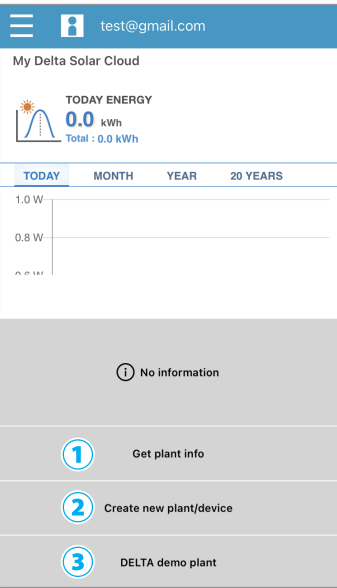
1. Start the APP, click "Create account".
2. Enter the registration page.
3. Fill in the information and click "REGISTRATION". (Check to agree declaration and click "OK" to continue.)
4. Registration success, APP will lead to set internet connection.



Quick commission icon

The icon shown in the picture provides a shortcut and allows installers to commission.

1.6. Home page for new user



At home page, If no plant in the account, there will have three options for user.

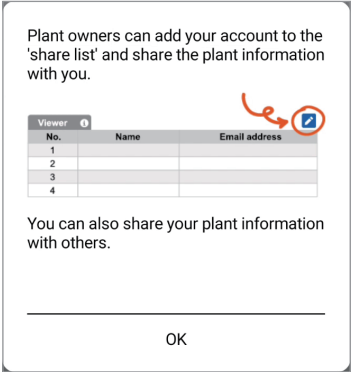
* When there still don't have plant at second time login, APP will still show three options.

① Get plant info

User can get plant information shared by other plant owners.
Details authority please refer to chapter 3.4.

Function accessibility list

Authority / Function	Owner	Manager	Viewer
View plant information	✓	✓	✓
View share list	✓	✓	✓
Plant setting (Remote)	✓	✓	🔒
Plant setting (Local)	Password needed, please contact local service.		
Change device password	✓	🔒	🔒
Edit share list	✓	🔒	🔒



② Create new plant/device

Create new plant or add inverter to exist plant, for more detail please refer chapter 2 "Commissioning".

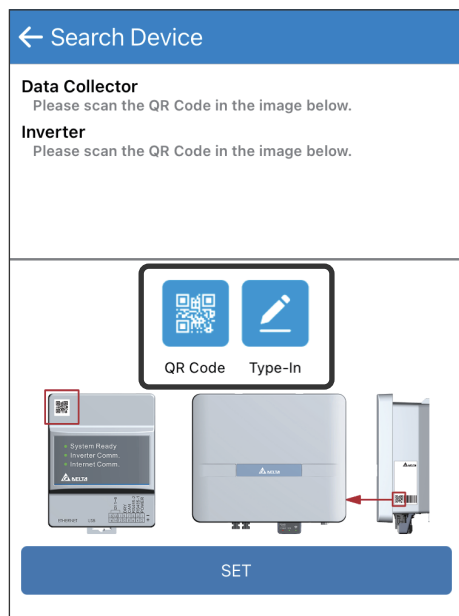
③ DELTA demo plant

User can learn interface and APP by demo plant first.

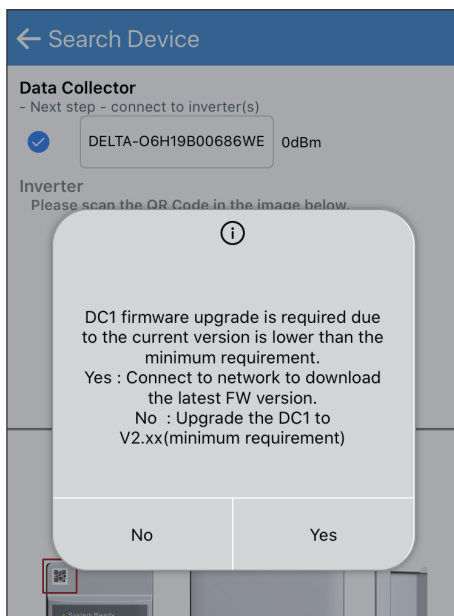
2.Commissioning

2.1. Data Collector

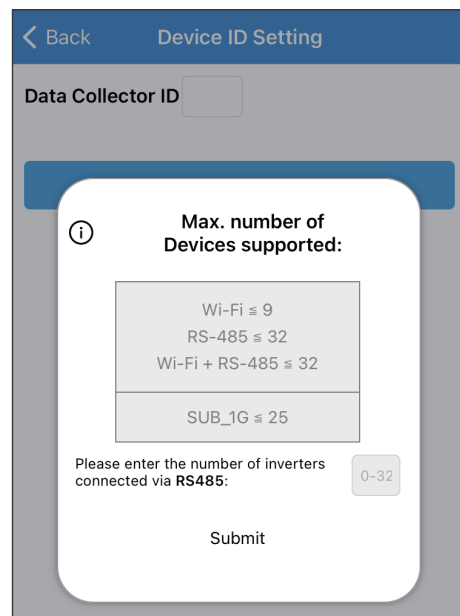
Please scan the QR code or enter the serial number of the device, and then click "SET".



If the DC1 FW is not the latest version, App will require to update DC1 first, click "Yes" App will start FW update for DC1.

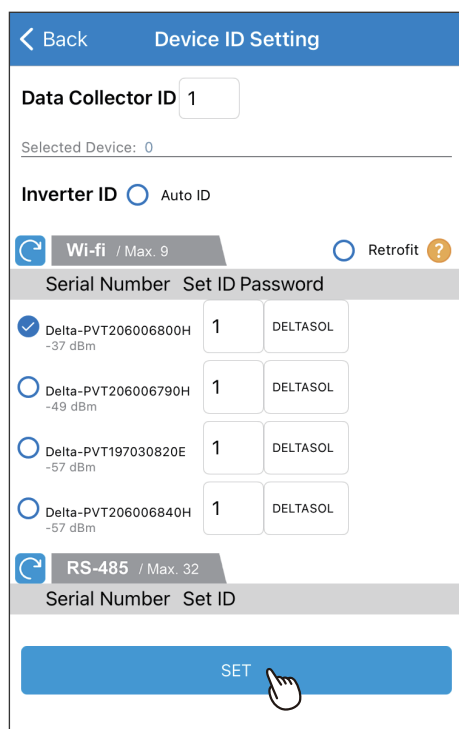


Please fill-in RS-485 device quantity.

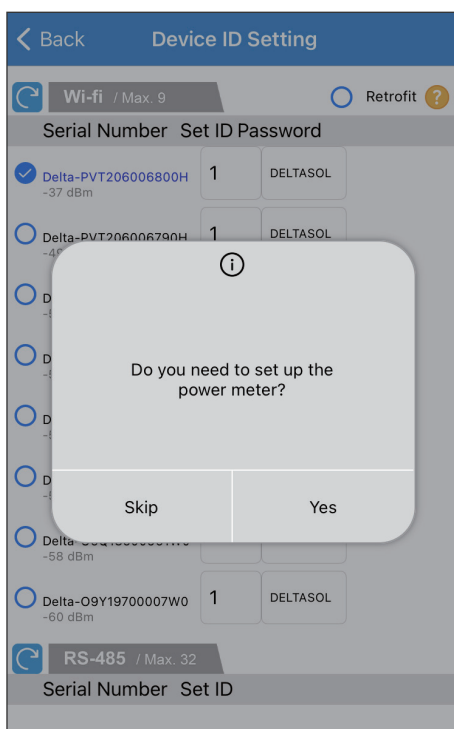


To establish a successful communication between Inverter Wi-Fi to MyDeltaSolar Cloud, in the Wi-Fi connection setup page, the signal strength must be above **-70dBm** between each Wi-Fi device (Wi-Fi router, inverter, DC1...etc.). **In case the signal strength is below -70dbm, it may cause certain communication errors which may prevent a successful Wi-Fi communication.** To avoid such issues, Please adjust the Wi-Fi device position to improve the signal strength/quality.

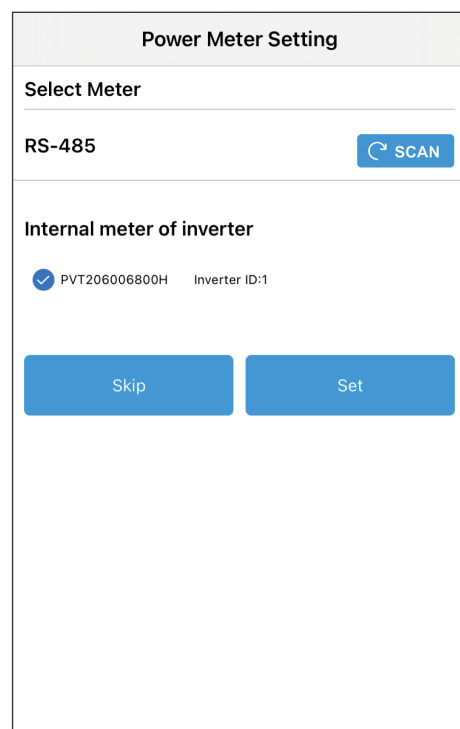
Select the target inverters, click "Auto ID" to assign the ID automatically, and click "SET".



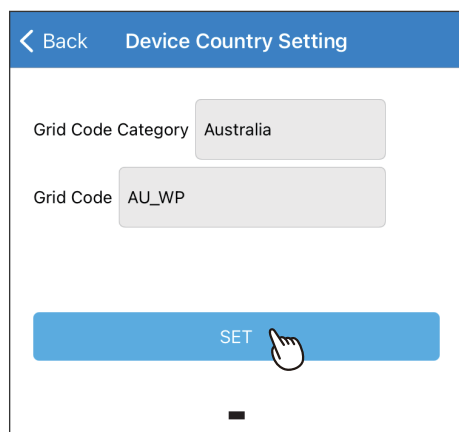
If the site contain power meter, please click "Yes" to proceed, or skip to country setting.



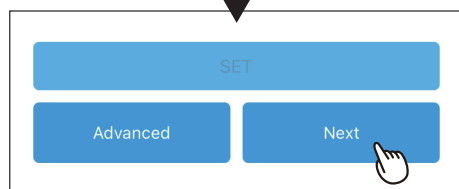
Select the meter device for monitoring.



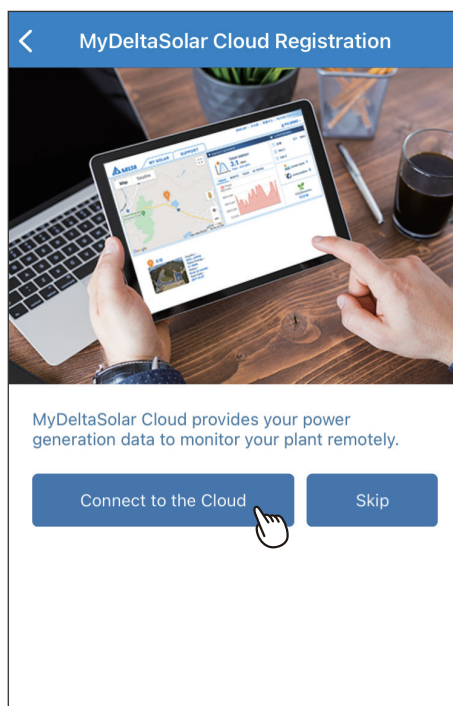
Select grid code and click "SET".



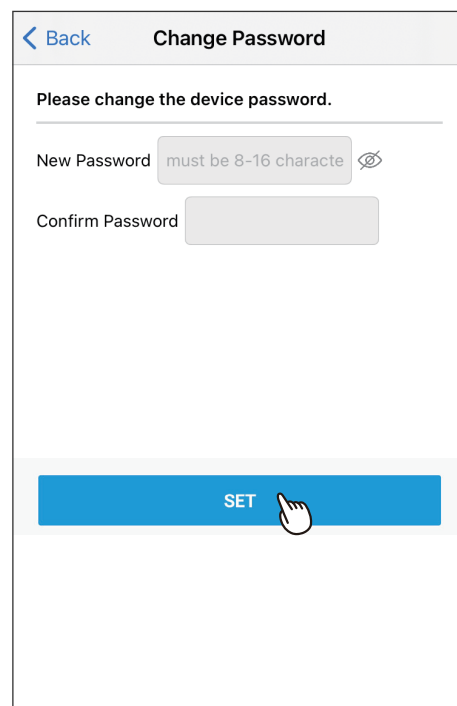
Click "NEXT"



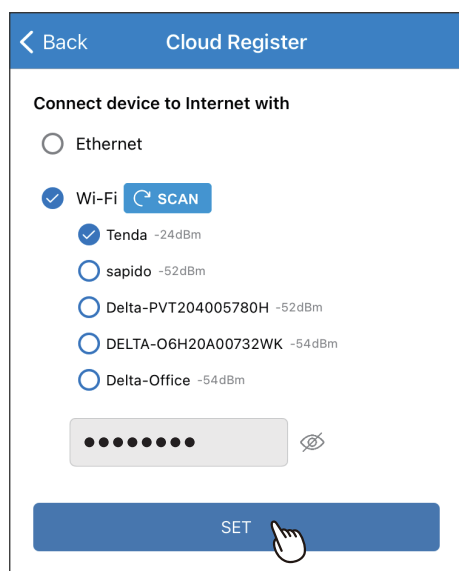
Click "Connect to the Cloud" to use MyDeltaSolar monitoring or click "Skip" to go to "Plant setting".



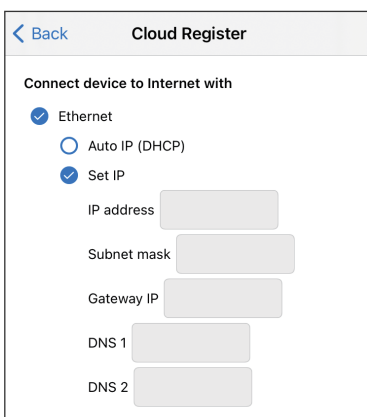
Set a new password to the device and click "SET".



Select the network interface and click "SET".



Select "Ethernet"



Auto IP (DHCP)

System will automatically assign an IP address.

Set IP

1. IP Address: Please enter a specified IP address.
2. Subnet Mask: Please enter a subnet mask.
3. Gateway IP: Please enter the IP address of the router.
4. DNS1: Please enter DNS1 for the network.
5. DNS2: Please enter DNS2 for the network.
6. Click "SET" to complete the setup.

Select the plant type and then assign a
plant name. Click “Get Location” for the GPS
position and click “SET”.

Fill in the e-mail address to assign the
owner to the plant.

< Back

Plant Setting

✓

New Plant

Plant type

Feed-in without power meter

Plant Name

Test

📍 Get location

SET

Owner Setting

You are current the manager, you may assign the
plant owner now or later.

Authority	Owner	Manager
View plant information	✓	✓
View share list	✓	✓
Plant setting	✓	✓
Change device password	✓	🔒
Edit share list	✓	🔒

☐

Assign to

Email address

☐

I am owner.

☐

Do it later.

SET

You are current the manager, you may assign the
plant owner now or later.

Authority	Owner	Manager
View plant information	✓	✓
View share list	✓	✓
Plant setting	✓	✓
Change device password	✓	🔒
Edit share list	✓	🔒

✓

SUCCESS

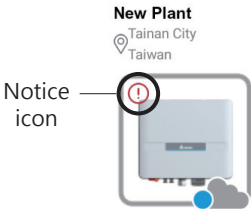
Test

has been connected on MyDeltaSolar Cloud



About owner setting...

- The APP authority of site installer will default as manager, the installer can set himself as owner in commission process.
- If the account has not registered to Delta cloud, there will be an email notice and invite the account to register Delta cloud.
- During no Internet environment, the setting information will be stored in APP and transmit to cloud when Internet ability available.
- After commission, the cloud system will send site information(with device password) and transfer success mail to owner account.
- When no owner has been set during the commission process, there will be a pop up notice every time when select the plant until owner has been set.



← Search Device

Data Collector
Please scan the QR Code in the image below.

Inverter
Please scan the QR Code in the image below.

The diagram illustrates the connection between three components: a Data Collector, an Inverter, and a Solar Panel. The Data Collector is a small device with a QR code on its top left. The Inverter is a larger device with a QR code on its front panel. The Solar Panel is a vertical panel with a QR code on its bottom right. A red arrow points from the Inverter to the Solar Panel. Above the Inverter, there is a box containing two icons: a QR code icon labeled 'QR Code' and a pencil icon labeled 'Type-In'.

Device ID Setting

Inverter ID

Auto

Serial number

Set ID

Delta-PVT206006800H
0dBm

1

Set

 Click **Auto** button, the APP will arrange the device ID automatically.

<

Back

Device Country Setting

Grid Code Category

Australia

Grid Code

AU_WP

SET

 To establish a successful communication between Inverter Wi-Fi to MyDeltaSolar Cloud, in the Wi-Fi connection setup page, the signal strength must be above **-70dBm** between each Wi-Fi device (Wi-Fi router, inverter, DC1...etc.). **In case the signal strength is below -70dbm, it may cause certain communication errors which may prevent a successful Wi-Fi communication.** To avoid such issues, Please adjust the Wi-Fi device position to improve the signal strength/quality.

< Back

Device Country Setting

Success

Grid Code Category

Australia

Grid Code

AU_WP

SET

Advanced

Next

Back

Change Password

Please change the device password.

New Password

must be 8-16 character

Confirm Password

SET

Select the network interface and click "SET".

Select the plant type and then assign a plant name. Click "Get Location" for the GPS position and click "SET".

Fill in the e-mail address to assign the owner to the plant and click "SET".

Authority	Owner	Manager
View plant information	✓	✓
View share list	✓	✓
Plant setting	✓	✓
Change device password	✓	🔒
Edit share list	✓	🔒

! About owner setting...

- The APP authority of site installer will default as manager, the installer can set himself as owner in commission process.
- If the account has not registered to Delta cloud, there will be an email notice and invite the account to register Delta cloud
- During no Internet environment, the setting information will be stored in APP and transmit to cloud when Internet ability available.
- After commission, the cloud system will send site information(with device password) and transfer success mail to owner account.
- When no owner has been set during the commission process, there will be a pop up notice every time when select the plant until owner has been set.



2.3. Battery Storage System (DC1)

Please scan the QR code or enter the serial number of the device, and then click "SET".

If the DC1 FW is not the latest version, App will require to update DC1 first, click "Yes" App will start FW update for DC1.

Please fill-in RS-485 device quantity.



To establish a successful communication between Inverter Wi-Fi to MyDeltaSolar Cloud, in the Wi-Fi connection setup page, the signal strength must be above **-70dBm** between each Wi-Fi device (Wi-Fi router, inverter, DC1...etc.). **In case the signal strength is below -70dbm, it may cause certain communication errors which may prevent a successful Wi-Fi communication.** To avoid such issues, Please adjust the Wi-Fi device position to improve the signal strength/quality.

Select the target inverters, click "Auto ID" to assign the ID automatically, and click "SET".

Select the meter device for monitoring.

Click "NEXT".

Select grid code and click "SET".

Select VSG Function and Backup Power Type.

Select Battery type and SOH checking day.
 * The BX series need to check entire SOH at least once/year.

< Back Hybrid System Configuration

ID:1 O9H19A00003W0

Battery Type: ☒ BX6.3_AC ☐ BX12.6_AC

Time Schedule for SOH-Cycle(DD/MM): /

SAVE

* Once a year the BX6.3 must do a FULL un-interrupted discharge and re-charge cycle. This will be completed and undertaken at a scheduled day and time as above. Should the temperature of the battery be below 20 degrees Celsius the battery will postpone the process for 3 months

When select "BX12.6_AC", please type in the S/N of BX6.3_EX100.

< Back Hybrid System Configuration

ID:1 O9H19A00003W0

Battery Type: ☐ BX6.3_AC ☒ BX12.6_AC

SN:

Time Schedule for SOH-Cycle(DD/MM): /

Click "Connect to the Cloud" to use MyDeltaSolar monitoring or click "Skip" to go to "Plant setting".

< MyDeltaSolar Cloud Registration



MyDeltaSolar Cloud provides your power generation data to monitor your plant remotely.

Connect to the Cloud **Skip**

Set a new password to the device and click "SET".

< Back Change Password

Please change the device password.

New Password

Confirm Password

SET

Select the network interface and click "SET".

< Back Cloud Register

Connect device to Internet with

☐ Ethernet

☒ Wi-Fi **SCAN**

- ☒ Tenda -24dBm
- ☐ sapido -52dBm
- ☐ Delta-PVT204005780H -52dBm
- ☐ DELTA-O6H20A00732WK -54dBm
- ☐ Delta-Office -54dBm

SET

Select "Ethernet"

< Back Cloud Register

Connect device to Internet with

☒ Ethernet

☐ Auto IP (DHCP)

☒ Set IP

IP address

Subnet mask

Gateway IP

DNS 1

DNS 2

Auto IP (DHCP)

System will automatically assign an IP address.

Set IP

1. IP Address: Please enter a specified IP address.
2. Subnet Mask: Please enter a subnet mask.
3. Gateway IP: Please enter the IP address of the router.
4. DNS1: Please enter DNS1 for the network.
5. DNS2: Please enter DNS2 for the network.
6. Click "SET" to complete the setup.

Select the plant type and then assign a plant name. Click “Get Location” for the GPS position and click “SET”.

