

DeltaSolar Application

Operation Manual for iOS system



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1.DeltaSolar

1.1. Download



DeltaSolar

- 1. This APP collocates with Delta Inverter.
- 2. If inverter is not connected to the cloud, you can still monitor your inverter with DeltaSolar App.







QR Code Android

Where can I download DeltaSolar App?

- QR Code: Please scan the QR code on the left side.
- IOS system: Please search for "DeltaSolar" in App store.
- Android system: Please search for "DeltaSolar" in Google Play.



About OS version

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

ATTENTION



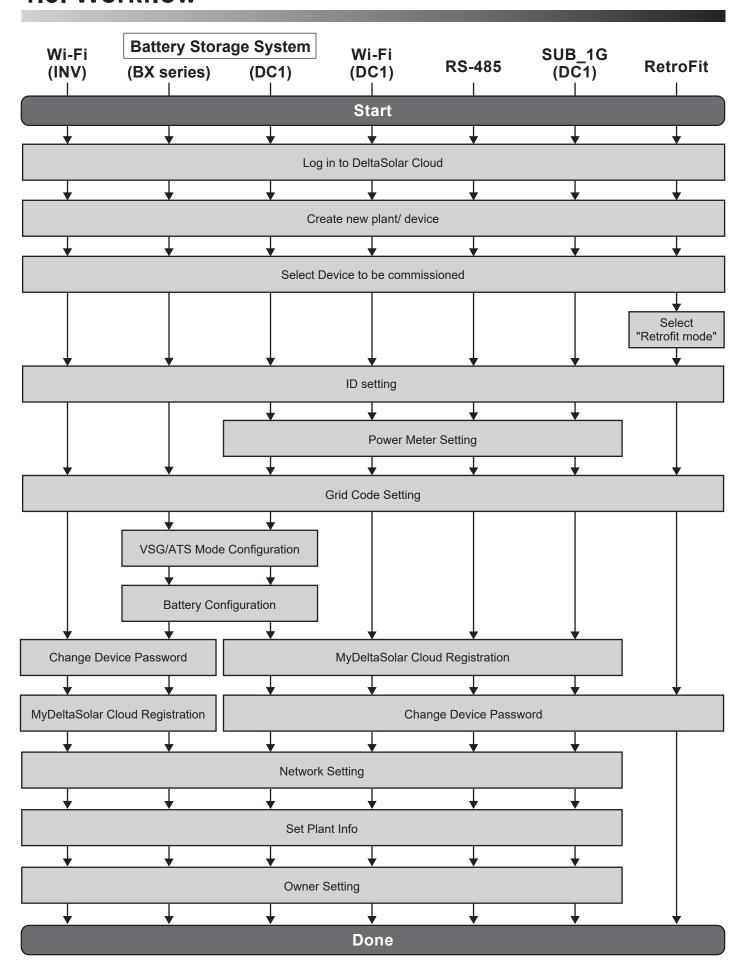
- Please make sure that your smart phone is connected to the Internet.
- Before setting up, please register an account and sign in to the app.

1.2. Basic operation



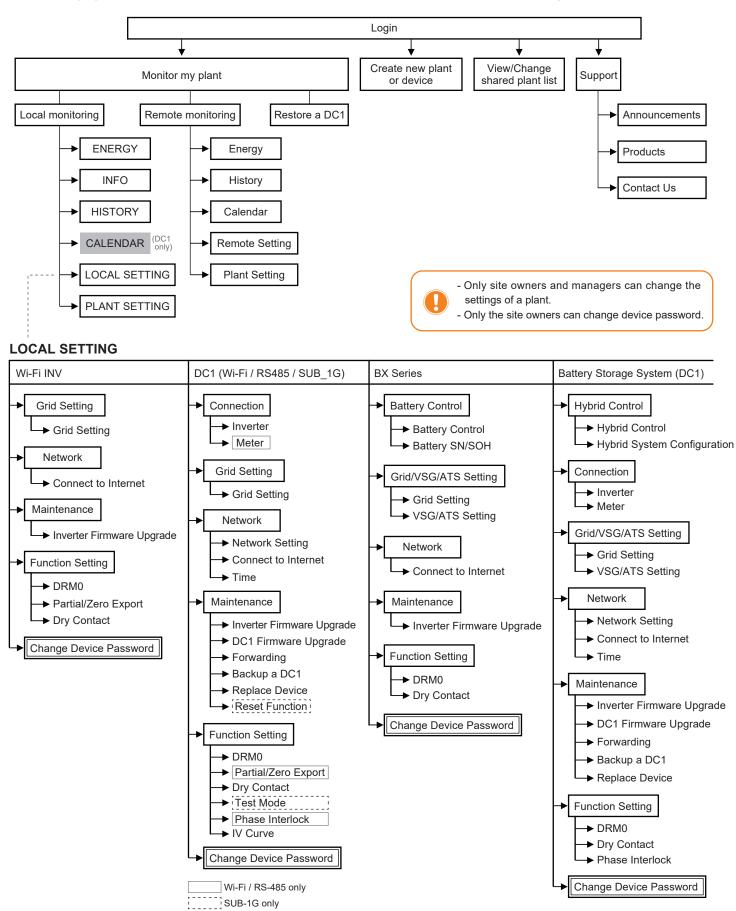
- 1 Touch selection
 - Press the item with your finger to move to the next screen.
- 2 Pull-down menu
 - The screen where the options are displayed in a list is called a pull-down menu.
- 3 Text bar
 - When you press a number or text, the system keyboard will appear for new characters to be entered.
 - (The typing interface depends on which device you are using.)
- 4 Check box
 - A check box is where you click and mark a "V" (check mark) inside.
- ⑤ Option button
 - An option button is a round frame which will be filled in with color when you press on.

1.3. Workflow



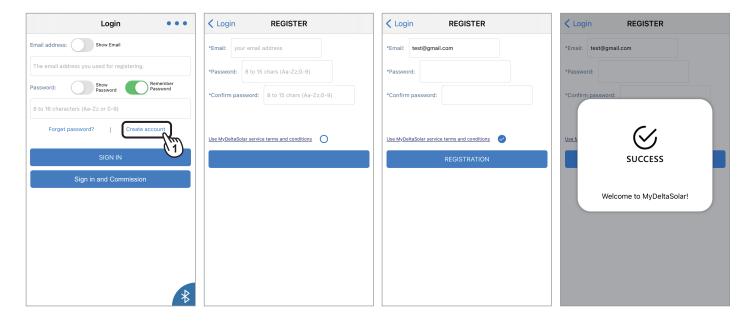
1.4. List of APP Pages

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

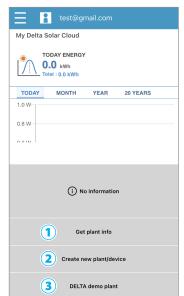


1.5. Create an account

- 1. Start the APP, click "Create account".
- 2. Enter the registration page.
- 3. Fill in the information and click "Register". (Check to agree declaration and click "OK" to continue.)
- 4. Registration success.



1.6. Homepage for new user



At homepage, If there is no plant in the account, the user can choose one of the three options.

① Get plant info

Users can check the plant information which is shared by the other plant owners.

For more details please refer to Chapter 3.4.

Function accessibility list

Authority / Function	Owner	Manager	Viewer
View plant information	✓	✓	✓
View share list	✓	✓	✓
Plant setting (Remote)	✓	✓	0
Plant setting (Local)	Password needed, please contact local service.		
Change device password	✓		
Edit share list	✓		



② Create new plant/device

Create a new plant or add an inverter to the existing plant, for more detail please refer to Chapter 2.

③ DELTA demo plant

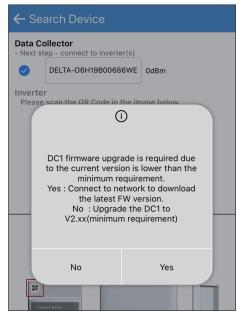
Users can have a look of the user interface and play with the App with DELTA demo plant first.

2.Commissioning

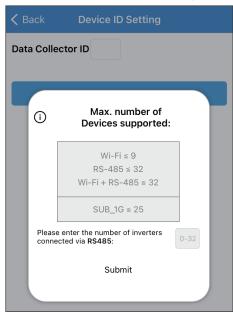
2.1. Data Collector (Include Power Meter P1/P3)

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

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



Please fill-in RS-485 device quantity.



To establish a stable connection between inverter and MyDeltaSolar Cloud, please check the Wi-Fi connection setting page. The signal strength must be greater than -70dBm between the Wi-Fi devices (Wi-Fi router, Wi-Fi inverter, DC1...etc.). If the signal strength is less than -70dbm, certain communication error may occur to block the Wi-Fi communication between devices. To avoid this situation, please adjust the device position to improve the signal strength/quality.

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

If a Delta power meter needs to be set up, please click "Yes", otherwise please click "Skip" to continue.



Retrofit ?

Serial Number Set ID Password

Delta-PVT206006800H 1 DELTASOL

-37 dBm

Delta-PVT206006790H 1 DELTASOL

Delta-PVT206006790H 1 DELTASOL

Delta-PVT206006790H 1 DELTASOL

Skip Yes

Delta-PVT206006790H 1 DELTASOL

Delta-PVT206006790H 1 DELTASOL

Delta-PVT206006790H 1 DELTASOL

Delta-PVT206006790H 1 DELTASOL

Compared to set up the power meter?

Delta-PVT206006790H 1 DELTASOL

Delta-PVT206006790H 1 DELTASOL

Skip Yes

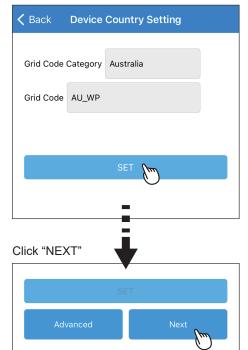
Delta-O9Y19700007W0 1 DELTASOL

Compared to set up the power meter?

Select the meter device for monitoring.

Coloot the motor dovi	oo for morntoning.					
Power Meter Setting						
Select Meter						
RS-485	(SCAN					
Internal meter of inverter						
PVT206006800H Inverter ID:1						
Skip	Set					

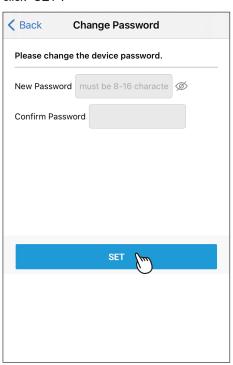
Select a grid code and click "SET".



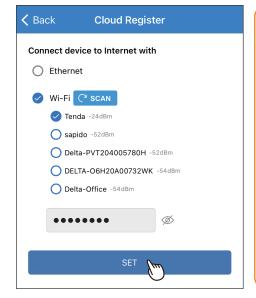
Click "Connect to the Cloud" to use MyDeltaSolar Cloud monitoring service or click "Skip" to go to "Plant setting".

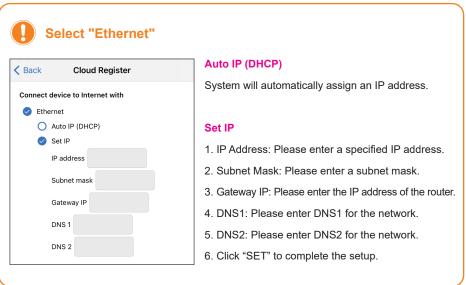


Set a new password to the device and click "SET".



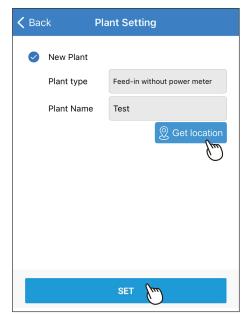
Select the network interface and click "SET".

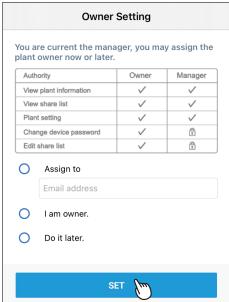


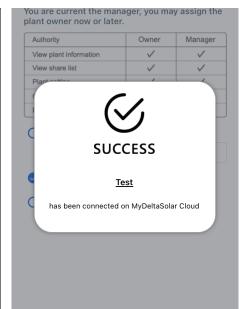


Select the plant type and assign a name to Fill in the e-mail address to assign the the plant. Click "Get Location" for the GPS position and click "SET".

the plant an owner.









About owner setting...

- During commissioning, the installer will be set as default, the manager of the plant. Or the installer can assign himself as the plant owner.
- If the assigned email address has not yet been registered to MyDeltaSolar Cloud, an invitation will be sent to this email address.
- When in an environment without Internet, the commissioned plant will be saved in the app and send to the cloud later when Internet is available.
- After commissioning success, the plant info (including device password) will be sent to the cloud. And a success notification will be sent to the plant owner.
- When no owner has been assigned to the plant, there will be a pop-up message every time when selecting the plant (until an owner has been set.)



2.2. Wi-Fi Inverter

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

Code in the image below.

Inverter
Please scan the QR Code in the image below.

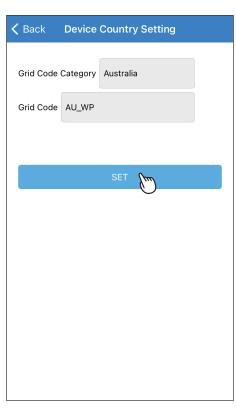
Inverter
Please scan the QR Code in the image below.