Fill in the e-mail address to assign the owner to the plant.

< Back

Plant Setting

✓ New Plant

Plant type

Feed-in without power meter

Plant Name

Test

Get location

SET

Owner Setting

You are current the manager, you may assign the plant owner now or later.

Authority	Owner	Manager
View plant information	✓	✓
View share list	✓	✓
Plant setting	✓	✓
Change device password	✓	🔒
Edit share list	✓	🔒

☐ Assign to

Email address

☐ I am owner.

☐ Do it later.

SET

You are current the manager, you may assign the plant owner now or later.

Authority	Owner	Manager
View plant information	✓	✓
View share list	✓	✓
Plant setting	✓	✓
Change device password	✓	🔒
Edit share list	✓	🔒

✓

SUCCESS

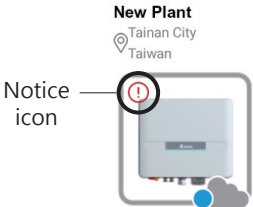
Test

has been connected on MyDeltaSolar Cloud



About owner setting...

- The APP authority of site installer will default as manager, the installer can set himself as owner in commission process.
- If the account has not registered to Delta cloud, there will be an email notice and invite the account to register Delta cloud.
- During no Internet environment, the setting information will be stored in APP and transmit to cloud when Internet ability available.
- After commission, the cloud system will send site information(with device password) and transfer success mail to owner account.
- When not owner has been set during the commission process, there will be a pop up notice every time when select the plant until owner has been set.



2.4. Battery Storage System (BX series)

Please scan the QR code or enter the serial number of the device, and then click "SET".

← Search Device

Data Collector
Please scan the QR Code in the image below.

Inverter
Please scan the QR Code in the image below.

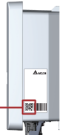


QR Code



Type-In





SET

Click "Auto" or enter a number to assign the device ID, and click "Set"

← Device ID Setting

Inverter ID Auto

Serial number	Set ID
Delta-PVT206006800H 0dBM	1

Set

 Click Auto button, the APP will arrange the device ID automatically.

Select grid code and click "SET".

← Back Device Country Setting

Grid Code Category Australia

Grid Code AU_WP

SET

Click "NEXT".

SET

Advanced
Next



To establish a successful communication between Inverter Wi-Fi to MyDeltaSolar Cloud, in the Wi-Fi connection setup page, the signal strength must be above **-70dBm** between each Wi-Fi device (Wi-Fi router, inverter, DC1...etc.). **In case the signal strength is below -70dbm, it may cause certain communication errors which may prevent a successful Wi-Fi communication.** To avoid such issues, Please adjust the Wi-Fi device position to improve the signal strength/quality.

Select VSG Function and Backup Power Type.

← Back VSG/ATS Setting

Inverter ID: 1

VSG Function : OFF OFF ON

Backup Power Type : External ATS

SAVE

Multiple Set

Click "NEXT".

SAVE

Multiple Set

Next

Select Battery type and SOH checking day.

* The BX series need to check entire SOH at least once/year.

← Back Battery SN/SOH

ID:1 O9H19A00003W0

Battery Type: ☒ BX6.3_AC ☐ BX12.6_AC

Time Schedule for SOH-Cycle(DD/MM): 9 / 9

SAVE

* Once a year the BX6.3 must do a FULL un-interrupted discharge and re-charge cycle. This will be completed and undertaken at a scheduled day and time as above. Should the temperature of the battery be below 20 degrees Celsius the battery will postpone the process for 3 months

When select "BX12.6_AC", please type in the S/N of BX6.3_EX100.

← Back Battery SN/SOH

ID:1 O9H19A00003W0

Battery Type: ☐ BX6.3_AC ☒ BX12.6_AC

SN: OAN0987654321

Time Schedule for SOH-Cycle(DD/MM): 9 / 9

SAVE

* Once a year the BX6.3 must do a FULL un-interrupted discharge and re-charge cycle. This will be completed and undertaken at a scheduled day and time as above. Should the temperature of the battery be below 20 degrees Celsius the battery will postpone the process for 3 months

Set a new password to the device and click "SET".

Click "Connect to the Cloud" to use MyDeltaSolar monitoring or click "Skip" to go to "Plant setting".

Select the network interface and click "SET".

Select the plant type and then assign a plant name. Click "Get Location" for the GPS position and click "SET".

Fill in the e-mail address to assign the owner to the plant.

Authority	Owner	Manager
View plant information	✓	✓
View share list	✓	✓
Plant setting	✓	✓
Change device password	✓	🔒
Edit share list	✓	🔒

Authority	Owner	Manager
View plant information	✓	✓
View share list	✓	✓
Plant setting	✓	✓
Change device password	✓	🔒
Edit share list	✓	🔒



About owner setting...

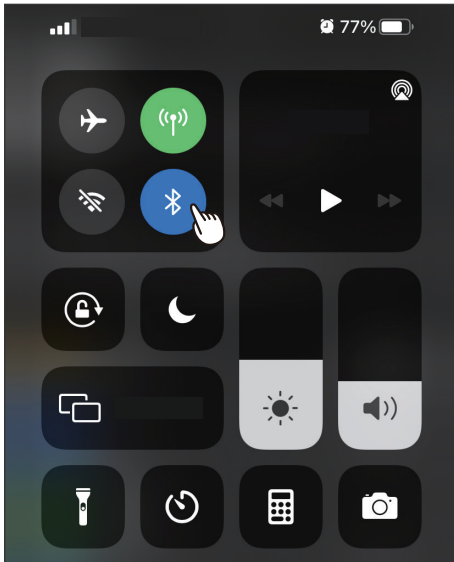
- The APP authority of site installer will default as manager, the installer can set himself as owner in commission process.
- If the account has not registered to Delta cloud, there will be an email notice and invite the account to register Delta cloud.
- During no Internet environment, the setting information will be stored in APP and transmit to cloud when Internet ability available.
- After commission, the cloud system will send site information(with device password) and transfer success mail to owner account.
- When not owner has been set during the commission process, there will be a pop up notice every time when select the plant until owner has been set.



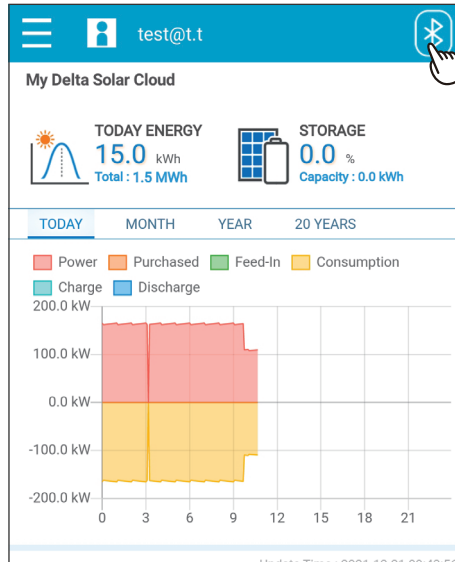
3. Bluetooth

3.1. Connection

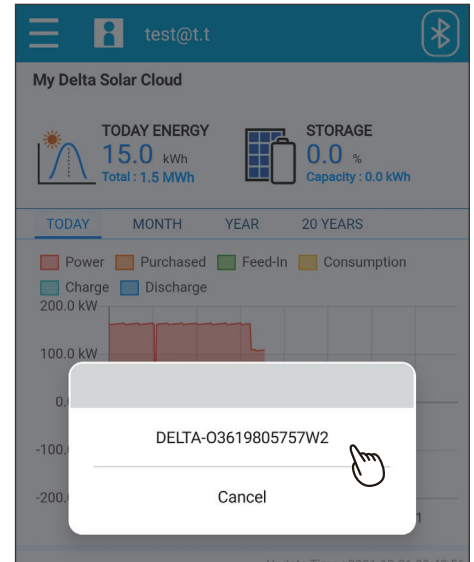
Swipe down from the top of the screen and tap Bluetooth icon.



Click  on the home page.



Select the serial number of the device.



3.2. Bluetooth menu

There are 3 tabs for Bluetooth menu.

[INFO]

Bluetooth menu

Info

ID	1
Serial Number	03619805757W2
Model	RPI-M88H
Status	NO DC
Country	TAIWAN

Energy

Today Energy	0.00 kWh
Total Life Energy	888880.00 kWh

Input

Voltage	0.00 / 0.00 V
Current	0.00 / 0.00 A
Power	0 / 0 W

Output

Voltage	0.00 / 0.00 / 0.00 V
Current	0.00 / 0.00 / 0.00 A
Power	0 / 0 / 0 W

FW Version

[HISTORY]

Bluetooth menu

Test

ITEM:

Event Log

START DATE:

2021/11/10

END DATE:

2021/11/10

Event Log

ID	7
Time	2021/12/13 上午 12:00:00
Event	E09 - No Grid

Info.

History

Local Setting

[LOCAL SETTING]

Grid Setting

Select Inverter ID:

1

Selected inverter model:

RPI-M88H

Inverter ID

Inverter ID

1

INVERTER ID SET

Installation Settings

Country

TAIWAN

SET

SAME MODEL SET

Insulation Mode

ON

Insulation Resistance

150

kΩ

RCMU

ON

EPO 1 (External power off)

Normal Close

4. Description of the page display

The APP displays a variety of information, such as the amount of power production, consumed, Feed-in or purchased, as well as the operating status of the Inverter.



There are some slight differences between ios and Android's APP screen layout.
This manual uses the Android system APP screen representative to explain.

4.1. Home Page



① Main menu
For details, please see the section "Description of the screen display".

② USER menu
Change language, Sign out.



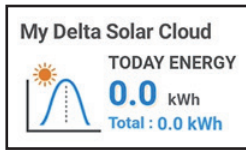
③ Power generation

Show today's power generation and total power generation.

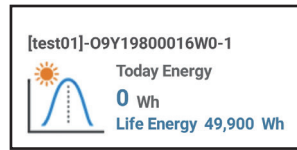
At remote monitoring: will shown the power generation for all plant.

At Local monitoring : will show the power generation for selected device of the plant.

[Remote mode]



[Local mode]

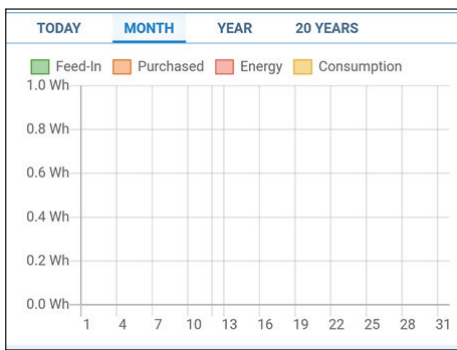


④ Battery capacity

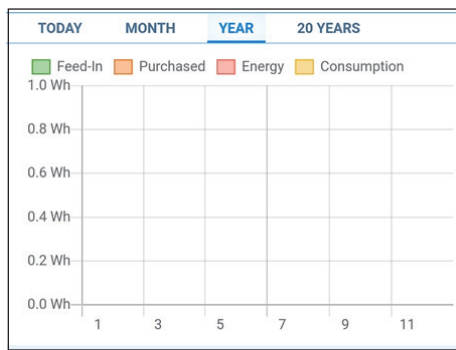
If the site contain a storage system, this icon will shows up to indicate the battery capacity.

⑤ Power generation map

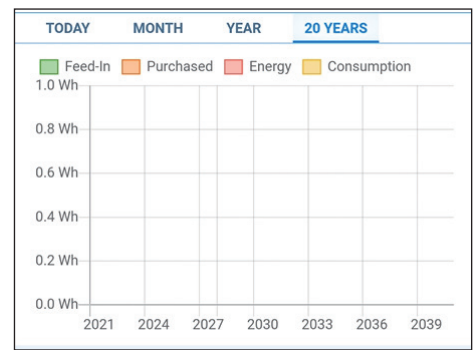
Display different power generation maps according to the selected time interval.



[MONTH]



[YEAR]



[20 YEARS]

⑥ Set up the Plant

Display the name of each plant and the amount of power generated.

Definition of Status Icon



Plant on cloud
With cloud icon



Plant not on cloud
with circle icon, quick P2P
connection from here

On site connection

- no signal
- not connected
- monitoring

Cloud connection

- no Internet
- monitoring
- fault
- error/waring/
disconnect

⑥ Bluetooth

Connect the device through Bluetooth, see the section "Bluetooth" for detail.

4.2. Monitor my plant

User can view plant information or do the setting by enter "Monitoring my plant".

There are three options :

"Local monitoring"

"Remote monitoring"

"Restore a DC1"

Local monitoring :

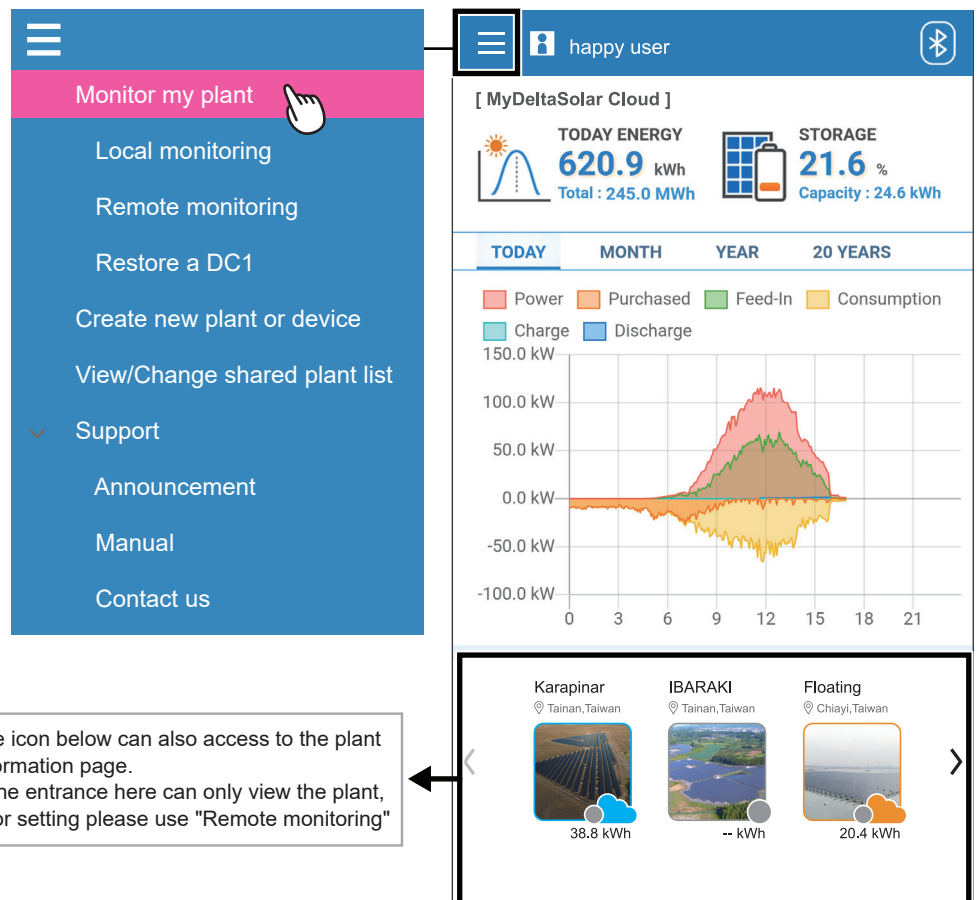
Use WiFi point to point connection to device near by and check the information.

Remote monitoring :

check information from Delta solar cloud.

Restore DC1 :

User can use this function to for DC1 replacement.



The plant list will shows up when entering "Local monitoring" or "Remote monitoring" of "Monitoring my plant".

① This icon  can change the sorting method of the plant list.

(Local monitoring only)

② if there is no plant info, user can connect to the device by QR code scanning.



Slide the plant picture to the right, user can pin the plant on the top of the list.



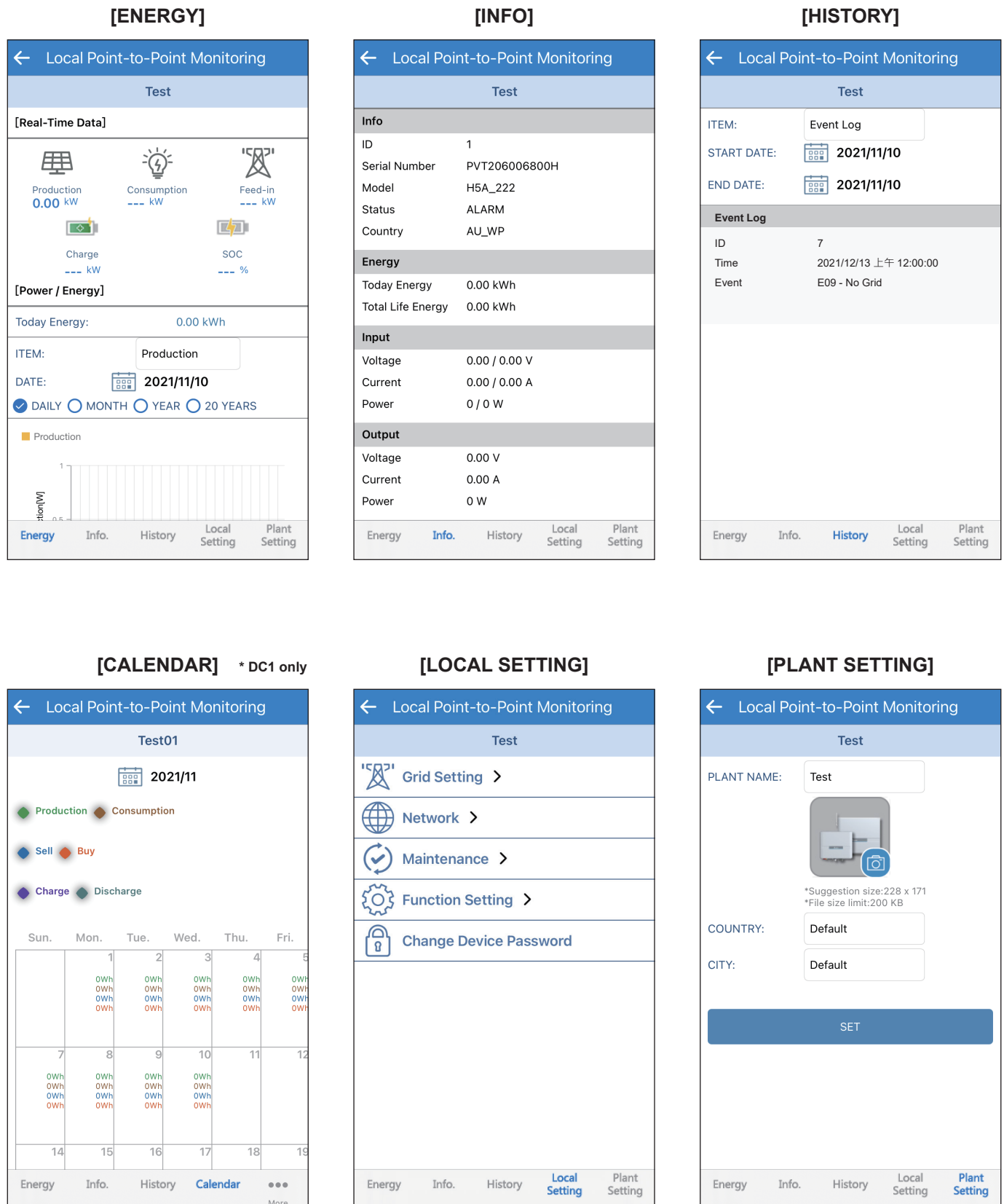
Slide to the left, user can delete the plant.

* The delete by here will only remove the plant info for this account, will not affect other person who has authority for this plant.

* When the last Owner delete this plant, the plant info will totally remove from cloud.

4.2.1. Local monitoring

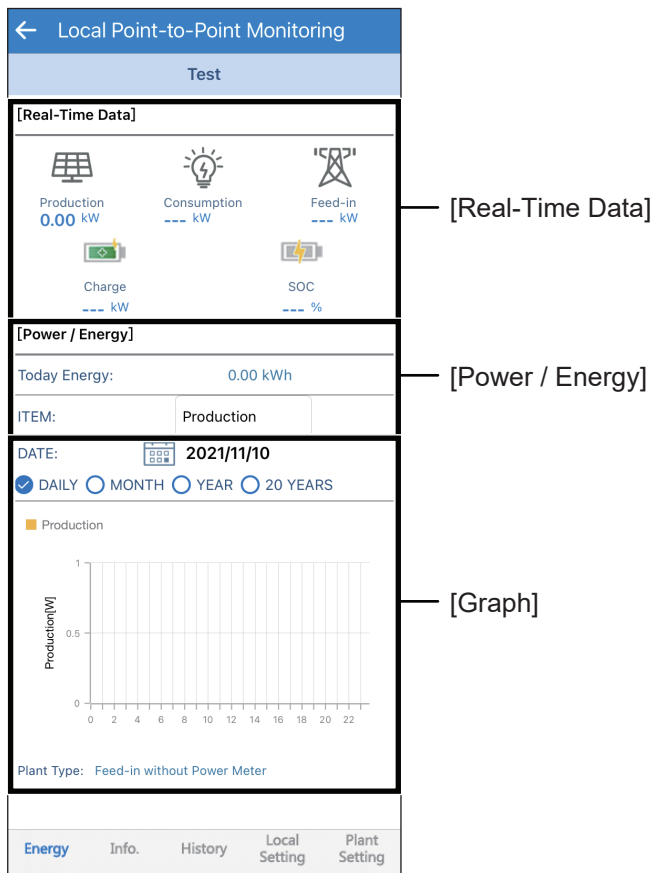
There are six tab for Local monitoring.