QR Code Type-In

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



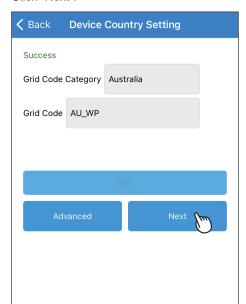
Select a grid code and click "SET".





To establish a stable connection between inverter and MyDeltaSolar Cloud, please check the Wi-Fi connection setting page. The signal strength must be greater than -70dBm between the Wi-Fi devices (Wi-Fi router, Wi-Fi inverter, DC1...etc.). If the signal strength is less than -70dbm, certain communication error may occur to block the Wi-Fi communication between devices. To avoid this situation, please adjust the device position to improve the signal strength/quality.

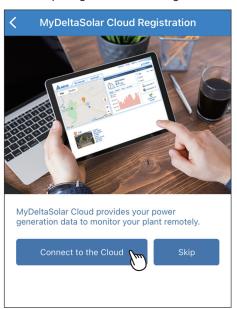
Click "Next".



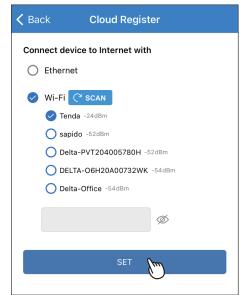
Set a new password to the device and click "SET".



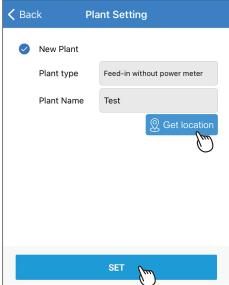
Click "Connect to the Cloud" to use MyDeltaSolar Cloud monitoring service or click "Skip" to go to "Plant setting".



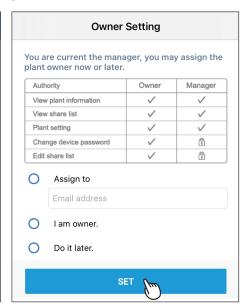
Select the network interface and click "SET".



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



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







About owner setting...

- During commissioning, the installer will be set as default, the manager of the plant. Or the installer can assign himself as the plant owner.
- If the assigned email address has not yet been registered to MyDeltaSolar Cloud, an invitation will be sent to this email address.
- When in an environment without Internet, the commissioned plant will be saved in the app and send to the cloud later when Internet is available.
- After commissioning success, the plant info (including device password) will be sent to the cloud. And a success notification will be sent to the plant owner.
- When no owner has been assigned to the plant, there will be a pop-up message every time when selecting the plant (until an 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".

Character 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

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

Data Collector

Next step - connect to inverter(s)

DELTA-06H19B00686WE

OdBm

Inverter

Please scan the QR Code in the image below

DC1 firmware upgrade is required due to the current version is lower than the minimum requirement.

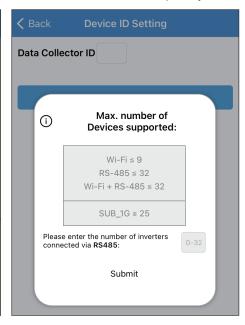
Yes: Connect to network to download the latest FW version.

No: Upgrade the DC1 to V2.xxx(minimum requirement)

No

Yes

Please fill-in RS-485 device quantity.



< Back

Data Collector ID 1

Inverter ID O Auto ID

Serial Number Set ID Password

Wi-fi / Max. 9

Oelta-PVT206006800H

O Delta-PVT197030820E

O Delta-PVT206006790H

O Delta-PVT206006840H 1

RS-485 / Max. 32

Serial Number Set ID

Selected Device: 0

To establish a stable connection between inverter and MyDeltaSolar Cloud, please check the Wi-Fi connection setting page. The signal strength must be greater than -70dBm between the Wi-Fi devices (Wi-Fi router, Wi-Fi inverter, DC1...etc.). If the signal strength is less than -70dbm, certain communication error may occur to block the Wi-Fi communication between devices. To avoid this situation, please adjust the device position to improve the signal strength/quality.

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

Device ID Setting

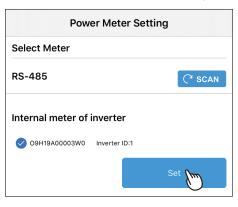
Retrofit ?

DELTASOL

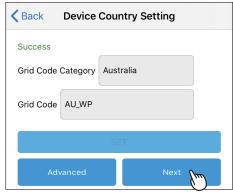
DELTASOL

DELTASOL

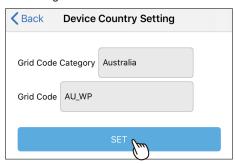
Select the meter device for monitoring.



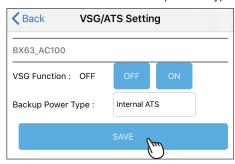
Click "NEXT".



Select a grid code and click "SET".



Select VSG Function and Backup Power Type.

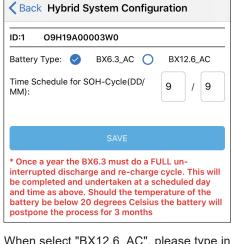


Select the Battery type and SOH checking day. * The BX series need to check the

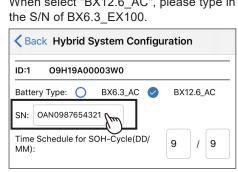
entire SOH at least once per year.

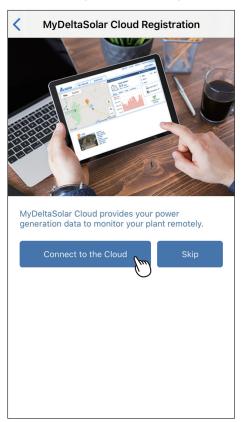
Click "Connect to the Cloud" to use MyDeltaSolar Cloud monitoring service or click "Skip" to go to "Plant setting".

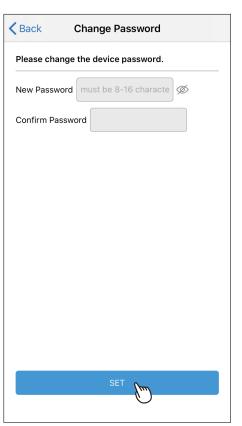
Set a new password to the device and click "SET".



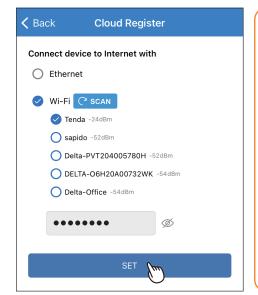
When select "BX12.6_AC", please type in the S/N of BX6.3_EX100.

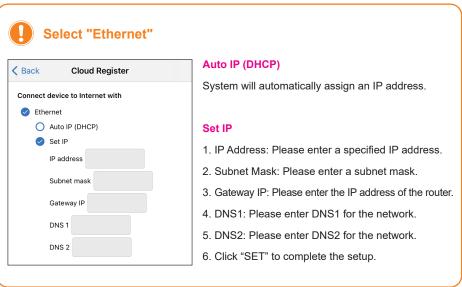






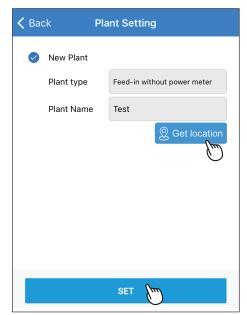
Select the network interface and click "SET".

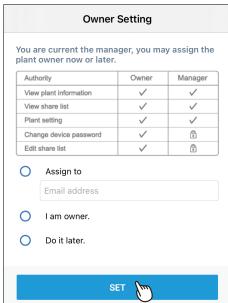


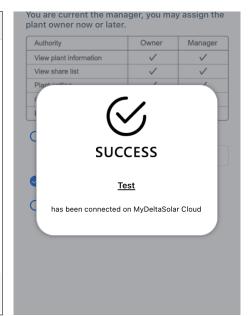


Select the plant type and assign a name to Fill in the e-mail address to assign the the plant. Click "Get Location" for the GPS position and click "SET".

the plant an owner.









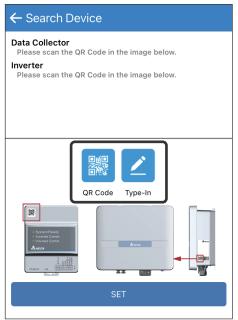
About owner setting...

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- If the assigned email address has not yet been registered to MyDeltaSolar Cloud, an invitation will be sent to this email address.
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- After commissioning success, the plant info (including device password) will be sent to the cloud. And a success notification will be sent to the plant owner.
- When no owner has been assigned to the plant, there will be a pop-up message every time when selecting the plant (until an owner has been set.)

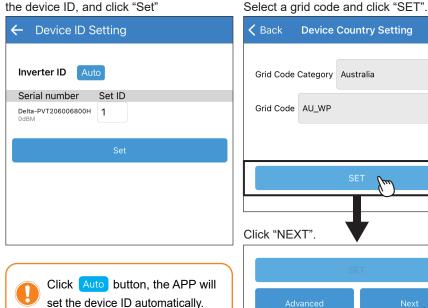


2.4. Battery Storage System (BX series)

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

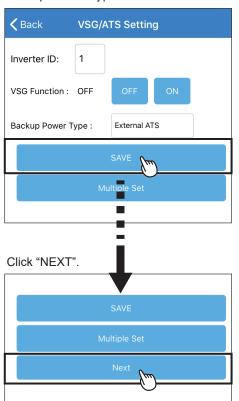


Click "Auto" or enter a number to assign the device ID, and click "Set"

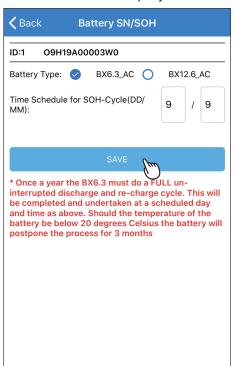


To establish a stable connection between inverter and MyDeltaSolar Cloud, please check the Wi-Fi connection setting page. The signal strength must be greater than -70dBm between the Wi-Fi devices (Wi-Fi router, Wi-Fi inverter, DC1...etc.). If the signal strength is less than -70dbm, certain communication error may occur to block the Wi-Fi communication between devices. To avoid this situation, please adjust the device position to improve the signal strength/quality.

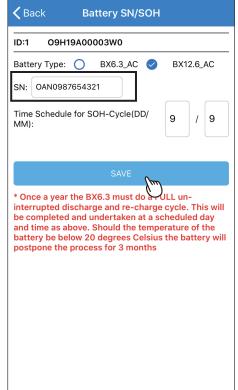
Select VSG Function and Backup Power Type.



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



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

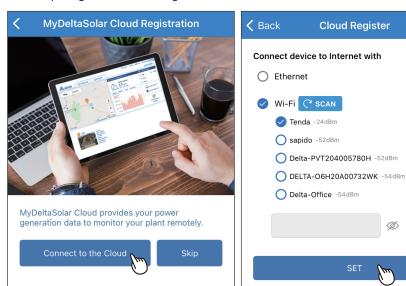


Set a new password to the device and click "SET".

Sack Change Password Please change the device password. New Password must be 8-16 characte Ø Confirm Password

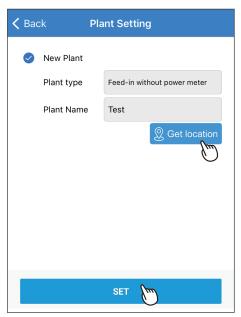
Click "Connect to the Cloud" to use MyDeltaSolar Cloud monitoring service or click "Skip" to go to "Plant setting".

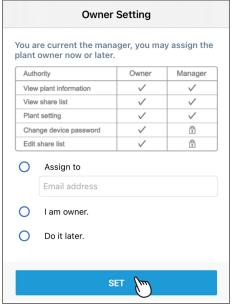
Select the network interface and click "SET".

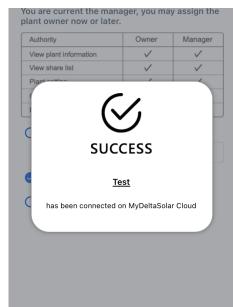


the plant. Click "Get Location" for the GPS position and click "SET".

Select the plant type and assign a name to Fill in the e-mail address to assign the the plant an owner.







About owner setting...

- During commissioning, the installer will be set as default, the manager of the plant. Or the installer can assign himself as the plant owner.
- If the assigned email address has not yet been registered to MyDeltaSolar Cloud, an invitation will be sent to this email address.
- When in an environment without Internet, the commissioned plant will be saved in the app and send to the cloud later when Internet is available.
- After commissioning success, the plant info (including device password) will be sent to the cloud. And a success notification will be sent to the plant owner.
- When no owner has been assigned to the plant, there will be a pop-up message every time when selecting the plant (until an owner has been set.)

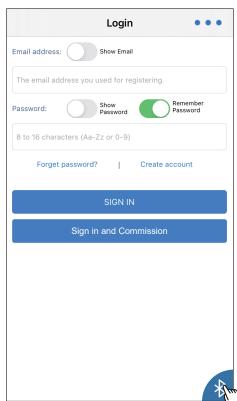


3.Bluetooth

3.1. Connection

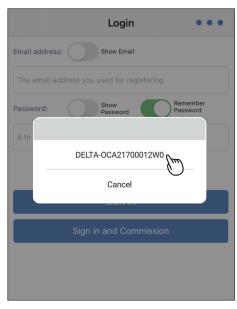
Enable the Bluetooth function of your mobile device.