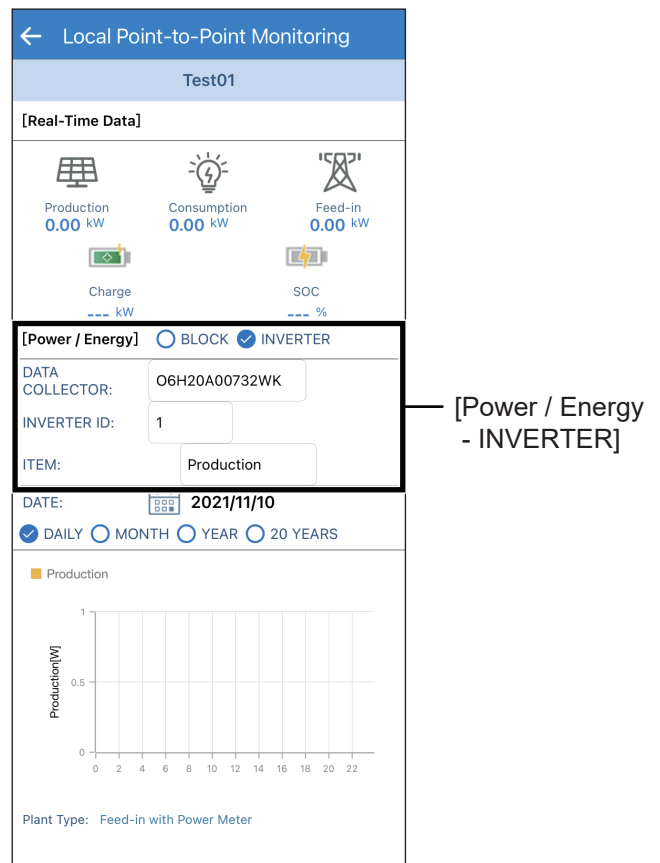
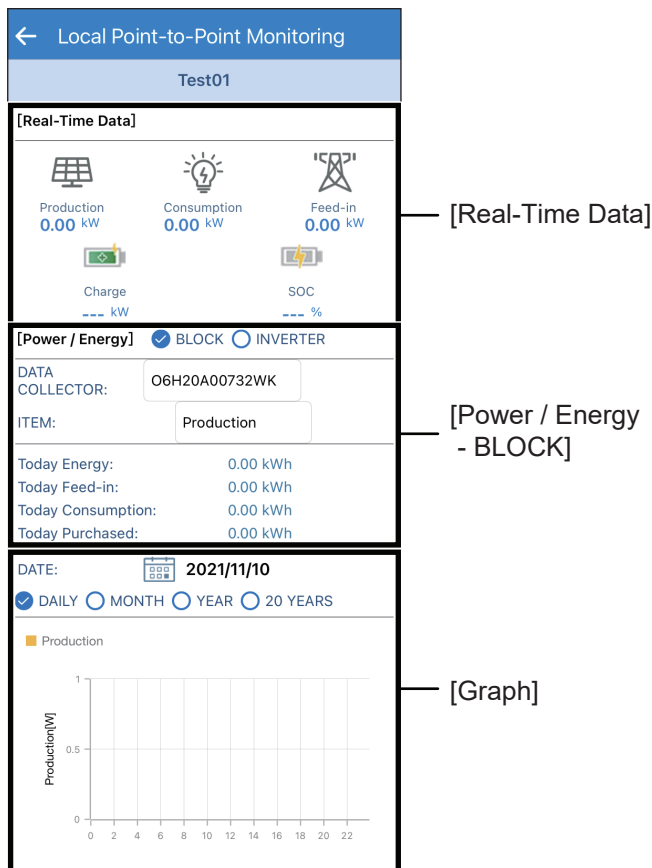
ENERGY

The indication of energy tab have some different between DC1 and inverter, the additional selection for DC1 is to show the energy by block.

Connection of Inverter



Connection of DC1



INFO

The indication of energy tab have some different between DC1 and inverter.
For DC1, user can select each device by change the ID.

Connection of Inverter

Local Point-to-Point Monitoring

Test

Info

ID1
Serial NumberPVT206006800H
ModelH5A_222
StatusALARM
CountryAU_WP

Energy

Today Energy0.00 kWh
Total Life Energy0.00 kWh

Input

Voltage0.00 / 0.00 V
Current0.00 / 0.00 A
Power0 / 0 W

Output

Voltage0.00 V
Current0.00 A
Power0 W

Meter Info

Voltage0.00 V
Current0.00 A
Power0 W - Feed-in
Meter StatusOff
Switching Time---

FW Version

COMM88.98
DSP---

Connection of DC1

Local Point-to-Point Monitoring

Test01

☒ BLOCK ☐ INVERTER

DATA COLLECTOR:O6H20A00732WK

Info

Serial NumberO6H20A00732WK
ModelDC1_100
Meter Quantity1
Firmware Version02.03

Energy

Today Energy0.00 kWh
Total Life Energy0.00 kWh

Energy Info History Calendar More

[BLOCK]

Local Point-to-Point Monitoring

Test01

☐ BLOCK ☒ INVERTER

DATA COLLECTOR:O6H20A00732WK

INVERTER ID:1

Info

ID1
Serial NumberPVT206006800H
ModelH5A_222
StatusALARM
CountryAU_WP

Energy

Today Energy0.00 kWh
Total Life Energy0.00 kWh

Input

Voltage0.00 / 0.00 V
Current0.00 / 0.00 A
Power0 / 0 W

Energy Info History Calendar More

[INVERTER]

HISTORY

Connection of Inverter

[Event Log]

Local Point-to-Point Monitoring

Test

ITEM: Event Log

START DATE: 2021/11/10

END DATE: 2021/11/10

Event Log

ID	7
Time	2021/12/13 上午 12:00:00
Event	E09 - No Grid

Energy Info. History Local Setting Plant Setting

[Startup Log]

Local Point-to-Point Monitoring

Test

ITEM: Startup Log

Startup Log

ID	1
Time	2021/8/5 上午 12:00:00

Energy Info. History Local Setting Plant Setting

[Derating Log]

Local Point-to-Point Monitoring

Test

ITEM: Derating Log

START DATE: 2021/11/10

END DATE: 2021/11/10

Over Voltage AC

ID	7
Start Time	2021/10/16 下午 12:31:24
Total Time	00:01:46

Under Voltage AC

ID	-
Start Time	-
Total Time	-

Over Voltage DC

ID	-
Start Time	-
Total Time	-

Over Temperature

ID	-
Start Time	-

Energy Info. History Local Setting Plant Setting

Connection of DC1

[BLOCK]

Local Point-to-Point Monitoring

Test01

☒ BLOCK ☐ INVERTER

DATA COLLECTOR: O6H20A00732WK

ITEM: Startup Log

Startup Log

Data Collector	O6H20A00737WK
Time	2021/8/5 上午 12:00:00

Energy Info. History Calendar More

[INVERTER]

Local Point-to-Point Monitoring

Test01

☐ BLOCK ☒ INVERTER

DATA COLLECTOR: O6H20A00732WK

INVERTER ID: All

ITEM: Event Log

START DATE: 2021/11/10

END DATE: 2021/11/10

Event Log

ID	1
Time	2021/12/13 上午 11:10:13
Event	E09 - No Grid

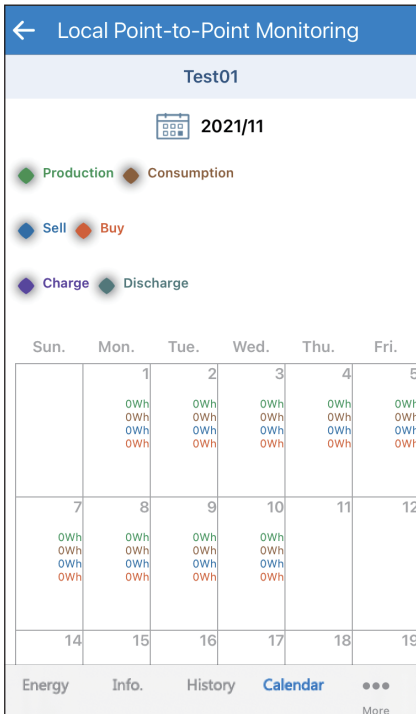
ID	2
Time	2021/12/13 上午 11:06:28
Event	E09 - No Grid

Energy Info. History Calendar More

CALENDAR

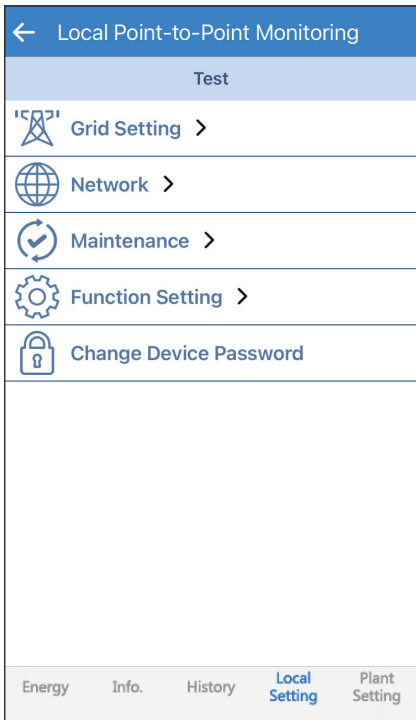
The calendar is only for the connection of DC1, user can check the energy flow by day.

Connection of DC1

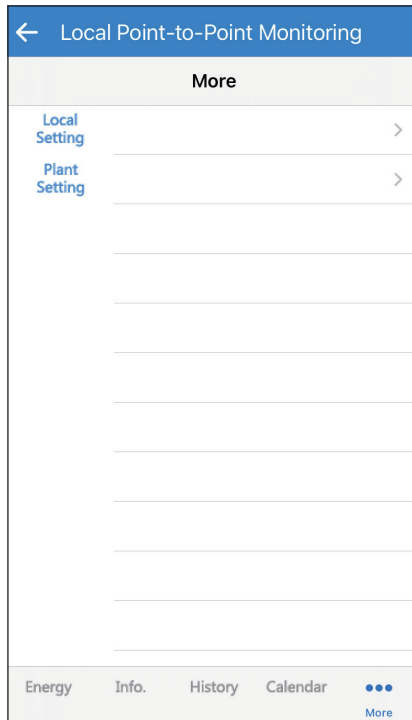
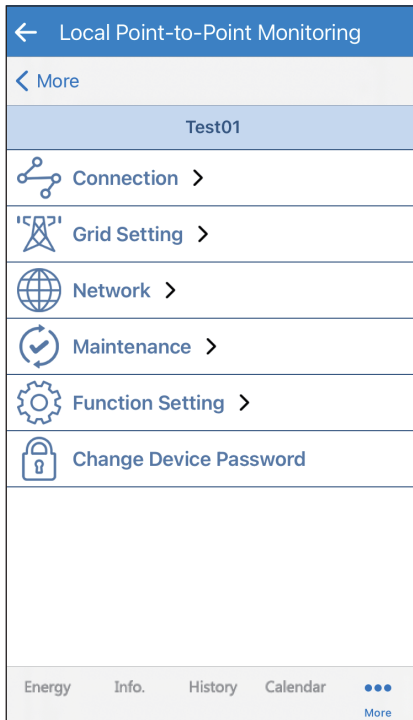


LOCAL SETTING

Connection of Inverter



Connection of DC1



* For more detail please refer chapter 1.4 "List of APP pages"

PLANT SETTING

User can change plant name, plant picture, country, city by plant setting.

Connection of Inverter

[←](#) Local Point-to-Point Monitoring

Test

PLANT NAME:



*Suggestion size:228 x 171
*File size limit:200 KB

COUNTRY:

CITY:

SET

[Energy](#) [Info.](#) [History](#) [Local Setting](#) [Plant Setting](#)

Connection of DC1

[←](#) Local Point-to-Point Monitoring

[< More](#)

Test01

PLANT NAME:



*Suggestion size:228 x 171
*File size limit:200 KB

COUNTRY:

CITY:

SET

[Energy](#) [Info.](#) [History](#) [Calendar](#) [More](#)

4.2.2. Remote monitoring

There are five tabs for "Remote monitoring"

[Energy]

[History]

[Calendar]

[Remote Setting]

[Plant Setting]

Energy

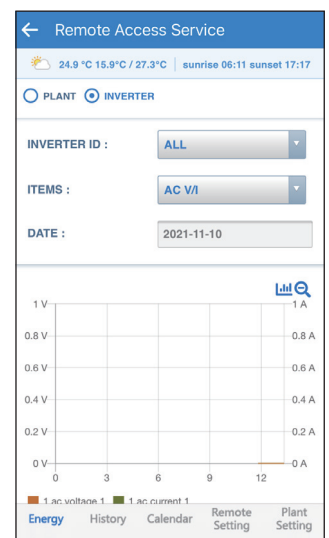
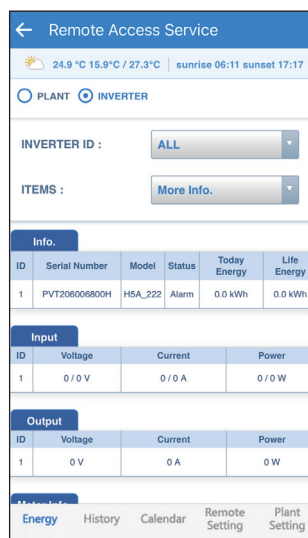
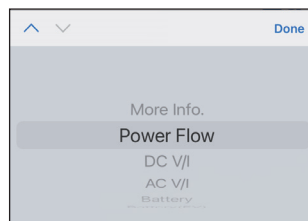
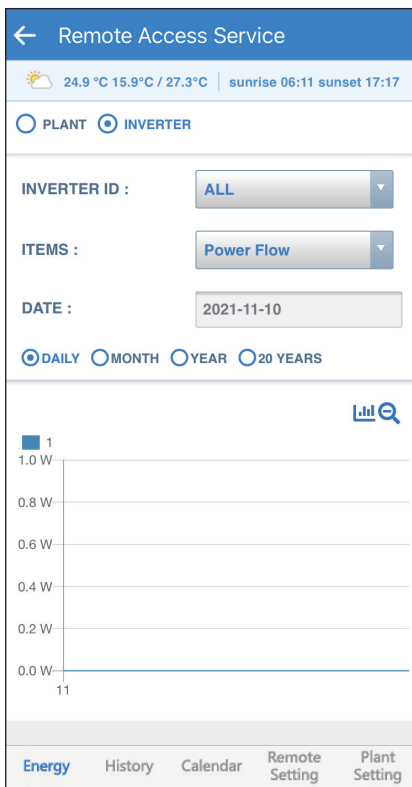
In energy tab, User can check energy for whole plant and detail information of each inverter by selecting Plant/Inverter.

Connection of Inverter

[PLANT]

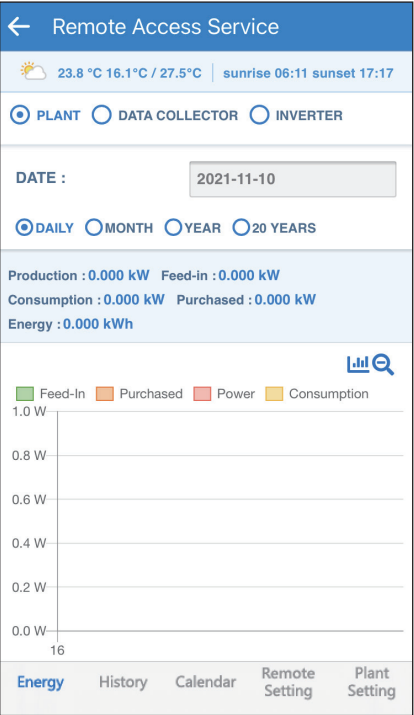


[INVERTER]

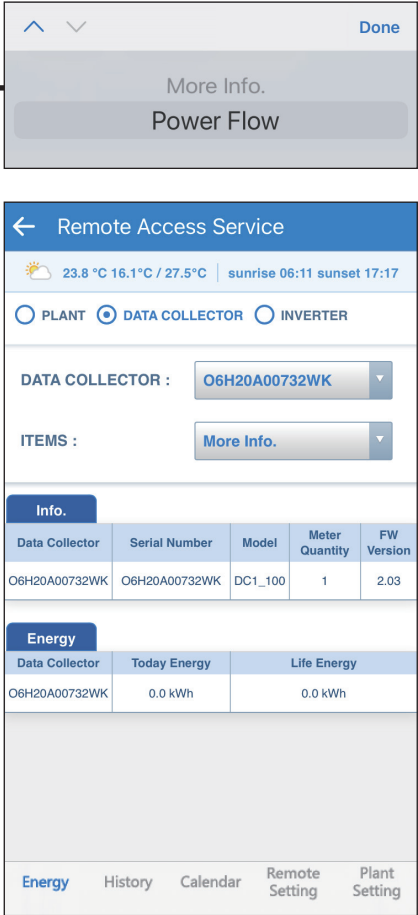
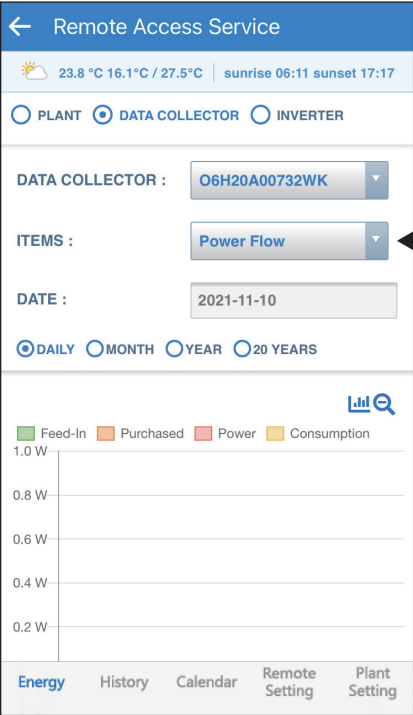


Connection of DC1

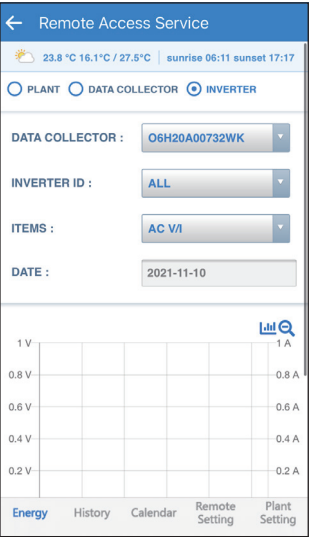
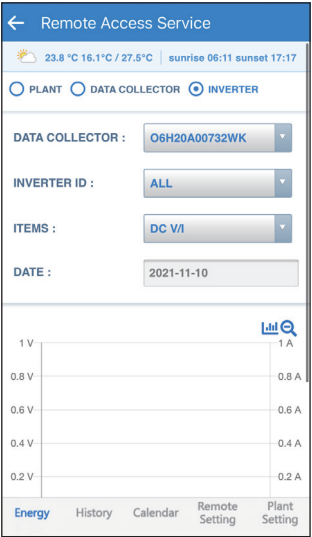
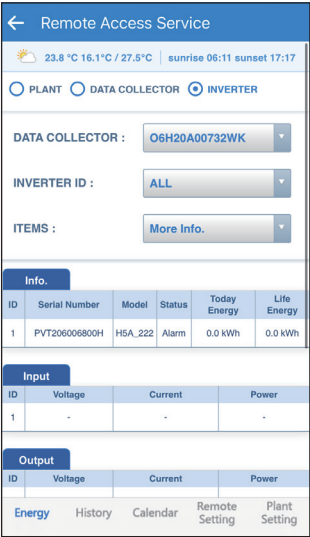
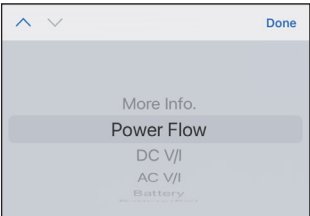
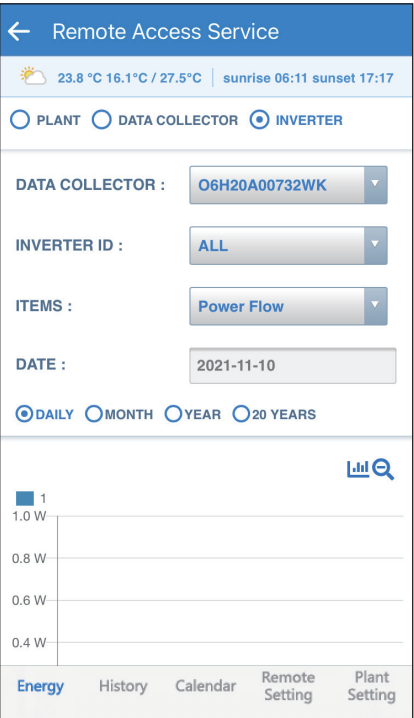
[PLANT]



[DATA COLLECTOR]



[INVERTER]



History

In History tab, User can check startup date and event log of each inverter by selecting Plant/Inverter.