Click " on the bottom right corner.

Select the serial number of the device.

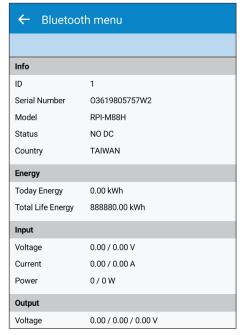


If the S/N of the corresponding inverter is not available on the list in the app, please reboot the Bluetooth function of your mobile device.

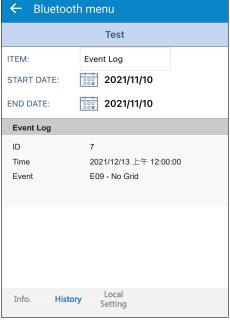
3.2. Bluetooth menu

There are 3 tabs for Bluetooth menu.

[INFO]



[HISTORY]



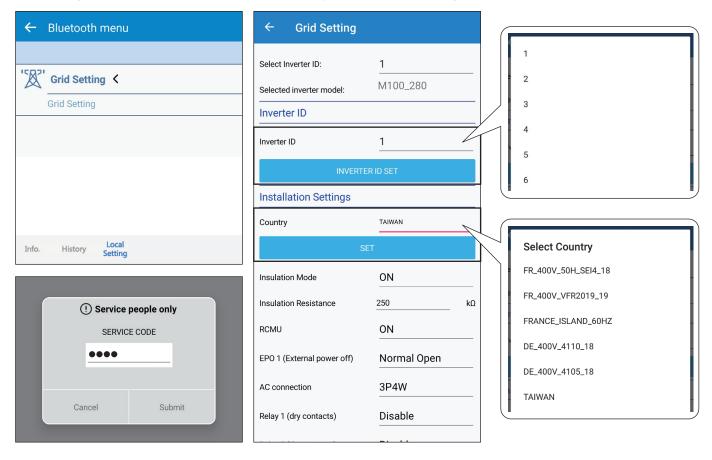
[LOCAL SETTING]



3.3. Commission

Select "LOCAL SETTING" sheet and click "Grid Setting".

Click "Inverter ID" to select the required ID and then click "INVERTER ID SET". Click "Country" to select the required grid code and then click "SET".



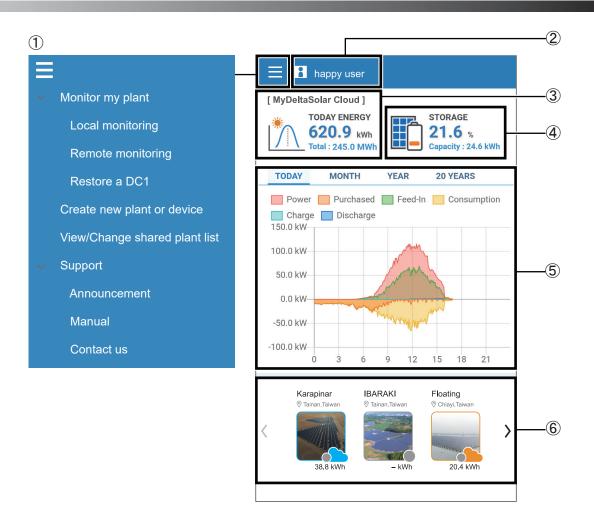
4. Description of the page display

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



The iOS and Android App have a slightly different layout. This manual explains the App for the iOS system.

4.1. Homepage



- Main menu
 For more details, please see the section "Description of the screen display".
- ② User menu Change language, Sign out.



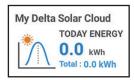
3 Power generation

Showing today's power generation and total power generation.

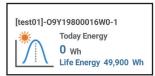
At remote monitoring: showing the power generation for all plant.

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

[Remote mode]



[Local mode]



4 Battery capacity

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

⑤ Power generation map

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







[MONTH]

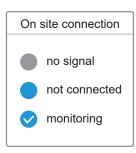
[YEAR] [20 YEARS]

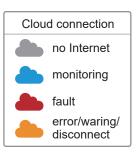
6 Set up the Plant

Showing the name of each plant and the power generated.

Definition of Status Icon







4.2. Monitor my plant

Users can view plant information or change settings by entering to "Monitor my plant".

There are three options.

Local monitoring:

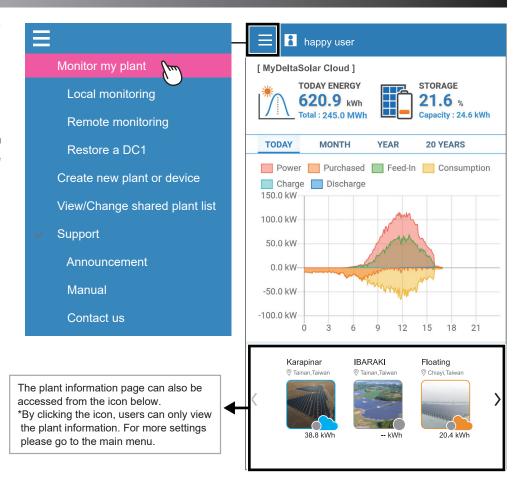
Use Wi-Fi point to point connection with the device nearby and check the information.

Remote monitoring:

check information from MyDeltaSolar Cloud.

Restore DC1:

Users can use this function for DC1 replacement.



The plant list will be shown when entering "Local monitoring" or "Remote monitoring" from "Monitor my plant".

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

(Local monitoring only)

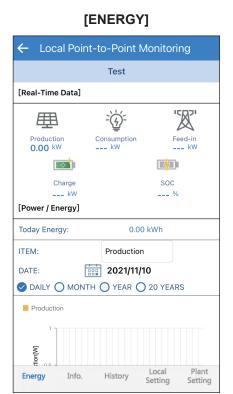
② If there is no plant info, users can connect to the device by searching Wi-Fi signal or scanning QR code.

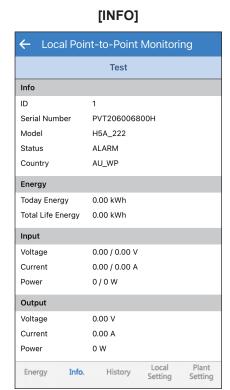


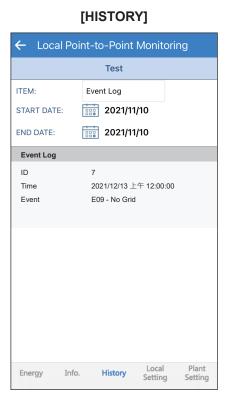


4.2.1. Local monitoring

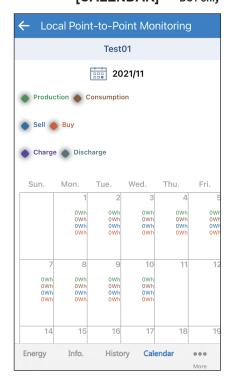
There are six tabs in "Local monitoring."