Connection of Inverter

[PLANT]

Remote Access Service

☒ PLANT
☐ INVERTER

PLANT NAME : TEST

ITEMS : Startup

Plant Name	Time
Test	2021-11-10 11:38:45

Energy
History
Calendar
Remote Setting
Plant Setting

[INVERTER]

Remote Access Service

☐ PLANT
☒ INVERTER

INVERTER ID : ALL

ITEMS : Event

START DATE : 2021-11-10

END DATE : 2021-11-10

ID	Time	Event
----	------	-------

Energy
History
Calendar
Remote Setting
Plant Setting

Event

Disconnect
Startup

Remote Access Service

☐ PLANT
☒ INVERTER

INVERTER ID : ALL

ITEMS : Disconnect

START DATE : 2021-11-10

END DATE : 2021-11-10

ID	Start	End
----	-------	-----

Remote Access Service

☐ PLANT
☒ INVERTER

INVERTER ID : ALL

ITEMS : Startup

ID	Time
1	2021-11-10 11:20:00

Energy
History
Calendar
Remote Setting
Plant Setting

Connection of DC1

[PLANT]

← Remote Access Service

☒ PLANT ☐ DATA COLLECTOR ☐ INVERTER

PLANT NAME : TEST01

ITEMS : Startup

Plant Name	Time
Test01	2021-11-10 16:12:17

Energy History Calendar Remote Setting Plant Setting

[DATA COLLECTOR]

← Remote Access Service

☐ PLANT ☒ DATA COLLECTOR ☐ INVERTER

DATA COLLECTOR : O6H20A00732WK

ITEMS : Disconnect

START DATE : 2021-11-10

END DATE : 2021-11-10

Data Collector	Start	End
----------------	-------	-----

Energy History Calendar Remote Setting Plant Setting

Done

Disconnect

Startup

← Remote Access Service

☐ PLANT ☒ DATA COLLECTOR ☐ INVERTER

DATA COLLECTOR : O6H20A00732WK

ITEMS : Startup

Data Collector	Time
O6H20A00732WK	2021-11-10 16:12:18

Energy History Calendar Remote Setting Plant Setting

[INVERTER]

← Remote Access Service

☐ PLANT ☐ DATA COLLECTOR ☒ INVERTER

DATA COLLECTOR : O6H20A00732WK

INVERTER ID : ALL

ITEMS : Event

START DATE : 2021-11-10

END DATE : 2021-11-10

ID	Time	Event
1	2021-11-10 14:55:19	Internal Communication Fault (between Display) (F23)
1	2021-11-10 14:38:07	Failsafe (F114)

Energy History Calendar Remote Setting Plant Setting

Done

Event

Disconnect

Startup

← Remote Access Service

☐ PLANT ☐ DATA COLLECTOR ☒ INVERTER

DATA COLLECTOR : O6H20A00732WK

INVERTER ID : ALL

ITEMS : Disconnect

START DATE : 2021-11-10

END DATE : 2021-11-10

ID	Start	End
----	-------	-----

← Remote Access Service

☐ PLANT ☐ DATA COLLECTOR ☒ INVERTER

DATA COLLECTOR : O6H20A00732WK

INVERTER ID : ALL

ITEMS : Startup

ID	Time
1	2021-11-10 16:15:00

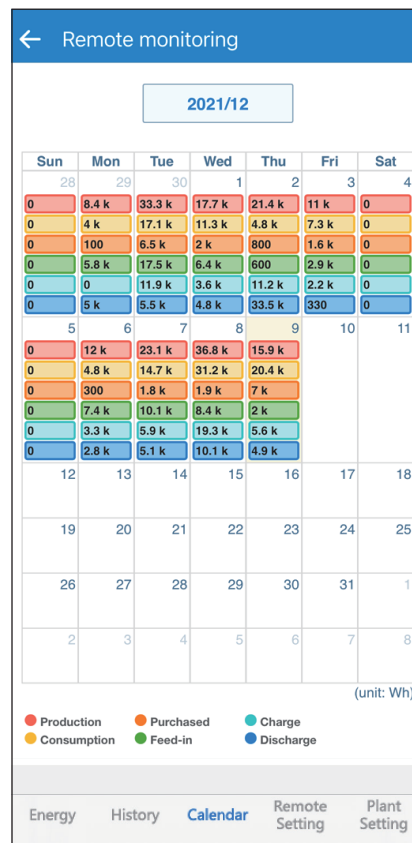
Energy History Calendar Remote Setting Plant Setting

CALENDAR

Connection of Inverter



Connection of DC1



Plant Setting

Connection of Inverter

PLANT: User can change plant info and share plant to others.

BLOCK : User can define devices into a block and the information can be shown in energy tab by blocks.

INVERTER : User can check ID, S/N of the devices.

NOTIFICATION : User can set emails here to let cloud send notification for fault or error of the plant.

[PLANT]

The screenshot shows the 'Remote Access Service' app with the 'PLANT' tab selected. The form includes fields for 'PLANT NAME' (Test), 'COUNTRY' (Taiwan), 'CITY' (Tainan City), 'TIMEZONE' ((GMT+08:00) Tai...), and 'LATITUDE' (23.120881). There is a 'Select File' button and an 'Upload' button. A placeholder image of an inverter is shown with a note: '* Suggestion size : 228 x 171' and '* File size limit : 200 KB'. The bottom navigation bar shows 'Energy', 'History', 'Calendar', 'Remote Setting', and 'Plant Setting' (highlighted).

[BLOCK]

The screenshot shows the 'Remote Access Service' app with the 'BLOCK' tab selected. The form includes a 'BLOCK' dropdown menu, a '+ Add New Block' button, and an 'EDIT' button. Below is a 'BLOCK NAME' field (BLOCK NAME) and a 'DEVICES' section with a radio button for 'ALL' and a list item '1'. The bottom navigation bar shows 'Energy', 'History', 'Calendar', 'Remote Setting', and 'Plant Setting' (highlighted).

[INVERTER]

The screenshot shows the 'Remote Access Service' app with the 'INVERTER' tab selected. The form includes fields for 'INVERTER ID' (1), 'INVERTER NAME' (INVERTER NAME), 'SERIAL NUMBER' (PVT206006800H), 'MAC' (88DA1A5A5650), and another 'INVERTER ID' (1). There are 'Apply' and 'Delete' buttons at the bottom. The bottom navigation bar shows 'Energy', 'History', 'Calendar', 'Remote Setting', and 'Plant Setting' (highlighted).

[NOTIFICATION]

The screenshot shows the 'Remote Access Service' app with the 'NOTIFICATION' tab selected. The form includes a table with columns 'E-mail', 'Fault', 'Error', and 'Disconnection'. The 'E-mail' column has a text input 'test@gma...' and a 'Cancel' button. There is a '+' button below the table and an 'Apply' button at the bottom. The bottom navigation bar shows 'Energy', 'History', 'Calendar', 'Remote Setting', and 'Plant Setting' (highlighted).

Connection of DC1

PLANT: User can change plant info and share plant to others.

BLOCK : User can define devices into a block and the information can be shown in energy tab by blocks.

DATA COLLECTOR : User can check ID, S/N of the DC1.

INVERTER : User can check ID, S/N of the inverter.

NOTIFICATION : User can set emails here to let cloud send notification for fault or error of the plant.

[PLANT]

← Remote Access Service

☒ PLANT ☐ BLOCK ☐ DATA COLLECTOR

☐ INVERTER ☐ NOTIFICATION

PLANT NAME :

Test01

Select File

Upload



* Suggestion size : 228 x 171

* File size limit : 200 KB

COUNTRY :

Taiwan

CITY :

Tainan City

TIMEZONE :

(GMT+08:00) Tai...

LATITUDE :

23.120884

Energy

History

Calendar

Remote Setting

Plant Setting

[BLOCK]

← Remote Access Service

☐ PLANT ☒ BLOCK ☐ DATA COLLECTOR

☐ INVERTER ☐ NOTIFICATION

BLOCK :

+ Add New Block

EDIT

BLOCK NAME :

BLOCK NAME

DEVICES :

O6H20A00732WK :

1

Energy

History

Calendar

Remote Setting

Plant Setting

[DATA COLLECTOR]

← Remote Access Service

☐ PLANT ☐ BLOCK ☒ DATA COLLECTOR

☐ INVERTER ☐ NOTIFICATION

DATA COLLECTOR :

O6H20A00732WK

EDIT

COLLECTOR NAME :

COLLECTOR NAME

SERIAL NUMBER :

O6H20A00732WK

MAC :

0035FF93B562

Apply

Delete

Energy

History

Calendar

Remote Setting

Plant Setting

[INVERTER]

← Remote Access Service

☐ PLANT ☐ BLOCK ☐ DATA COLLECTOR

☒ INVERTER ☐ NOTIFICATION

DATA COLLECTOR :

O6H20A00732WK

EDIT

INVERTER ID :

1

INVERTER NAME :

INVERTER NAME

SERIAL NUMBER :

PVT206006800H

INVERTER ID :

1

Apply

Delete

Energy

History

Calendar

Remote Setting

Plant Setting

[NOTIFICATION]

← Remote Access Service

☐ PLANT ☐ BLOCK ☐ DATA COLLECTOR

☐ INVERTER ☒ NOTIFICATION

E-mail

Fault

Error

Disconnection

test@gma...

Once ...

+

Apply

Energy

History

Calendar

Remote Setting

Plant Setting

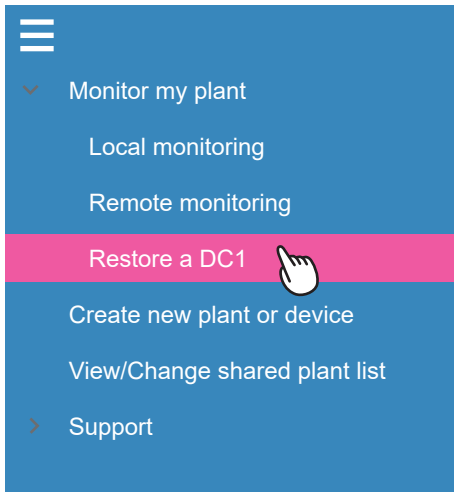
4.2.3. Restore a DC1

ATTENTION



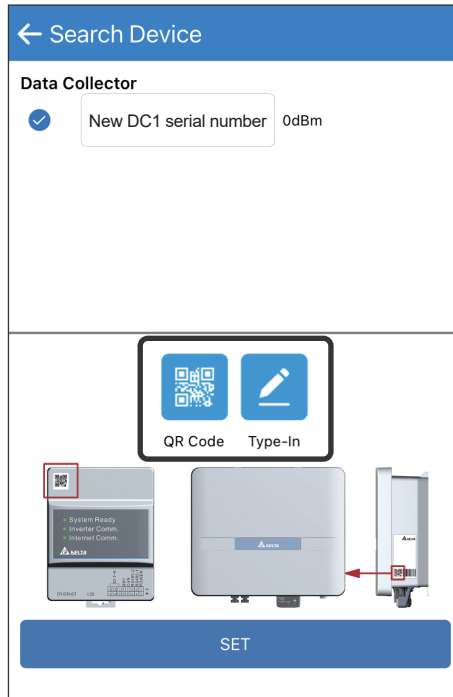
- Before doing restore DC1, please backup the data from old DC1. (refer chapter 5.4)
- Please insert the USB with backup file to new DC1 and start restore.

Click Menu --> Restore a DC1

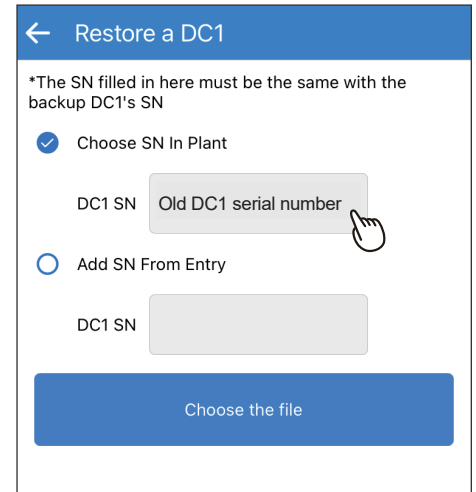


Before doing restore DC1, please backup the data from old DC1. (refer chapter 5.4)

Scan the QR code or enter the serial number of the new DC1

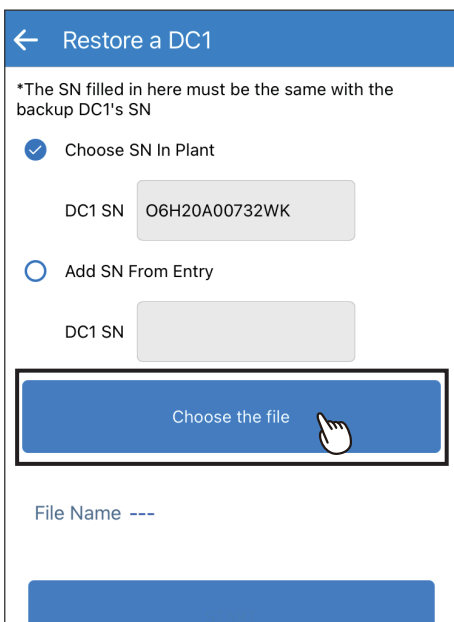


Select serial number of old DC1.

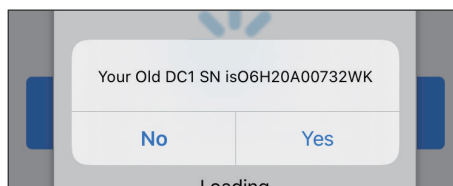


if the serial is not on the list, user can try type in the serial number manually.

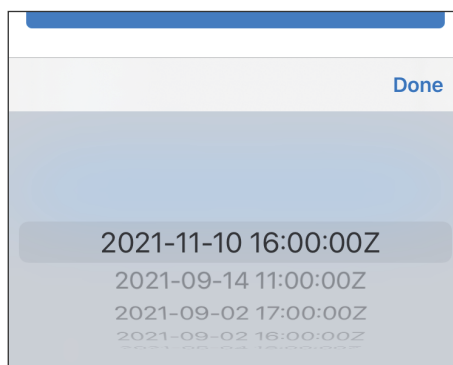
Click "Choose the file"



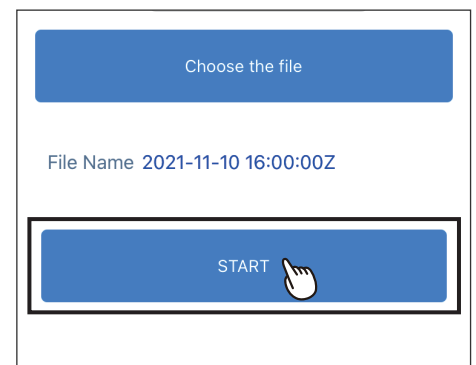
Confirm the serial number of old DC1.



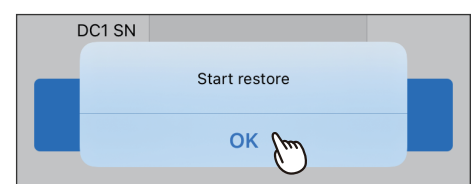
Select the file for the restore process.



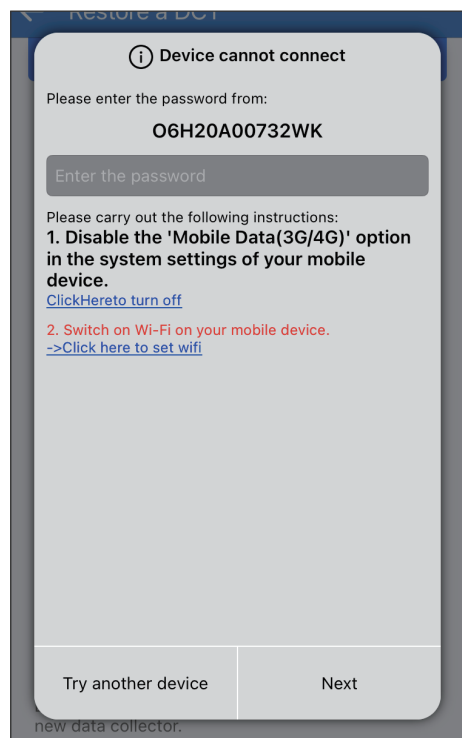
Confirm the file and then click "START".



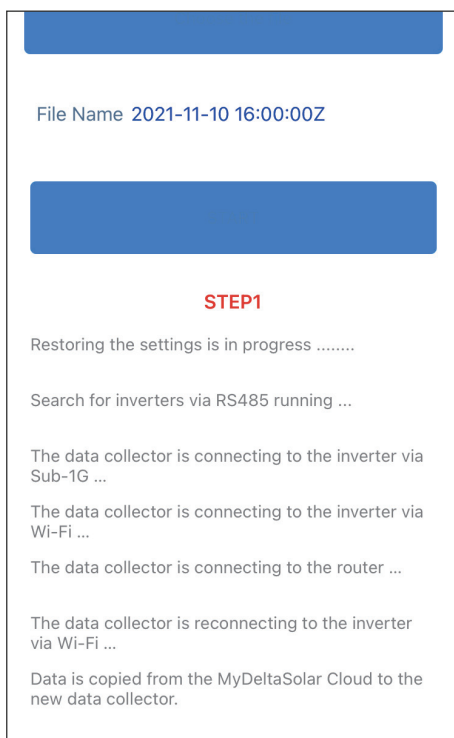
Click "OK"



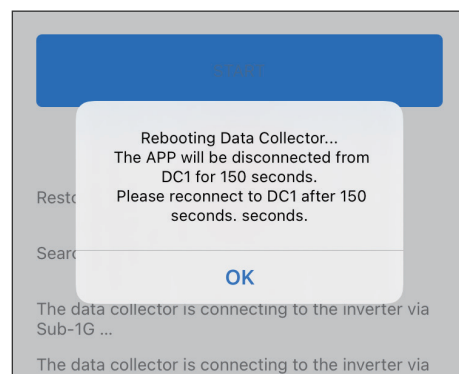
Please type in the password of old DC1.



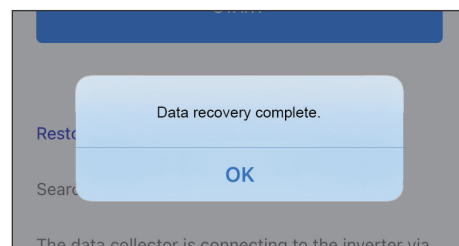
APP will start restore process.



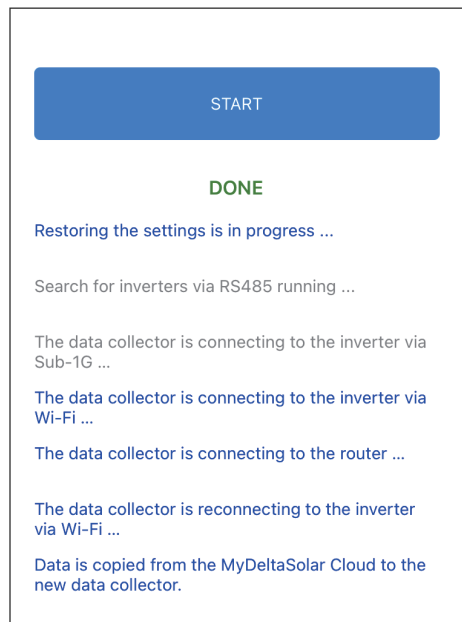
The process will take around 150 sec, click OK to proceed.



Data recovery complete.

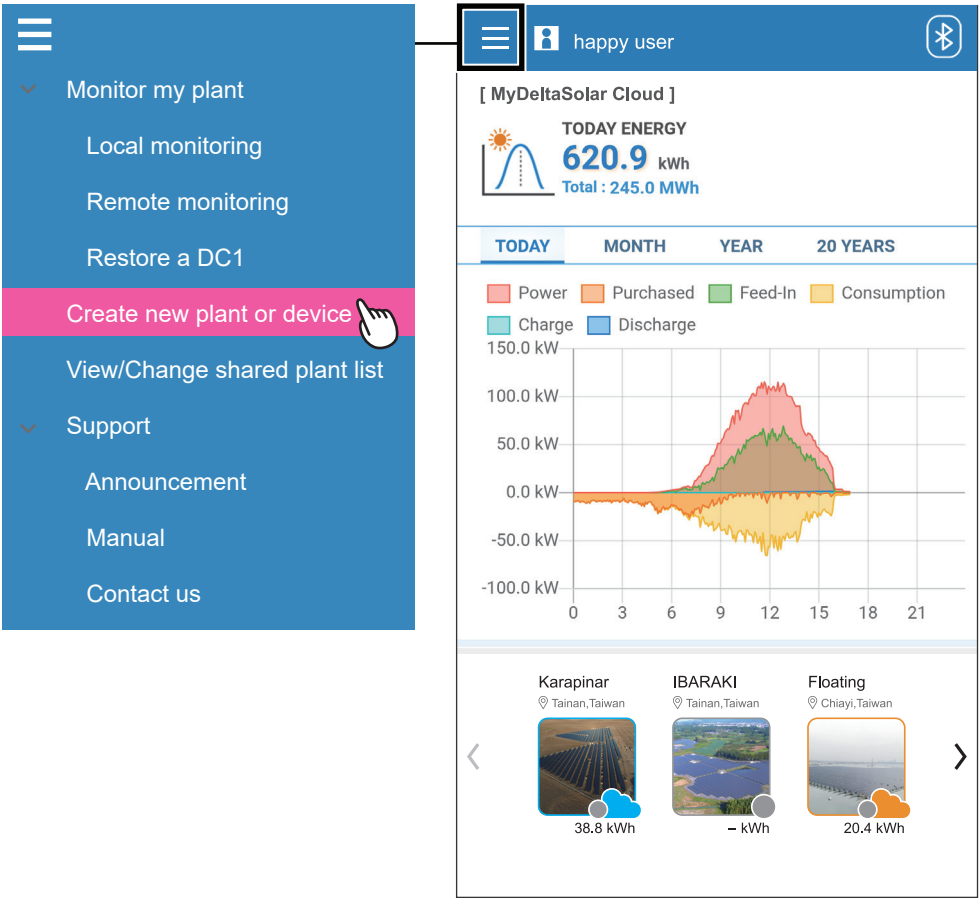


DONE.



4.3. Create new plant or device

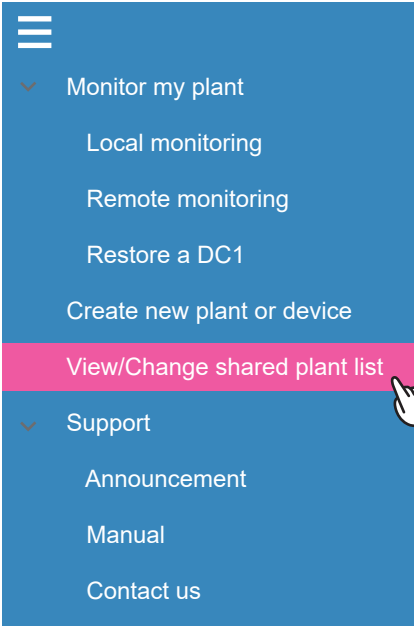
For more details, please refer chapter 2 commissioning.

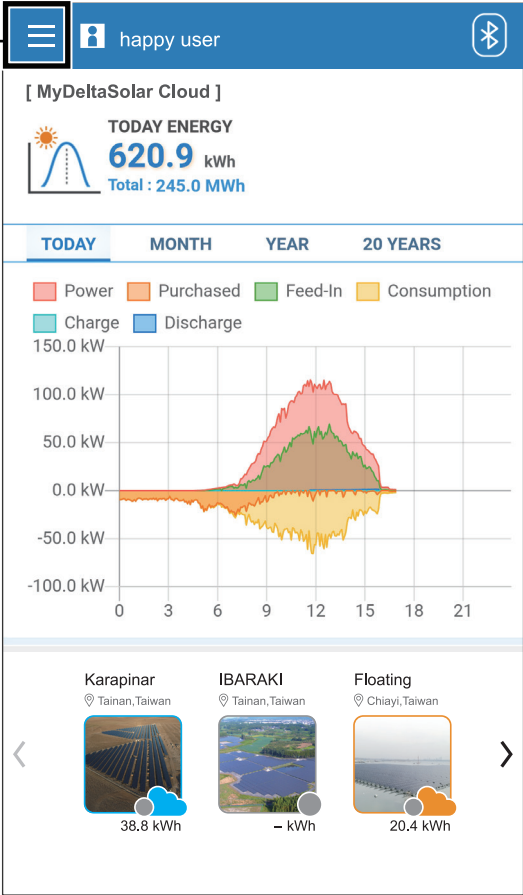


4.4. View/Change shared plant list

User (owner) can arrange the authority to others, the account has authority to access the plant can check the shared plant list here.

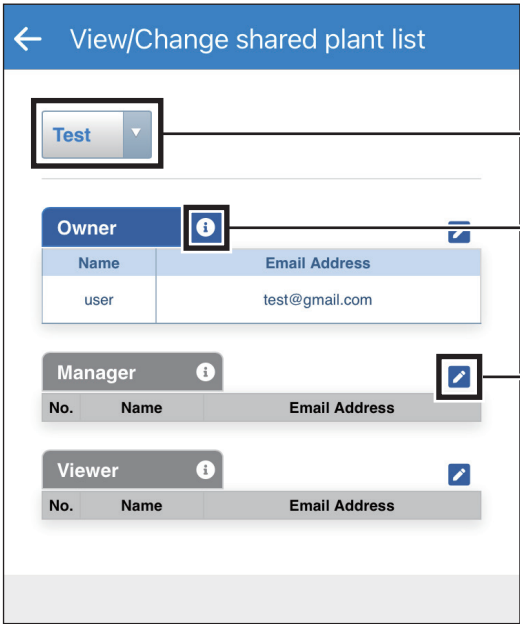
* Only plant owner can edit the shared plant list.





Function accessibility list

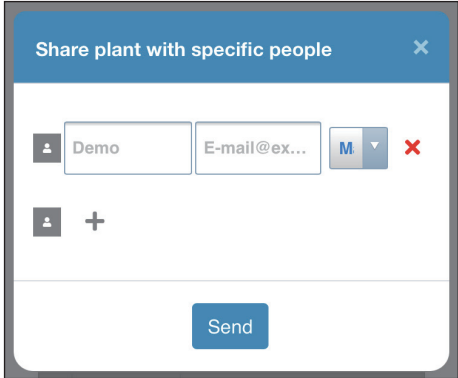
Authority / Function	Owner	Manager	Viewer
View plant information	✓	✓	✓
View share list	✓	✓	✓
Plant setting (Remote)	✓	✓	🔒
Plant setting (Local)	Password needed, please contact local service.		
Change device password	✓	🔒	🔒
Edit share list	✓	🔒	🔒



test ▼ Select the plant for edit

i Click here to check function accessibility

✎ Edit the authority list

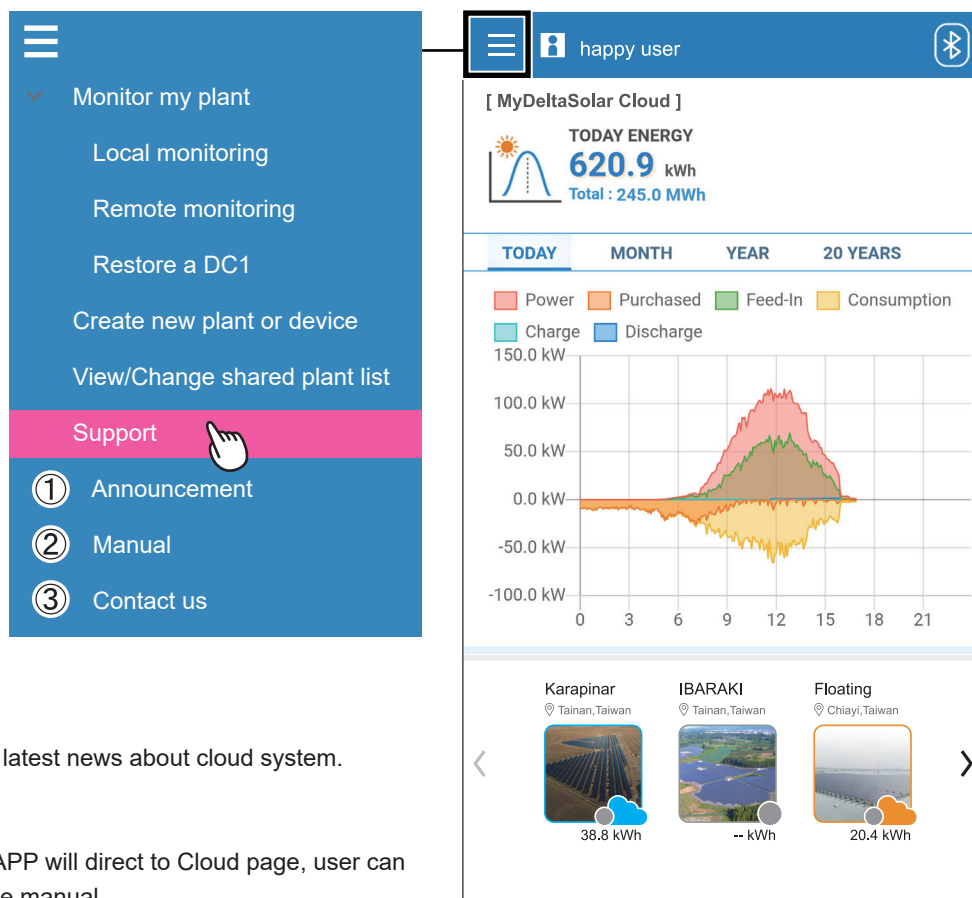


* The Owner can share the same authority to second person (one site can only have two Owner authority)

* If the shared account has not register to Delta cloud, the cloud system will send a invitation letter to the mailbox and invite to join DeltaSolar APP member.

4.5. Support

There are three option in "Support" : 「Announcement」 、 「Manual」 、 「Contact us」



① Announcement

Will publish the latest news about cloud system.

② Manual

After click, the APP will direct to Cloud page, user can check the device manual .

③ Contact us

With Internet ability : please fill in the request form and submit the customer service.

Without Internet ability : please contact the local contact window shown on APP.

← Announcement

Announcements

🔔 2021/04/22 System Update

- New plant notification setting page: You can subscribe/unsubscribe alert or disconnect notification E-mail more flexibly.
- Green Home Solar Power Solutions: Integrate home green power device information, including electric vehicle charging pile and battery storage information.

2019/12/17 System Update

- Official Launch of Block Mechanism: You can set up the blocks of plants through the cloud, where the power generation data of data collectors or inverters can be effectively integrated.
- New Revision of Data Chart: Optimize the user experience of data charts. Provide faster data visualization efficiency, chart dynamic filtering and

← Manual

Inverter Battery Data Collector Power Monitor Power Meter
Comm. Unit Mobile App

SINGLE PHASE INVERTER

H2.5 / H3 / H3A / H4A / H5A

Operation and Installation Manual :

📄 English 📄 繁體中文 📄 Português

Quick Installation Guide :

📄 English

H5A_222

Operation and Installation Manual :

📄 English 📄 繁體中文

Quick Installation Guide :

← Contact Us

CONTACT US

Delta Inc. Customer Service

NAME :

E-MAIL :

REGION :

PHONE :

TITLE :

MESSAGE :

5. Application

This chapter contains the setting for two communication way of DC1.

5.1. Modbus TCP/IP

If the communication protocol for DC1 is Modbus TCP/IP, please follow below process to set IP address.

LOCAL SETTING -> Network

-> Network Setting

Select "static" for Protocol, after setting the IP information, click "SET INFO".

Click "OK" to save the settings.

Interface

Ethernet or Wi-Fi

Protocol

dhcp

System will automatically assign an IP address.

static

1. IP Address: Please enter a specified IP address.
2. Subnet Mask: Please enter a subnet mask.
3. Gateway IP: Please enter the IP address of the router.
4. DNS1: Please enter DNS1 for the network.
5. DNS2: Please enter DNS2 for the network.
6. Click "SET INFO" to complete the setup.

IP Address

Set the IP to be specified for third-party monitoring.

Subnet Mask

Set the Mask to be specified for third-party monitoring.

Gateway IP

Set the Gateway to be specified for third-party monitoring.

DNS1

If DC1 has no external connection requirements, you do not need to fill it out. If yes, fill in the DNS that can be used.

DNS2

Same as DNS1, this is the alternate DNS.

Click "SET INFO" to complete the setup.

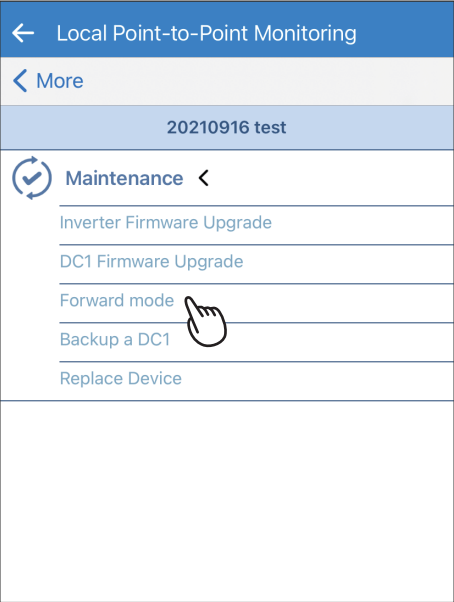
Read the external communication address via this IP.

5.2. Modbus RTU (Forward mode)

* Please contact local service for the password

Forward mode is suitable for third party monitoring system that already built in Delta Modbus RTU protocol address.

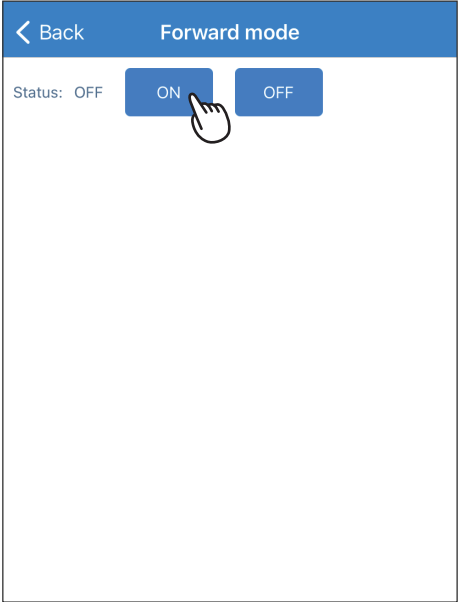
LOCAL SETTING -> Maintenance
-> Forward mode



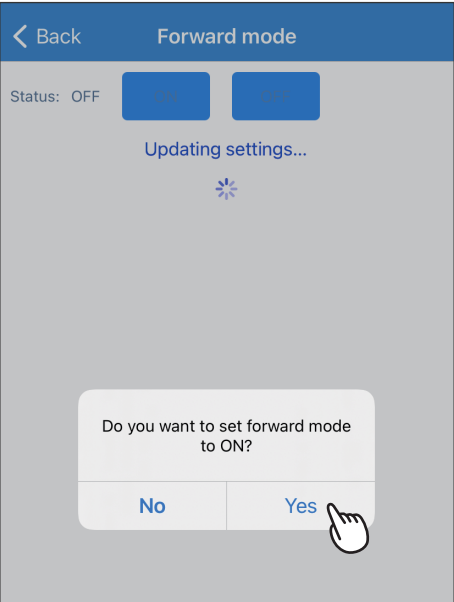
Please contact Delta local service for the password.



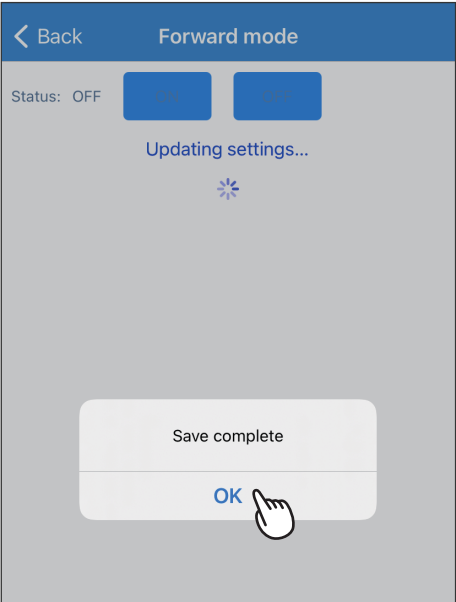
Click "OK" to save the settings.



Click "YES".



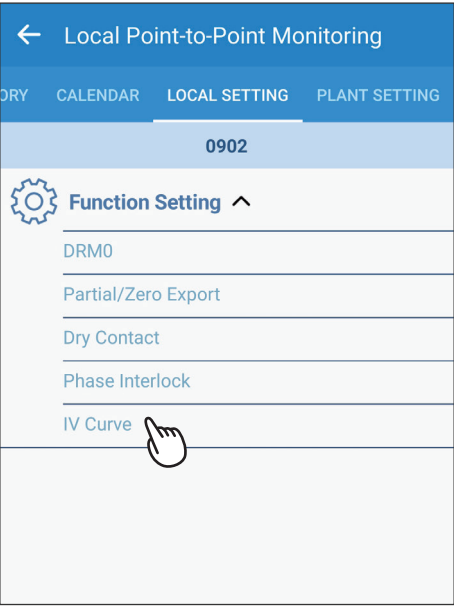
Save complete.



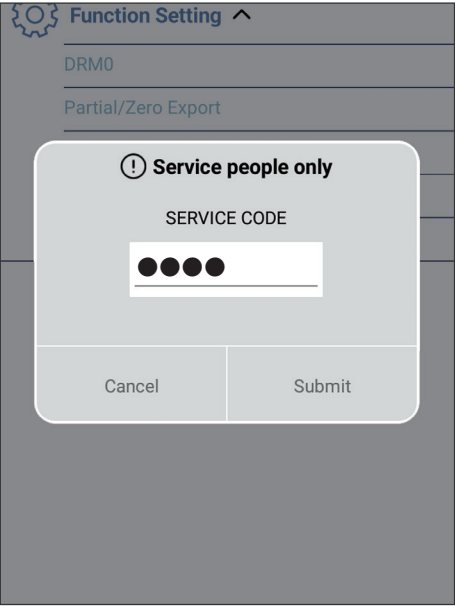
5.3. IV Curve

* Please contact local service for the password

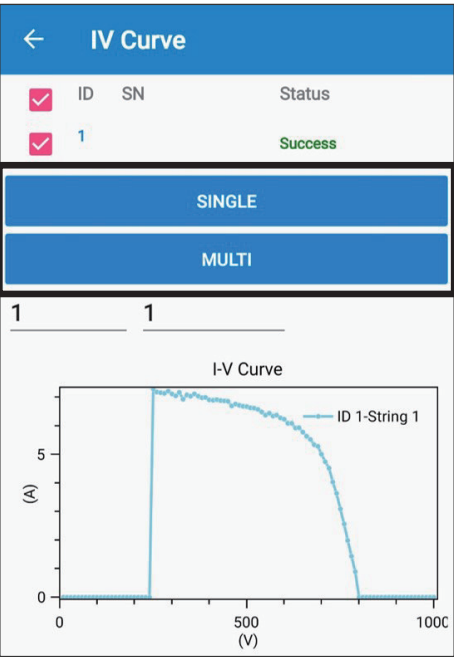
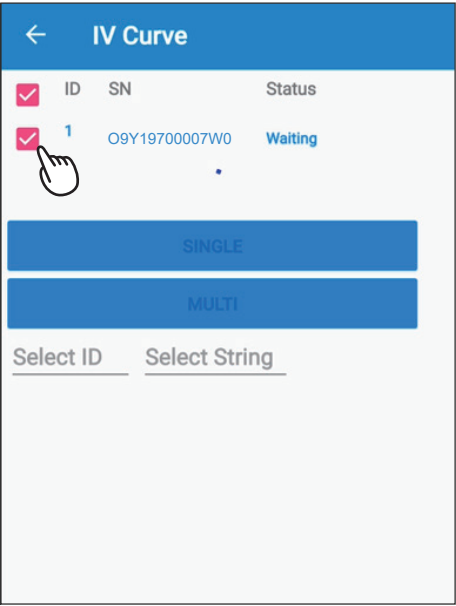
LOCAL SETTING -> Maintenance
-> Forward mode



Please contact Delta local service for the password.



Check the inverter for IV curve scan.



- a. Click "SINGLE", DC1 will do the IV curve scan one by one.
 - b. Click "MULTI", DC1 will do IV curve scan once for all inverter.
- * Suggest to use "SINGLE" to avoid power drop for the plant.

6. Maintenance

This chapter will give detail description for some setting process.

6.1. Firmware update

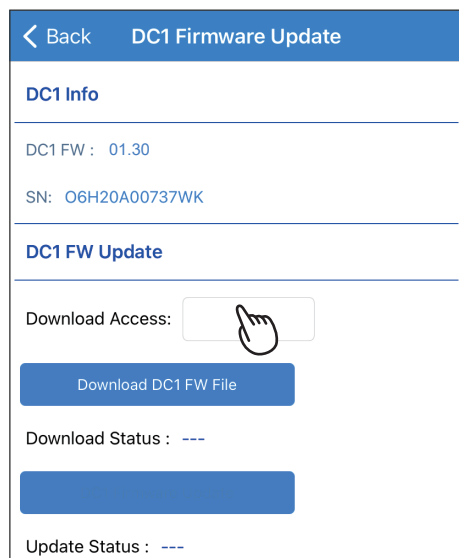
This section introduce firmware update process of DC1 & Wifi inverter. please refer the process below.