[CALENDAR] * DC1 only





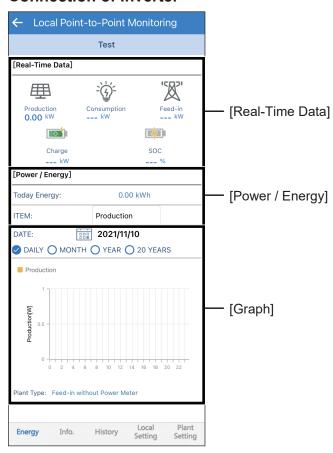


[PLANT SETTING]

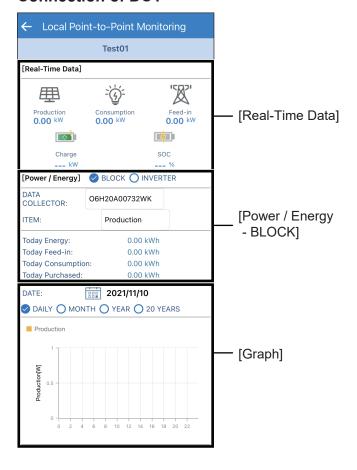


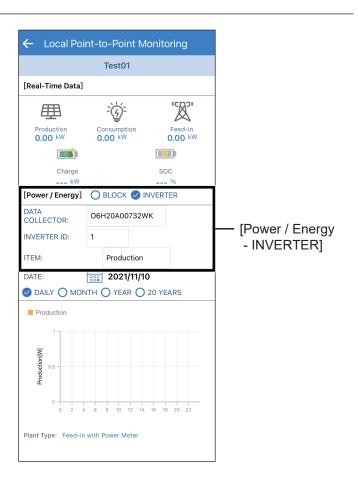
ENERGY

Connection of Inverter



Connection of DC1





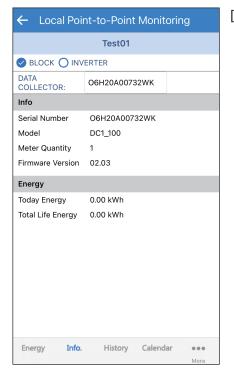
The energy tabs of a DC1 and an inverter have different indications. When connecting to DC1, users can select each inverter by ID.

INFO

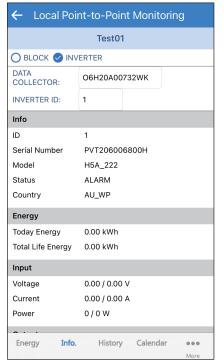
Connection of Inverter

← Local Point-to-Point Monitoring						
Test						
Info						
ID	1					
Serial Number	PVT206006800H					
Model	H5A_222					
Status	ALARM					
Country	AU_WP					
Energy						
Today Energy	0.00 kWh					
Total Life Energy	0.00 kWh					
Input						
Voltage	0.00 / 0.00 V					
Current	0.00 / 0.00 A					
Power	0 / 0 W					
Output						
Voltage	0.00 V					
Current	0.00 A					
Power	0 W					
Meter Info						
Voltage	0.00 V					
Current	0.00 A					
Power	0 W - Feed-in					
Meter Status	Off					
Switching Time						
FW Version						
СОММ	88.98					
DSP						

Connection of DC1



[BLOCK]

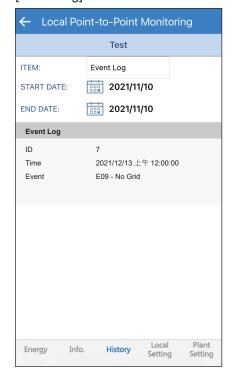


[INVERTER]

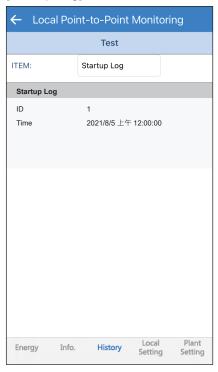
HISTORY

Connection of Inverter

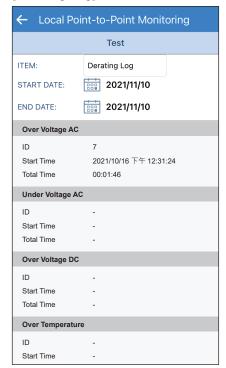
[Event Log]



[Startup Log]

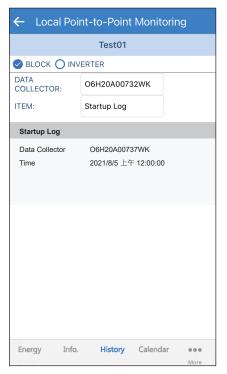


[Derating Log]

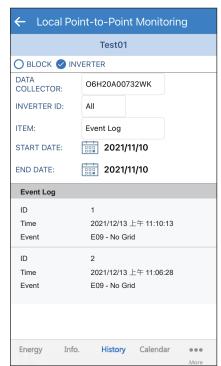


Connection of DC1

[BLOCK]



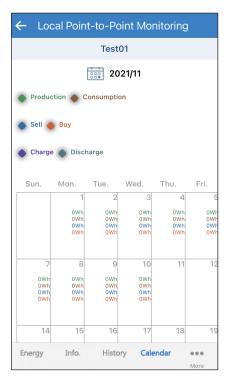
[INVERTER]



CALENDAR

The calendar is only displayed when under the connection with DC1. Users can check the energy flow day by day.

Connection of DC1



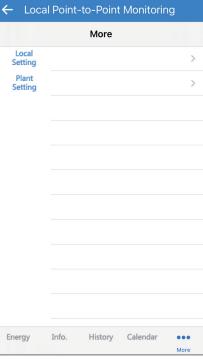
LOCAL SETTING

Connection of Inverter



Connection of DC1





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

PLANT SETTING

Users can change their plant name, plant picture, country and city in "Plant Setting".

Connection of Inverter



Connection of DC1



4.2.2. Remote monitoring

There are five tabs in "Remote monitoring."







[Remote Setting]



[Plant Setting]



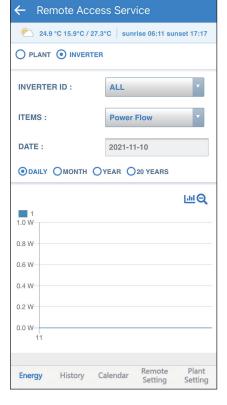
In "Energy" tab, users can check the energy production for their plant and the detail information of each inverter by selecting between Plant/ Inverter.

Connection of Inverter

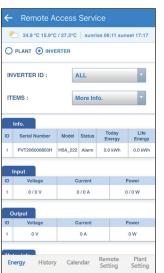
[PLANT]



[INVERTER]









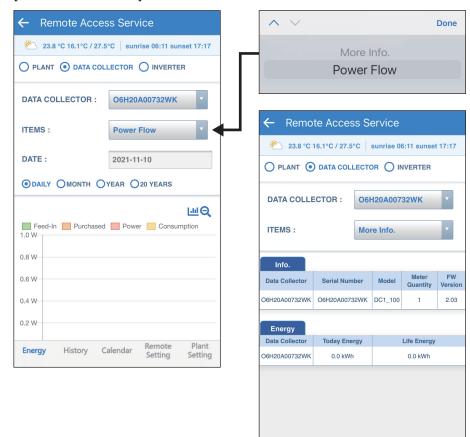


Connection of DC1

[PLANT]

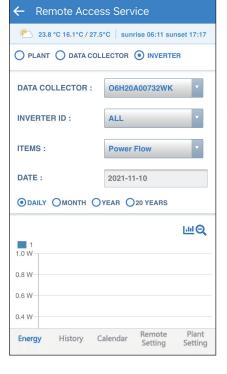


[DATA COLLECTOR]



Energy

[INVERTER]











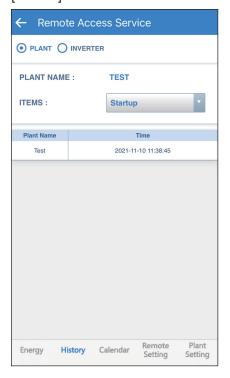
Remote Setting Plant Setting

In "History" tab, users can check the startup date and the event log for each inverter by selecting between Plant/ Inverter.



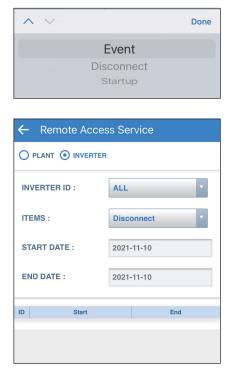
Connection of Inverter

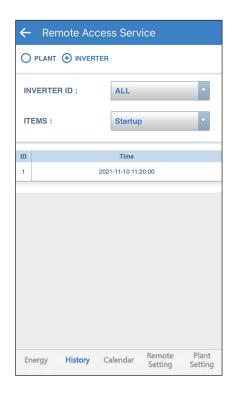
[PLANT]



[INVERTER]

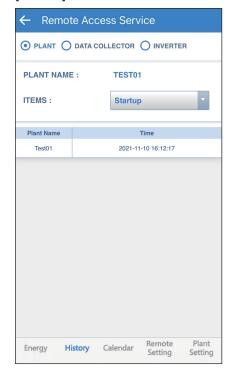






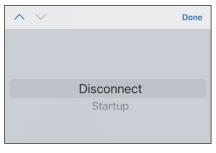
Connection of DC1

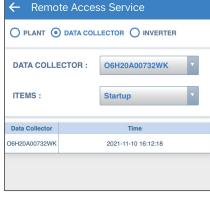
[PLANT]



[DATA COLLECTOR]

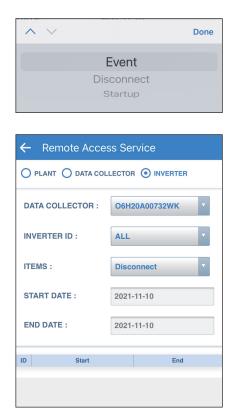


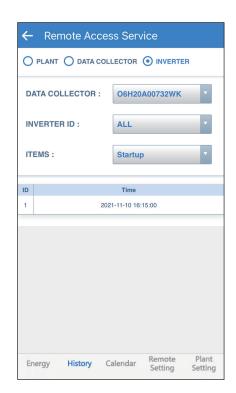




[INVERTER]







CALENDAR

Connection of Inverter



Connection of DC1



Plant Setting

Connection of Inverter

PLANT: Users can change plant info and share plant info with others.

BLOCK: Users can group several devices into a block and the information of the block will be shown in Energy tab.

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

NOTIFICATION: Users can set up multiple email account and the cloud will send fault/ error notification of the plant to these email addresses.

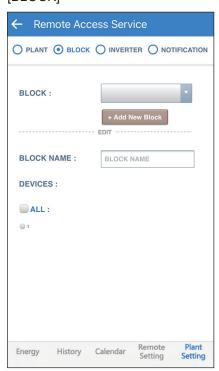
[PLANT]



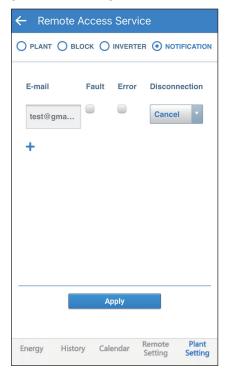
[INVERTER]



[BLOCK]



[NOTIFICATION]



Connection of DC1

PLANT: Users can change plant info and share plant info with others.

BLOCK: Users can group several devices into a block and the information of the block will be shown in Energy tab.

DATA COLLECTOR: Users can check ID and serial number of the DC1.

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

NOTIFICATION: Users can set up multiple email account and the cloud will send fault/ error notification of the plant to these email addresses.

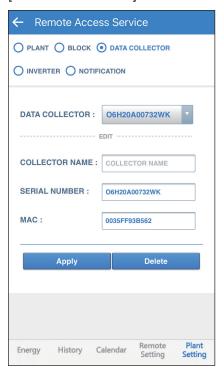
[PLANT]



[BLOCK]



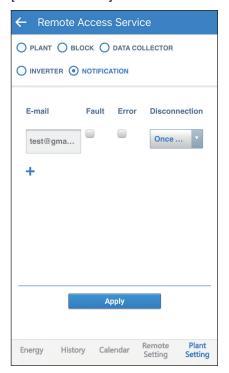
[DATA COLLECTOR]



[INVERTER]



[NOTIFICATION]



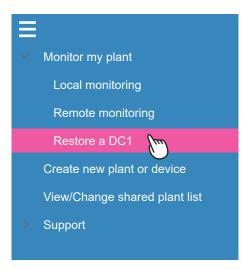
4.2.3. Restore a DC1

ATTENTION



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

Click Menu --> Restore a DC1

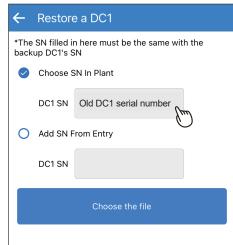


Please insert the USB with the backup file to a new DC1 and start to restore.

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

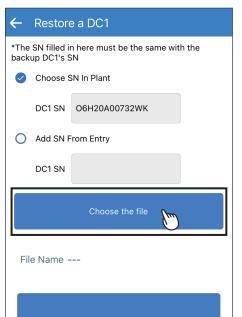


Select the serial number of the old DC1.