6.1.1. DC1 Firmware Update

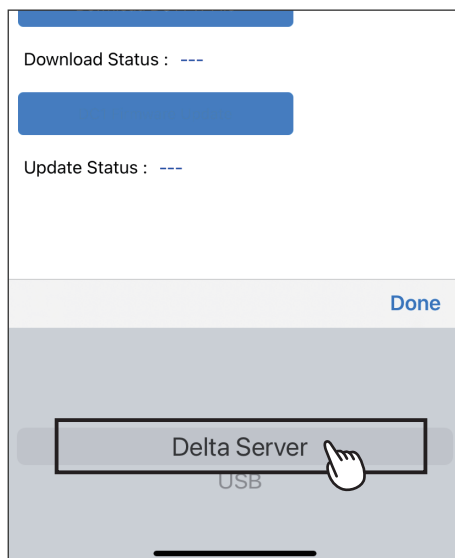
[DC1 Firmware Update - Delta Server update method]

LOCAL SETTING -> Maintenance -> DC1 Firmware Update

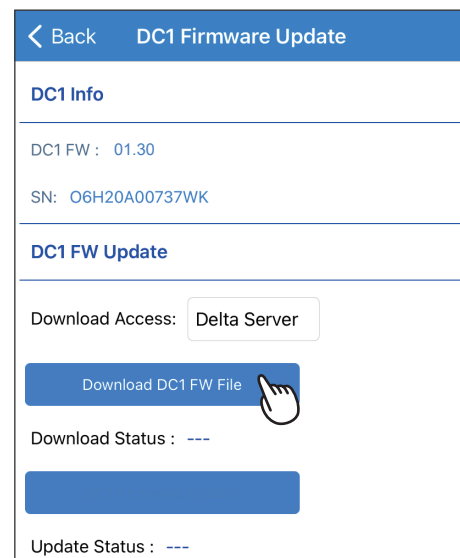
Select Download Access.



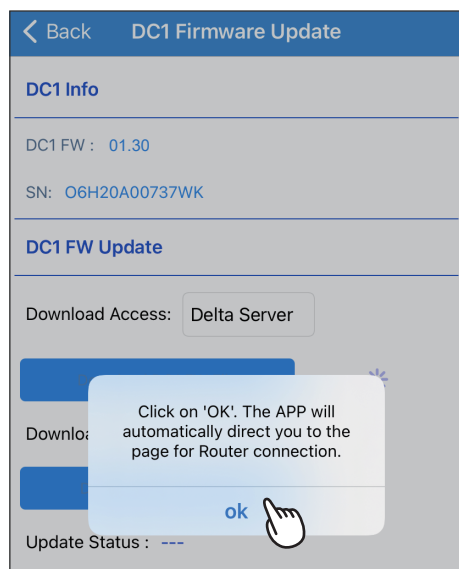
Click "Delta server".



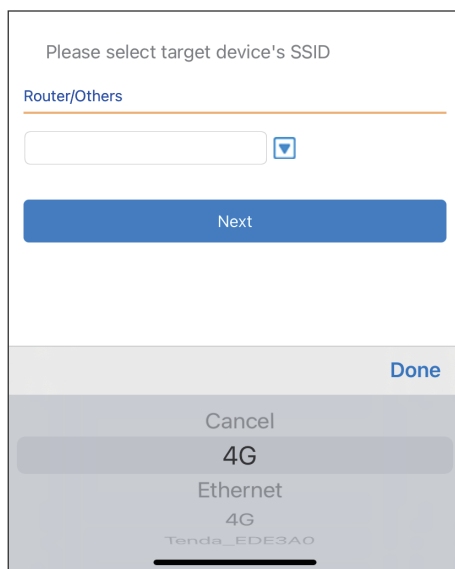
Click "DOWNLOAD DC1 FW FILE".



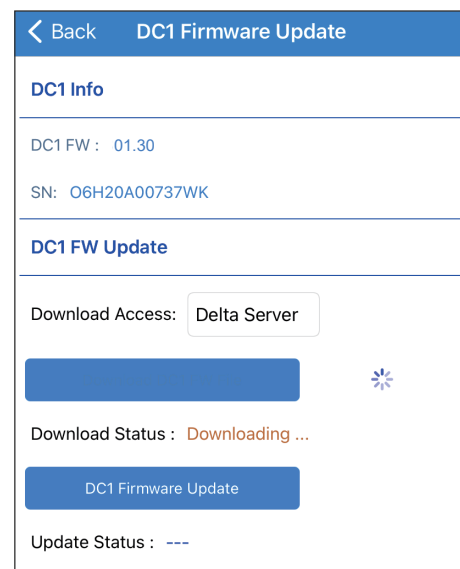
Click "OK".



Select the method to get Internet ability.



Downloading...



After download the FW,
please click "DC1 FIRMWARE UPDATE"
to start update process.

Back

DC1 Firmware Update

DC1 Info

DC1 FW : 01.30

SN: 06H20A00737WK

DC1 FW Update

Download Access: Delta Server

Download DC1 FW File

Download Status : Finished: V02.01

DC1 Firmware Update

Update Status : ---

Click "OK".

Back

DC1 Firmware Update

DC1 Info

DC1 FW : 01.30

SN: 06H20A00737WK

DC1 FW Update

Download Access: Delta Server

Download DC1 FW File

Download Status : Finished: V02.01

DC1 Firmware Update

Update Status : ---

Click on 'OK'. The APP will automatically direct you to the page for Data Collector connection.

ok

Select the serial number of the DC1.

Please select target device's SSID

Data Collector

DELTA- Type DC1 Serial Number

Next

Done

Cancel

O6H20A00737WK

Sending file to DC1...

Back

DC1 Firmware Update

DC1 Info

DC1 FW : 01.30

SN: 06H20A00737WK

DC1 FW Update

Download Access: Delta Server

Download DC1 FW File

Download Status : Finished: V02.01

Update Status : Sending file to DC1

DC1 is updating...

Back

DC1 Firmware Update

DC1 Info

DC1 FW : 01.30

SN: 06H20A00737WK

DC1 FW Update

Download Access: Delta Server

Download DC1 FW File

Download Status : Finished: V02.01

Update Status : Data Collector is updating...The LED indicator will turn red.Please wait 2~4 minutes.

Successfully updated DC1.

Back

DC1 Firmware Update

DC1 Info

DC1 FW : 02.01

SN: 06H20A00737WK

DC1 FW Update

Download Access: Delta Server

Download DC1 FW File

Download Status : Finished: V02.01

DC1 Firmware Update

Update Status : Successfully updated Data Collector.

[DC1 Firmware Update - USB update method]

LOCAL SETTING -> Maintenance -> DC1 Firmware Update

Select Download Access.

< Back

DC1 Firmware Update

DC1 Info

DC1 FW : 01.30

SN: 06H20A00737WK

DC1 FW Update

Download Access:

Download DC1 FW File

Download Status : ---

Update Status : ---

Click "USB".

Download Status : ---

Update Status : ---

Done

Delta Server

USB

Click "DOWNLOAD DC1 FW FILE".

< Back

DC1 Firmware Update

DC1 Info

DC1 FW : 01.30

SN: 06H20A00737WK

DC1 FW Update

Download Access: USB

Download DC1 FW File

Download Status : ---

Update Status : ---

After download the FW,
please click "DC1 FIRMWARE UPDATE"
to start update process.

DC1 is updating...

Successfully updated DC1.

< Back

DC1 Firmware Update

DC1 Info

DC1 FW : 01.30

SN: 06H20A00737WK

DC1 FW Update

Download Access: USB

Download DC1 FW File

Download Status : Finished: V02.01

DC1 Firmware Update

Update Status : ---

< Back

DC1 Firmware Update

DC1 Info

DC1 FW : 01.30

SN: 06H20A00737WK

DC1 FW Update

Download Access: USB

Download DC1 FW File

Download Status : Finished: V02.01

Update Status : Data Collector is updating...The LED indicator will turn red.Please wait 2~4 minutes.

< Back

DC1 Firmware Update

DC1 Info

DC1 FW : 02.01

SN: 06H20A00737WK

DC1 FW Update

Download Access: USB

Download DC1 FW File

Download Status : Finished: V02.01

DC1 Firmware Update

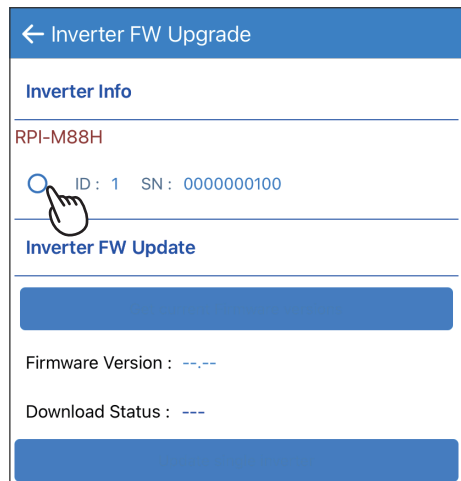
Update Status : Successfully updated Data Collector.

6.1.2. Inverter FW Update

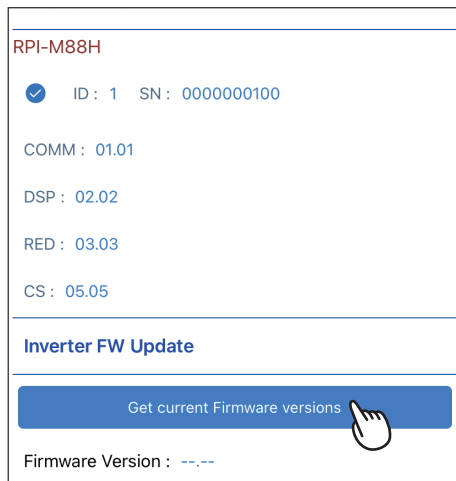
[Inverter FW Update - connection of DC1]

LOCAL SETTING -> Maintenance -> Inverter Firmware Update

Select the Inverter S/N for FW update.



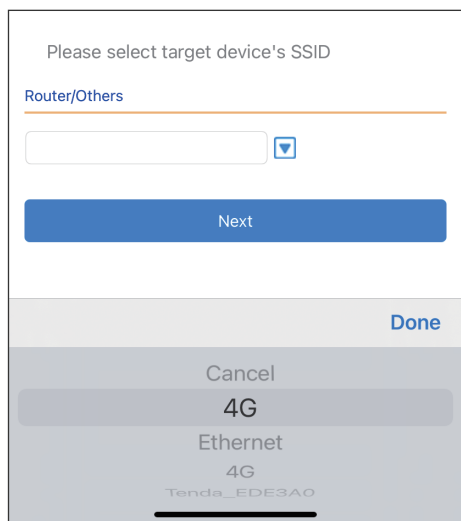
Click "GET CURRENT FIRMWARE VERSIONS".



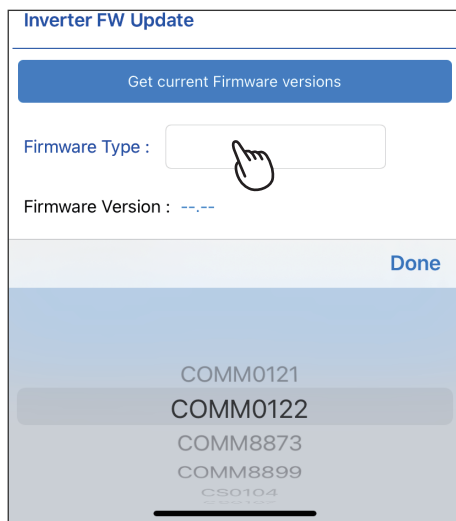
Click "OK".



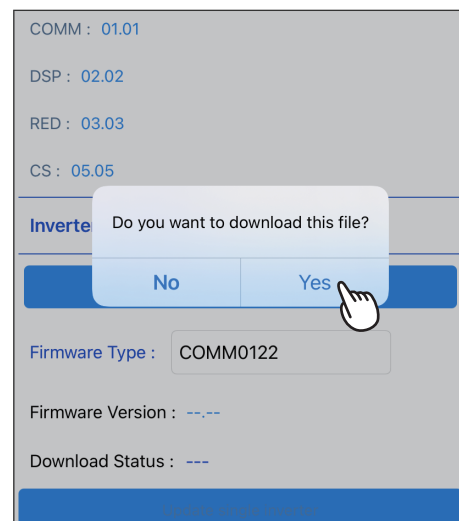
Select the method to get Internet ability.



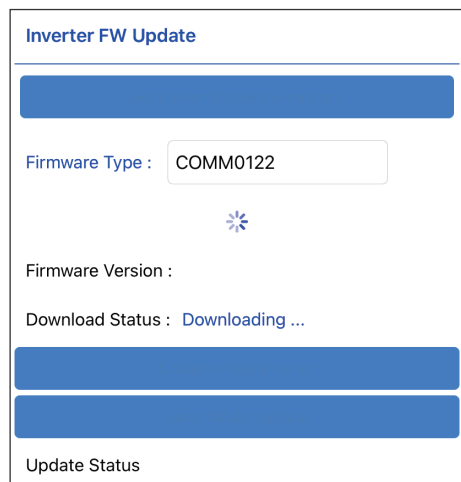
Select FW type, please confirm with local service for the FW type.



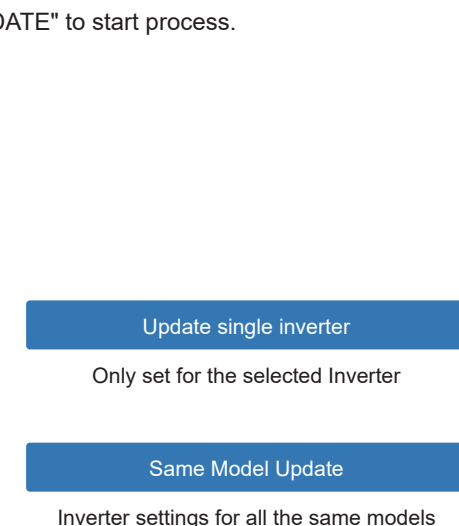
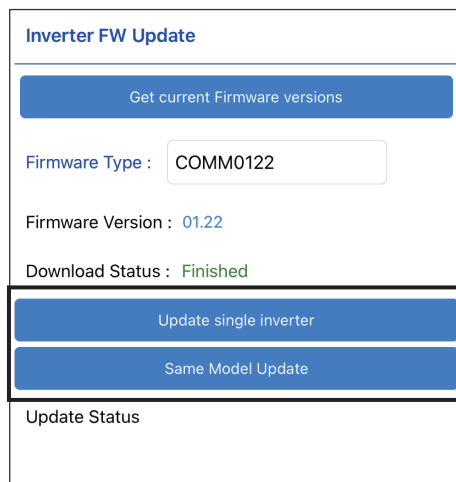
Click "YES".



Downloading...



After download complete, please click "UPDATE" to start process.



Click “OK”.

COMM : 01.01

DSP : 02.02

RED : 03.03

CS : 05

Inverter FW Update

Click on 'OK'. The APP will automatically direct you to the page for Data Collector connection.

ok

Firmware Type : COMM0122

Firmware Version : 01.22

Download Status : Finished

Update single inverter

Same Model Update

Updating...

COMM : 01.01

DSP : 02.02

RED : 03.03

CS : 05

Inverter FW Update

Please wait...

Success
DC1 is updating inverter firmware version. Please wait about 35 seconds and APP will refresh the page

Firmware Type : COMM0122

Firmware Version : 01.22

Download Status : Finished

Update single inverter

Same Model Update

Success.

Inverter FW Update

Get current Firmware versions

Firmware Type :

Firmware Version : 01.22

Download Status : Finished

Update single inverter

Same Model Update

Update Status

Success

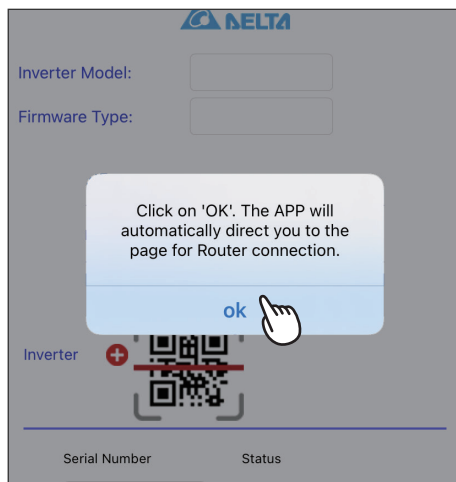
[Inverter FW Update - connection of inverter]

LOCAL SETTING -> Maintenance -> Firmware Update

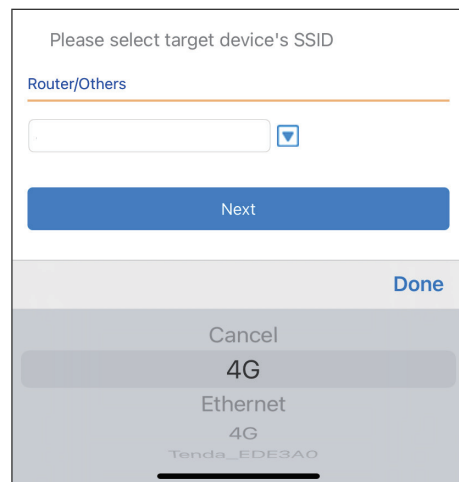
Enter Firmware update page.



Click "OK" the app will ask user connect to Internet.



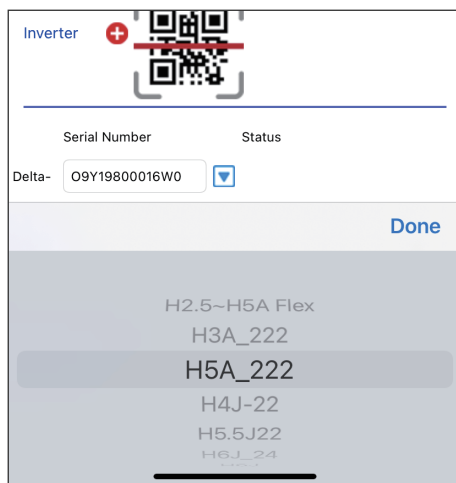
Select the method to get Internet ability.



Click "Inverter Model".



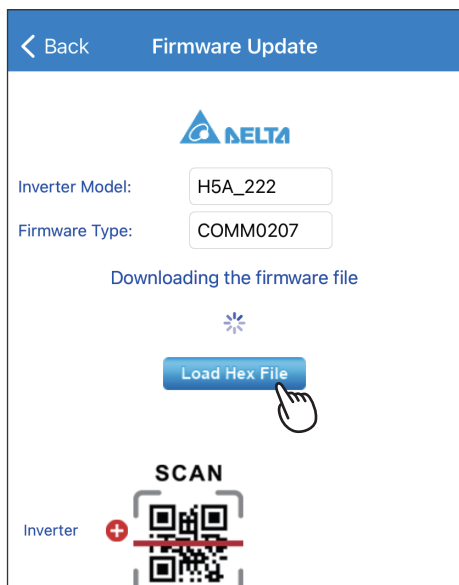
Select the Inverter model for FW update.



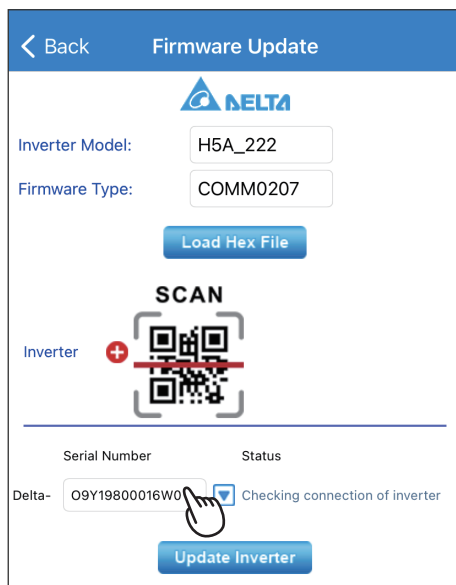
Select FW type, please confirm with local service for the FW type.



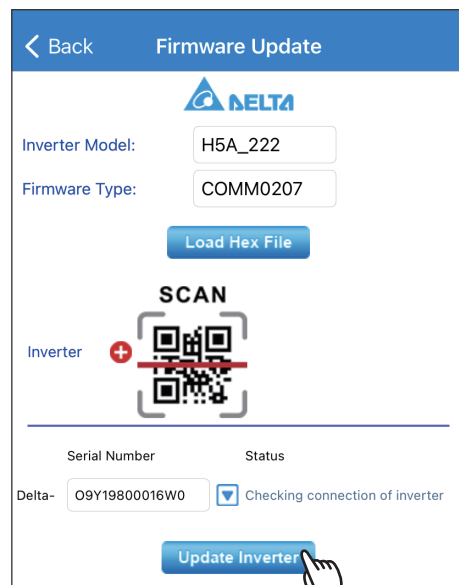
Click "Load Hex File".



Select the Inverter serial number for FW update.



Click "Update Inverter".



Upgrading...

Click "OK".

Back

Firmware Update

Inverter Model:

H5A_222

Firmware Type:

COMM0207

Load Hex File

Inverter

SCAN

Serial Number

Status

Delta-

O9Y19800016W0

Upgrading

Initial InterProcess Rate:43%

Firmware Version :

02.07

Information:

TCPGetPIDCmd done

ReqBoot1Tcp done

ReqBoot2Tcp done

ProcessorSelectTCP done

Back

Firmware Update

Inverter Model:

H5A_222

Firmware Type:

COMM0207

Load Hex File

Inverter

SCAN

Serial Number

Status

Delta-

O9Y19800016W0

Success

Update Inverter

Firmware Version :

02.07

Information:

BurnProcessTCP done

BankCloseProcTCP done

BurnDoneProcTCP done

InternalProcTCP_final done

Total Tx Len :227968

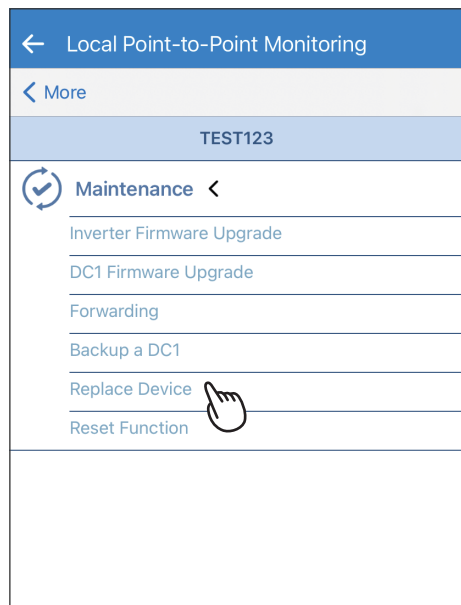
50

6.2. Replace inverter

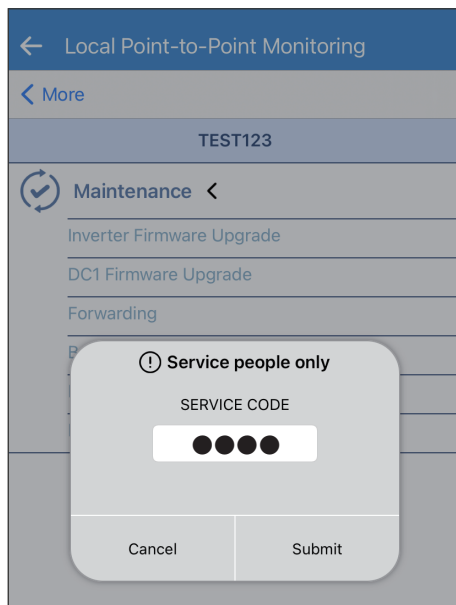
* Please contact local service for the password

This process is to replace the inverter which has been register to the DC1.

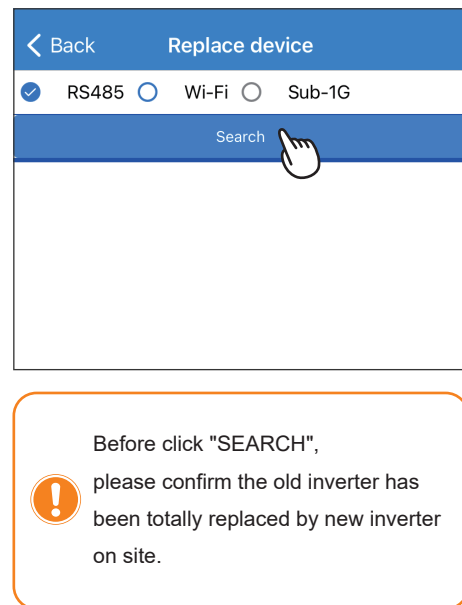
LOCAL SETTING -> Maintenance
-> Replace Device



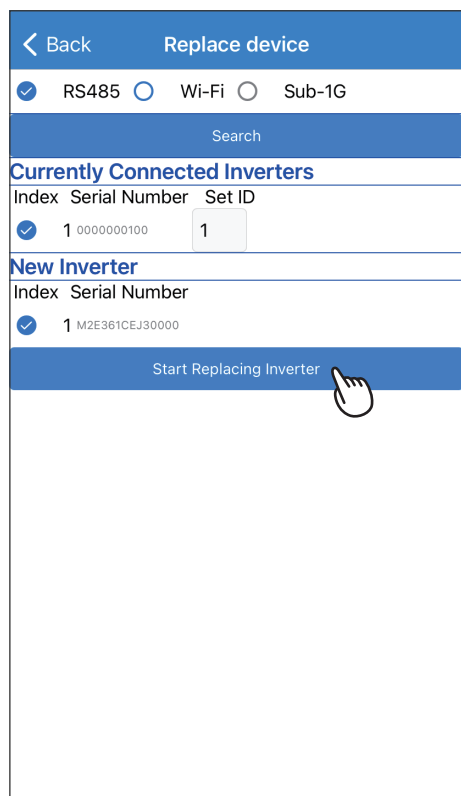
Please contact Delta local service for the password.



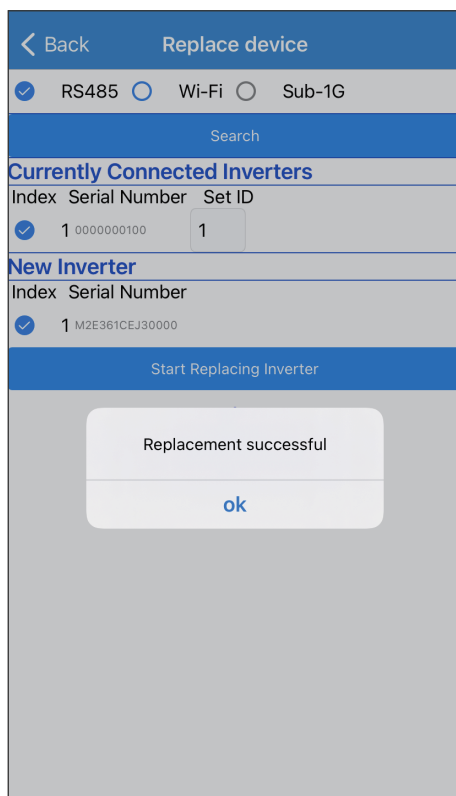
Select the connection method of DC1 and inverter then click "SEARCH".



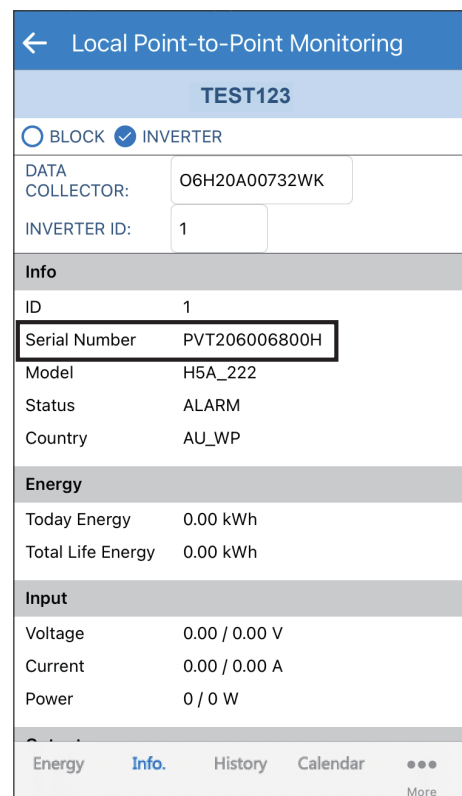
Select the both inverter that is going to replace, then click "START REPLACING INVERTER".



Replacement successful.



After replace complete, user can go to INFO page to check if the serial successfully been replaced.



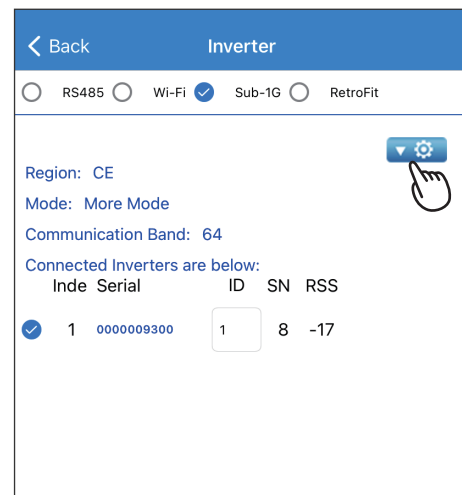
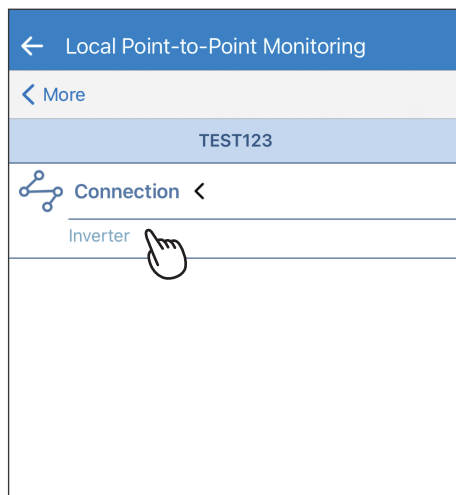
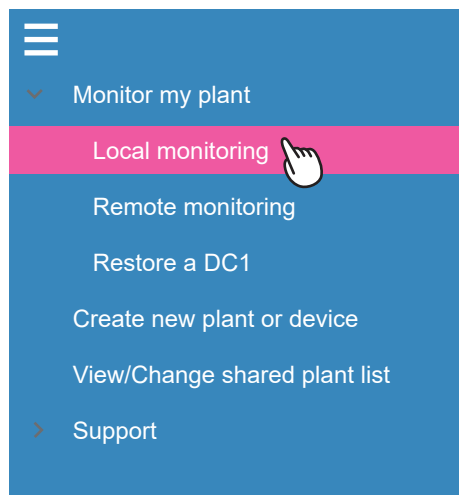
6.3. Add inverter

* This function is only for SUB_1G communication.

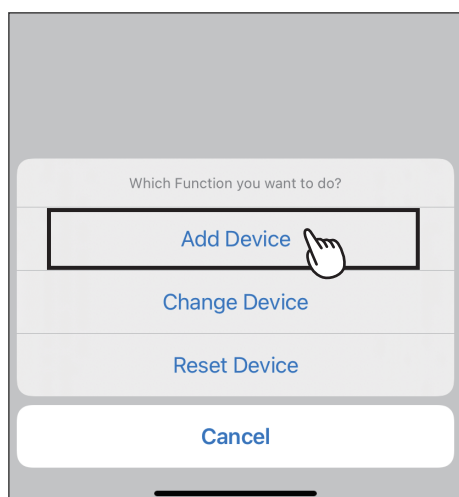
This process is to add inverter to DC1 with SUB_1G communication.

LOCAL SETTING -> Connection
-> Inverter

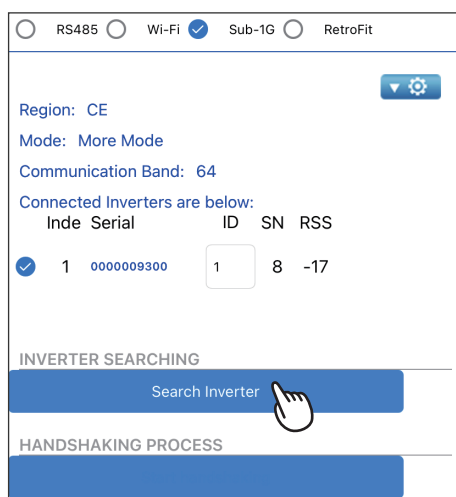
Click the Icon 



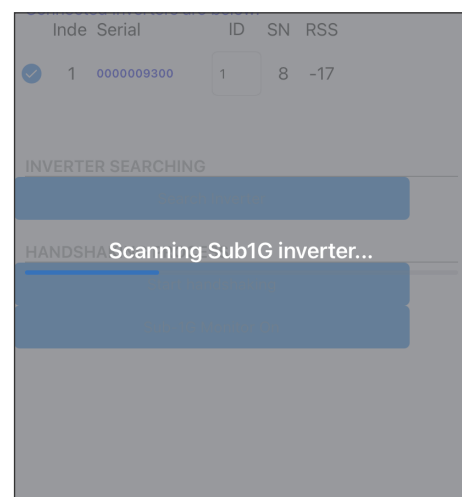
Click "Add Device".



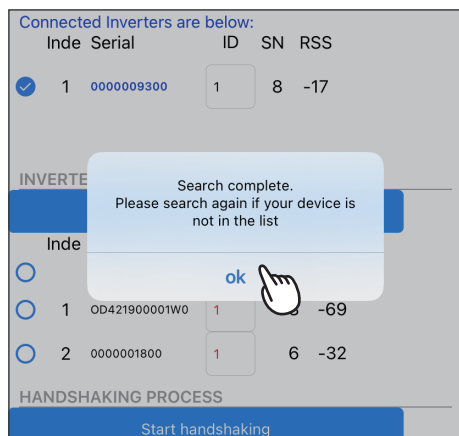
Click "SEARCH INVERTER".



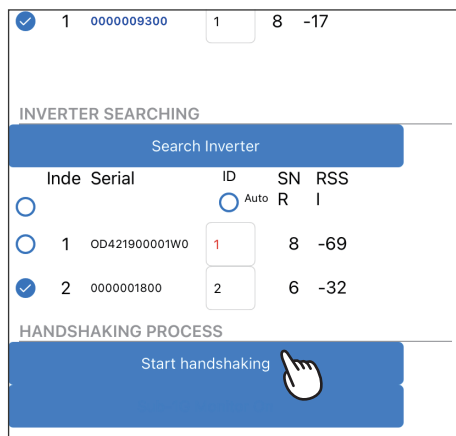
Scanning SUB-1G inverter...



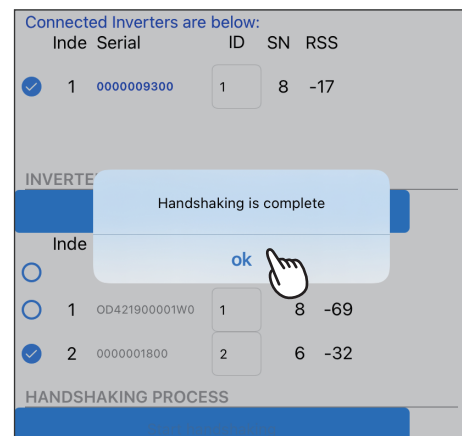
Click "OK".



Select the inverter serial number need to add into DC1.



Click "OK".



Click “SUB-1G MONITOR ON”.

INVERTER SEARCHING

Inde	Serial	ID	SN	RSS
☐		☐ Auto	R	I
☐	1	OD421900001W0	1	8 -69
☒	2	00000001800	2	6 -32

HANDSHAKING PROCESS

[STEP1] Set ID success
[STEP2] Get information success
[STEP3] Time synchronization success

Sub-1G Monitor On

Click “OK”.

Communication Band: 64

Connected Inverters are below:

Inde	Serial	ID	SN	RSS
☒	1	0000009300	1	8 -17
☐				
☐	1	OD421900001W0	1	8 -69
☒	2	00000001800	2	6 -32

INVERTER

Connection complete.

ok

HANDSHAKING PROCESS

[STEP1] Set ID success

APP will direct to grid setting page.

Communication Band: 64

Connected Inverters are below:

Inde	Serial	ID	SN	RSS
☒	1	0000009300	1	8 -17
☐				
☐	1	OD421900001W0	1	8 -69
☒	2	00000001800	2	6 -32

INVERTER

Directing to Grid-Setting Page...

OK

HANDSHAKING PROCESS

[STEP1] Set ID success

Confirm and modify the setting value.

< Back Grid Setting

Reload

Select Inverter ID: 2

Selected inverter model: RPI-M88H

Installation Settings

Country: TAIWAN

Single SET

Same Model SET

Insulation Mode: ON

Insulation Resistance: 600 kΩ

RCMU: ON

EPO 1 (External power off): Normal Open

AC connection: 3P4W

Relay 1 (dry contacts): Disable

Relay 2 (dry contacts): Disable

Anti-islanding (EU): ON

Maximum Power: 105000 W

Amp: 0.3 A

Add inverter process complete.

< Back Inverter

RS485 ☐ Wi-Fi ☒ Sub-1G ☐ RetroFit

Region: CE

Mode: Standard

Communication Band: 2

Connected Inverters are below:

Inde	Serial	ID	SN	RSS
☒	1	0000009300	1	8 -17
☒	2	00000001800	2	8 -44

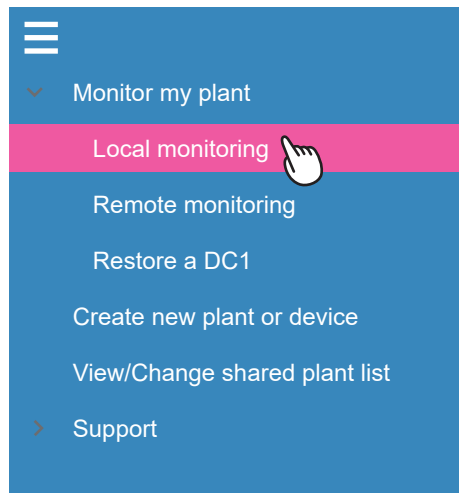
6.4. Back up DC1

ATTENTION

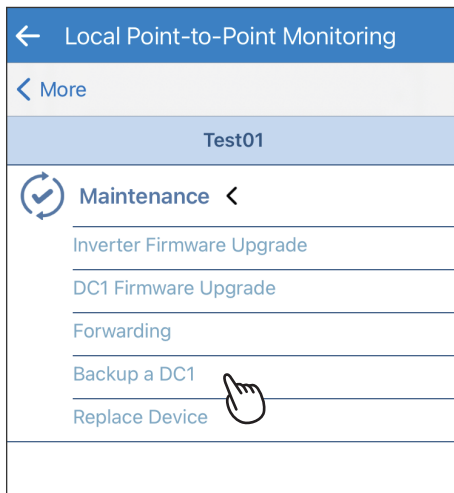


- USB stick is needed for backup function.
- User can refer chapter 4.2.3 for restore DC1 process.

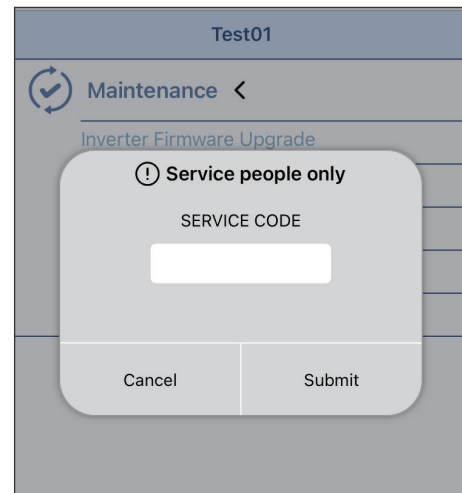
Click Menu-->Local monitoring, then select the plant with DC1 need to do the backup.



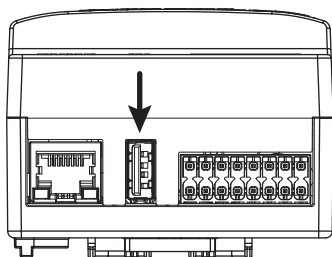
LOCAL SETTING -> Maintenance
-> Backup a DC1



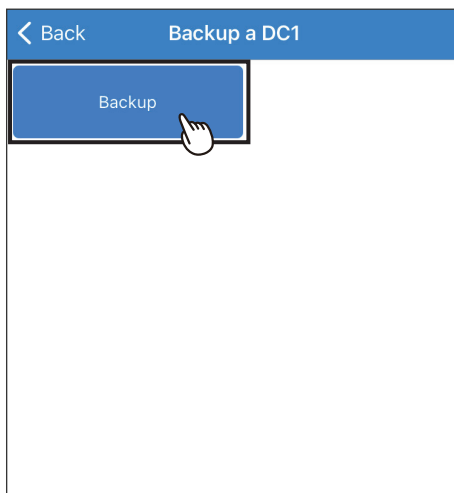
Please contact Delta local service for the password.



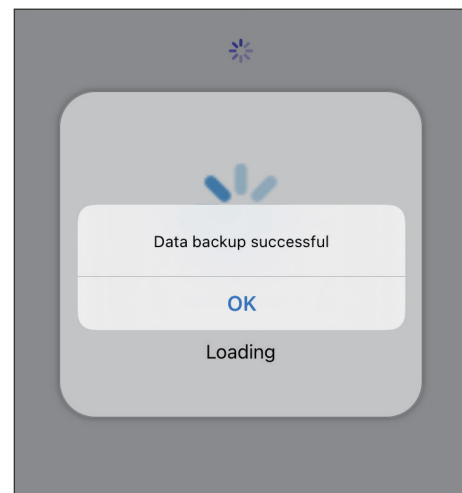
Connect the USB with DC1.



Click "BACKUP"



Backup success.



6.5. Reset DC1

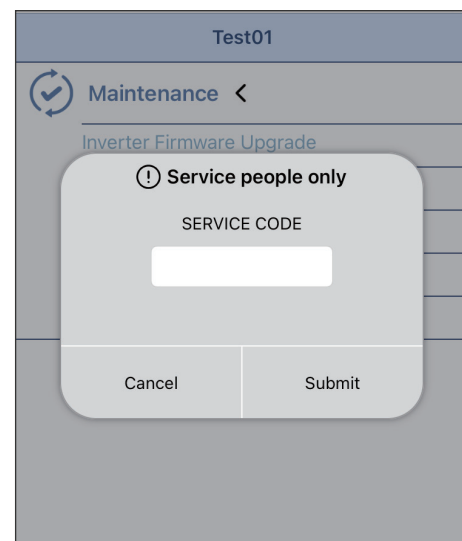
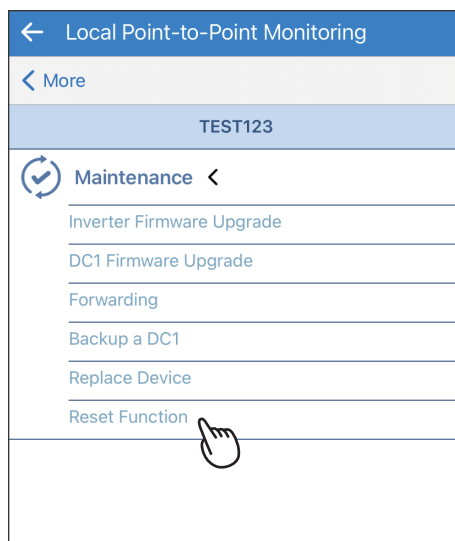
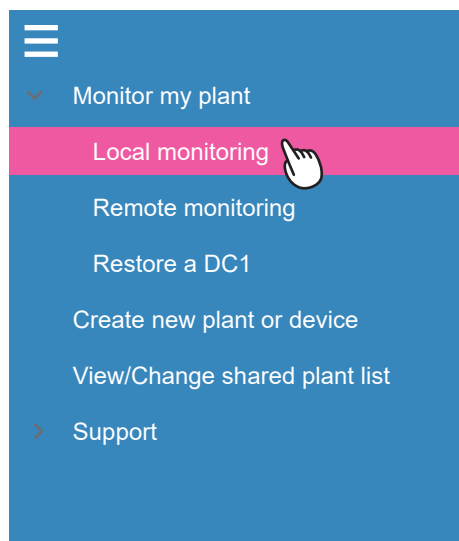
* This function is only for Sub1G communication.

* Please contact local service for the password.

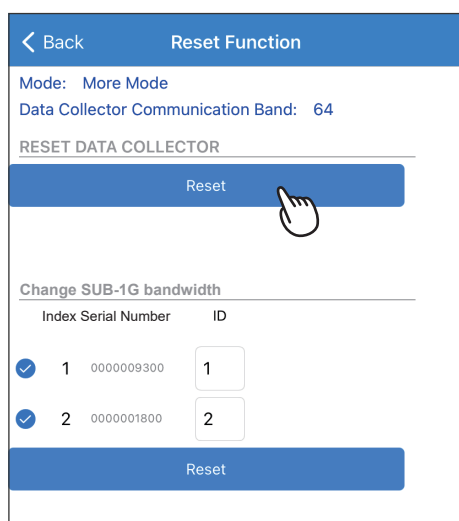
Click Menu-->Local monitoring, then select the plant need to do reset function for DC1.

LOCAL SETTING -> Maintenance -> Reset Function

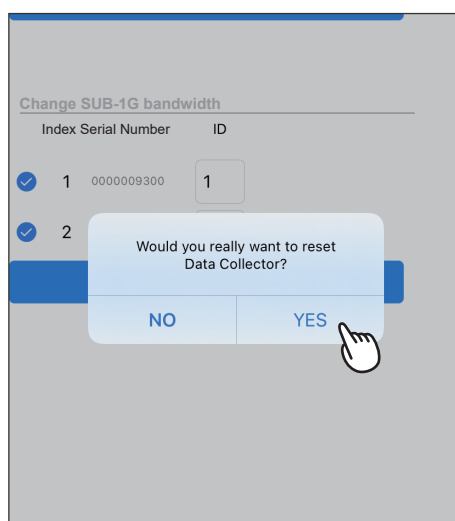
Please contact Delta local service for the password.



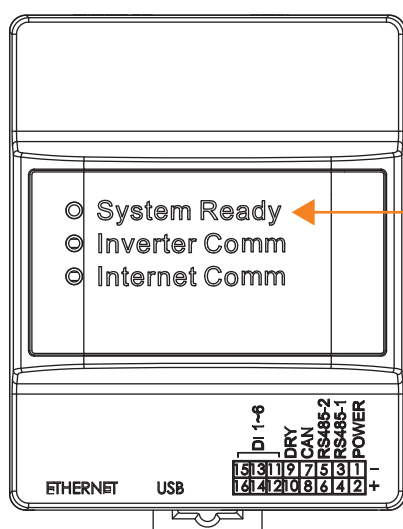
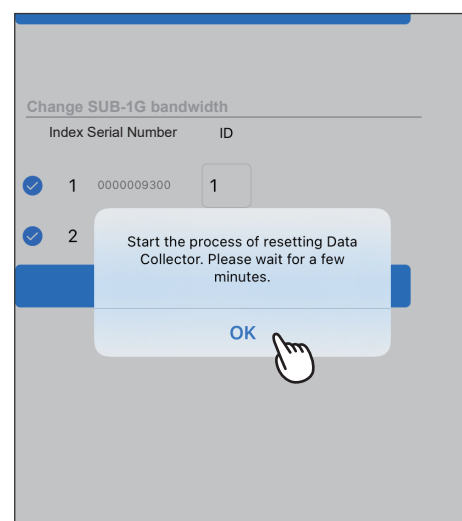
Click "RESET".



Click "YES".



Click "OK".



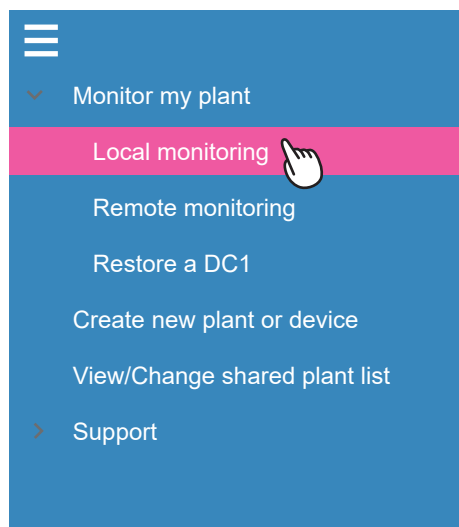
When reset done, "System ready" LED on DC1 will turn into red and go back to green after reboot.

6.6. Change SUB-1G bandwidth

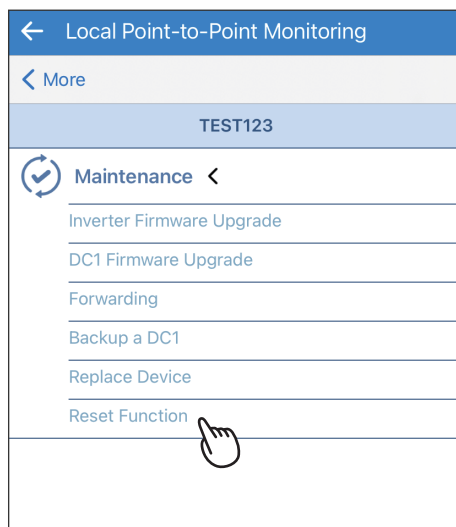
* This function is only for Sub1G communication.

* Please contact local service for the password.

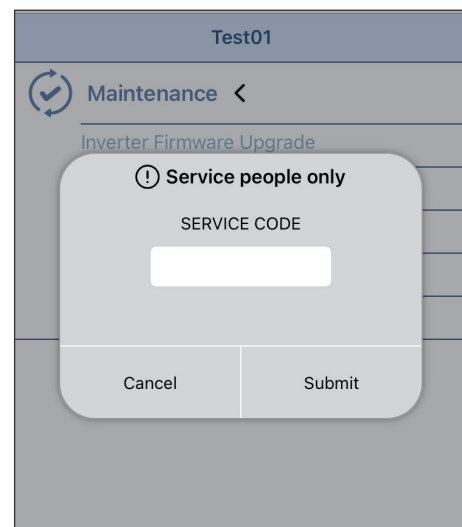
Click Menu-->Local monitoring, then select the plant need to change sub1G bandwidth.



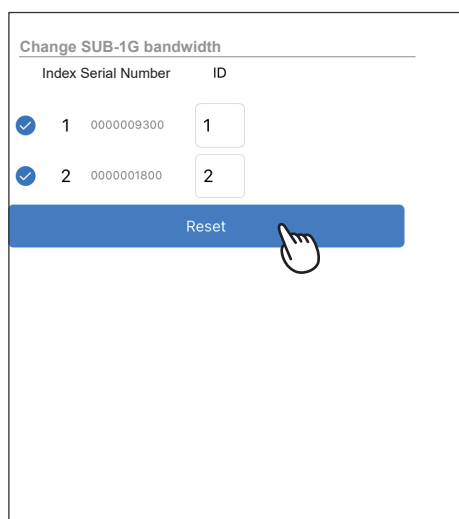
LOCAL SETTING -> Maintenance -> Reset Function



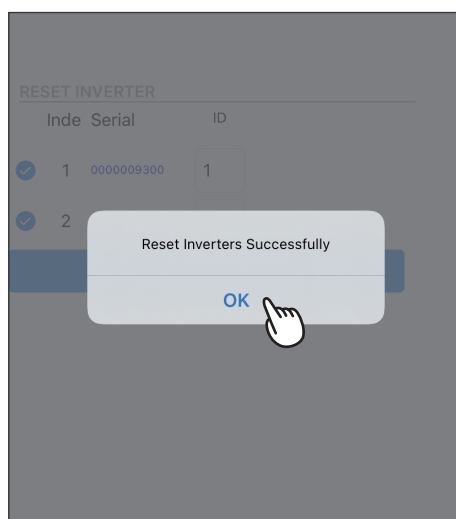
Please contact Delta local service for the password.



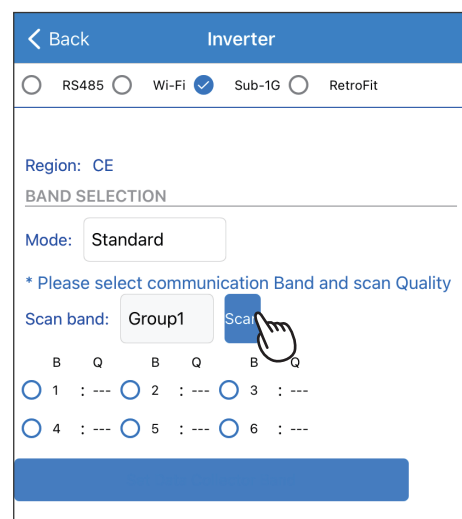
Click "Change"



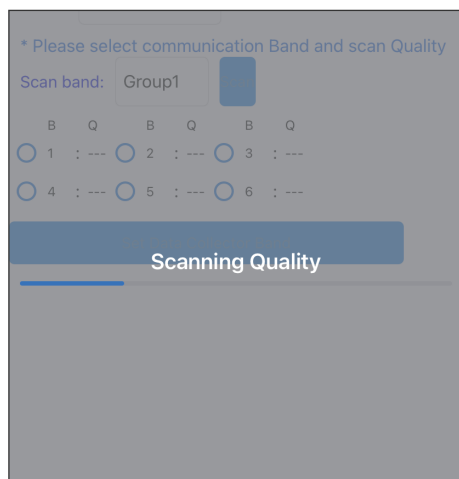
Click "OK".



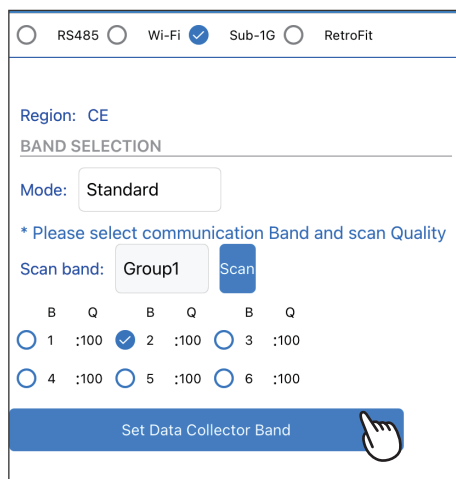
Select Mode and Scan band, click "Scan".



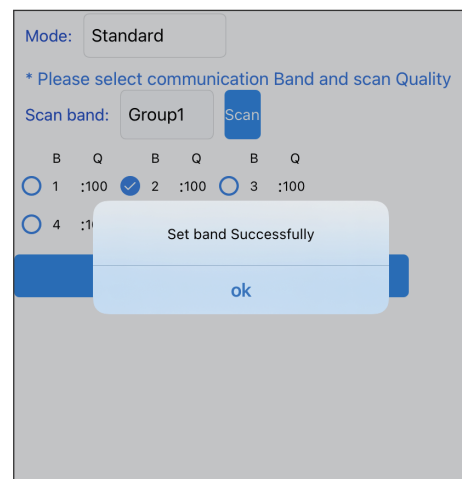
Scanning Quality



Select the proper bandwidth with good communication quality (100 is the best), and click "SET DATA COLLECTOR BAND"



Set band Successfully.



Click “RECONNECT”.

Back

Inverter

RS485

Wi-Fi

Sub-1G

RetroFit

Region: CE

BAND SELECTION

Mode: Standard

* Please select communication Band and scan Quality

Scan band: Group1

B

Q

1

:100

B

Q

2

:100

B

Q

3

:100

B

Q

4

:100

B

Q

5

:100

B

Q

6

:100

Inde

Serial

ID

1

0000009300

1

2

0000001800

2

Reconnect

Click “OK”.

Back

Inverter

RS485

Wi-Fi

Sub-1G

RetroFit

Region: CE

BAND SELECTION

Mode: Standard

* Please select communication Band and scan Quality

Scan band: Group1

B

Q

1

:100

B

Q

2

:100

B

Q

3

:100

B

Q

4

:100

Inde

Serial

ID

1

0000009300

1

2

0000001800

2

Reconnect

Data Collector starts monitoring

ok

Change finished.

Back

Inverter

RS485

Wi-Fi

Sub-1G

RetroFit

Region: CE

Mode: Standard

Communication Band: 2

Connected Inverters are below:

Inde	Serial	ID	SN	RSS
1	0000009300	1	8	-17
2	0000001800	2	8	-44

7. Error Message and Trouble Shooting

7.1. Error Displays

The error code list is in History tab, if there are some question of the error message, please contact local service team.

Local Point-to-Point Monitoring

Test

ITEM:

Event Log

START DATE:

2021/11/10

END DATE:

2021/11/10

Event Log

ID	Time	Event
1	2021/11/10 下午 02:55:19	F23 - DSP COMM Fa

Energy

Info.

History

Local Setting

Plant Setting

Please refer to the user manual of the Inverter for details error information.

7.2. Checking Step

When Wifi inverter or DC1 need trouble shooting, please refer the step in this section and feedback to local service team.

[Flex Inverter]

Step	Item
1	Check and record the status of LED indicator. => Record the status of all the three LED indicators. (color and status of blinking)
2	Connect the the inverter and take a screenshot of the network status. => Network page and click the status button, then take a screenshot.
3	Check the network accessibility of the WiFi router. => Connect your smartphone to the same WiFi router applied by the inverter. => Use the web browser to surf "MyDeltaSolar webpage".
4	Reboot the WiFi router and check if the inverter reconnect to the router. => Record the status of the inverter WiFi LED indicator on the inverter after 5mins the WiFi router reboot. => Check the SSID of the Inverter from the WiFi setting page of the mobile phone. => There will be an extra number at the end of the SSID if the inverter connected to the router. (ex: OXYxxxxxxxx -1)
5	Reboot the inverter and check if the inverter reconnect to the router. => Turn off both the DC and AC, make sure all the LED indicators has been turned off then only turn on the DC and AC. => Check the SSID of the Inverter from the WiFi setting page of the mobile phone. => There will be an extra number at the end of the SSID if the inverter connected to the router. (ex: OXYxxxxxxxx -1)
6	Check the Comm FW version on the Inverter. => If the Comm FW is not the latest version, please upgrade the FW.
7	Check if the inverter reconnect to the router.

[Flex with the DC1]

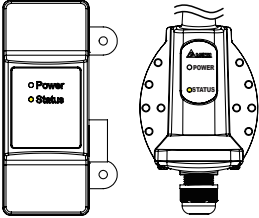
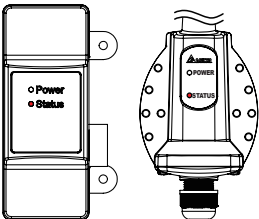
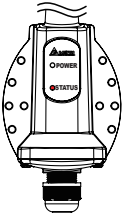
Step	Item
1	Check and record the status of LED indicator. (both inverters and DC1) => Record the status of all the three LED indicators(color and status of blinking)
2	Connect your mobile phone to the DC1. => Check if the DC1 can be connected.
3	Create a WiFi hotspot with your mobile phone to simulate WiFi of DC1. => Power off the DC1. => Set the SSID and password of the hotspot to be exactly the same with DC1. => Wait around 3 mins and check if the Inverter connected to the WiFi hotspot of your mobile phone.
4	Reboot the inverter. (power off and on) => Wait around 3 mins and check if the Inverter connected to the WiFi hotspot of your mobile phone.
5	Turn off the hotspot of mobile phone and power on the DC1. => Wait around 3 mins and check if the Inverter connected to the DC1.
6	Check the FW of the inverter, please update the FW to the latest version.
7	Check if the inverter reconnected to the DC1 via the connection page on the Apps.

[DC1 with the cloud]

Step	Item
1	Check and record the status of LED indicator of DC1. => Record the status of all the three LED indicators. (color and status of blinking)
2	Check the network accessibility of the WiFi router. => Connect your smartphone to the same WiFi router applied by the inverter. => Use the web browser to connect "MyDeltaSolar webpage".
3	Check the LED indicator of internet Comm on the DC1. => make sure mobile device is not connected to the DC1. => If the internet is off means the DC1 is not connected to the WiFi router.
4	Use the App connect to DC1 and scan the network. => check the WiFi strength of the related wifi router.
5	Reboot DC1. (power off and power on) => Wait around 10mins and check if there is data uploaded to the cloud.
6	Check the FW of the DC1, please update the FW to the latest version.

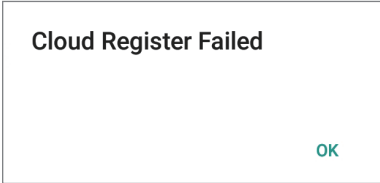
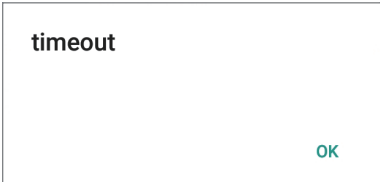
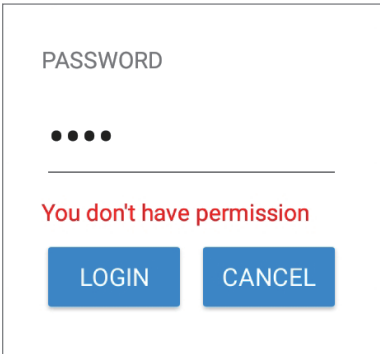
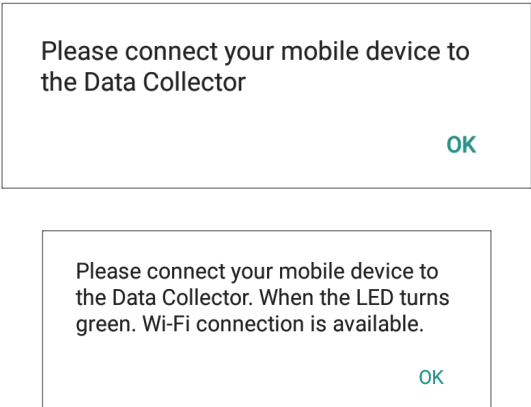
7.3. Troubleshooting

Responsive actions that should be taken in cases where the following symptoms occur are described.

Symptom	Verification details	Responsive action
 System ready light is red	DC1 is booting	Please wait two minutes for the boot to complete.
 Inverter comm light is continuously flashing green light	DC1 is Searching or Setting inverters.	Please wait for 2-10 minutes for Inverter to search or set up.
 Internet light constant	DC1 does not connect to internet	Please go to the NETWORK page to set network. please refer to section 4.7.
 The LED Light of 'Status' flashes slow and changing color between green and yellow	N1 does not connect to Data Collector N2 does not connect to Inverter	Please confirm if N1 is assembled with Data Collector/ Please confirm if N2 is adapted to Inverter.
 The LED Light of 'Status' turns red and slow flashing	N1 or N2 is booting	Please wait a minutes for the boot to complete.
 The LED Light of 'Status' turns red and fast flashing	Internal wireless module is abnormal.	Please contact customer service.

7.4. Error Dialog Display

The following explains the case where the following error dialog is displayed during operation.

Error indication	Contents	Workaround
	Register to cloud server fail	1. Please confirm whether this DC1 has been registered on the cloud. 2. Please confirm if Inverter has been registered on the cloud. 3. Please confirm if DC1 has internet connection. 4. Please confirm that the user account password is correct.
	Set wifi inverter time out	1. Please confirm the communication quality between DC1 and inverter. 2. Please confirm if Inverter has started. 3. Please confirm if the smartphone is connected to DC1.
	Insufficient permission warning message	Please enter the correct permission password.
	User is not connected to DC1	Please go to the smartphone WI-FI page and reconnect to DC1.

Error indication	Contents	Workaround
Search Wi-Fi failed OK	DC1 scan Inverter fail	DC1 may have a short weak signal. Please retry the scan.
Please make sure N1 is correctly adapted to Data Collector OK	N1 is not correctly assembled with Data Collector	Please confirm if N1 is assembled with Data Collector. If yes, re-assembled them again, please.
Scan Quality failed OK	Scanning the quality of communication band is failed	Please confirm the LED light color of 'Status'. If the light color is red and flashing slowly, it means that the SUB_1G module initializing is not ready. Please wait a minute until the light color turns to green.