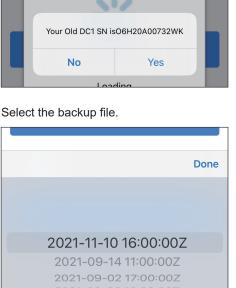


if the serial is not on the list, users can try to type in the S/N manually.

Click "Choose the file"



Confirm the serial number of the old DC1.



Check if the file is correct and click "START".

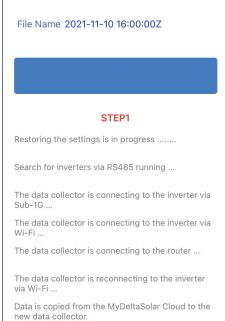




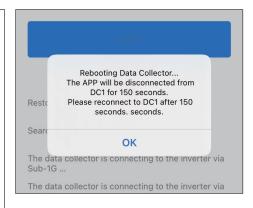
Type in the password of the old DC1.



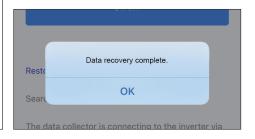
Starting the restore process.



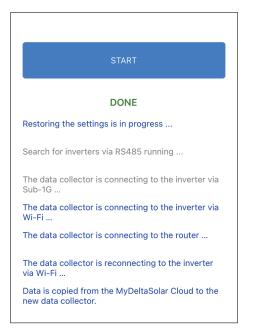
Restoring takes around 150 sec. Click "OK" to proceed.



Data recovery complete.

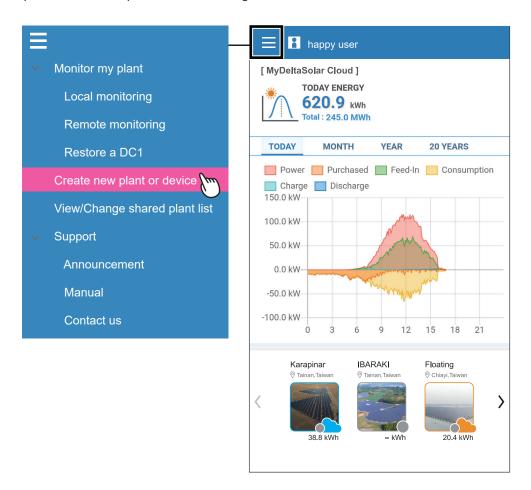


DONE.



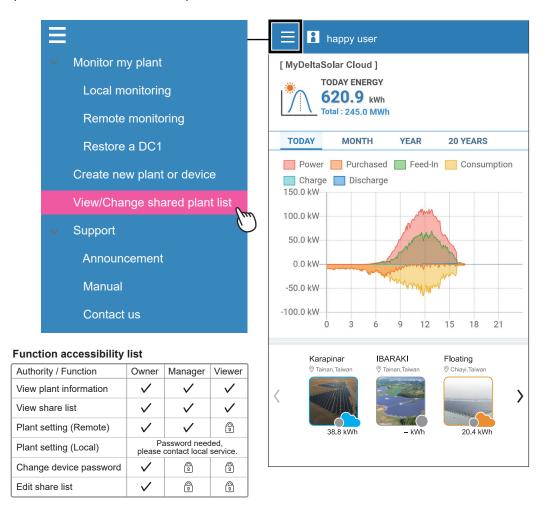
4.3. Create new plant or device

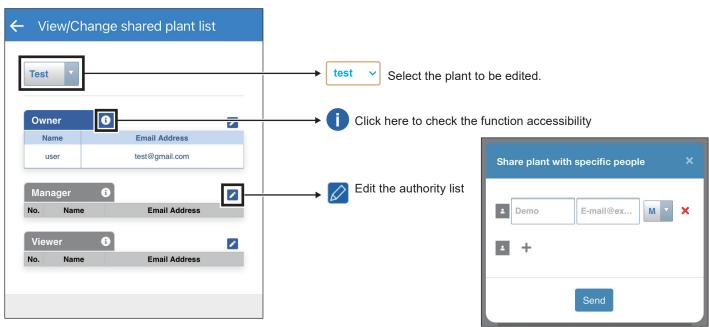
For more details, please refer to Chapter 2 "Commissioning".



4.4. View/Change shared plant list

User (owner) can arrange the authority for others. An account who has the authority to check the plant can view the shared plant list here. *Only a plant owner can edit the shared plant list.

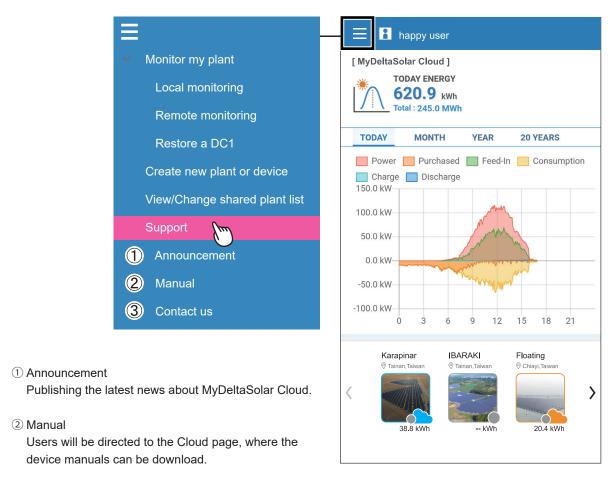




- * The plant owner can add another account also as a plant owner (Maximum number of owners: 2).
- * If a shared account has not registered to MyDeltaSolar Cloud, the Cloud will send an invitation email to them.

4.5. Support

There are three options in "Support": "Announcement", "Manual" and "Contact us".

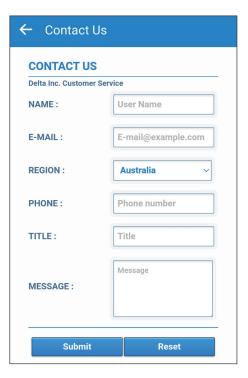


3 Contact us

With Internet ability: please fill in the request form and submit to the customer service. Without Internet ability: please contact the local contact window shown on APP.







5. Application

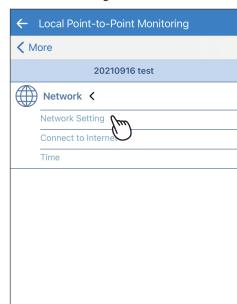
This chapter shows how to set up the two communication way of DC1.

5.1. Modbus TCP/IP

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

LOCAL SETTING -> Network

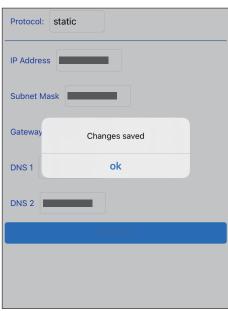
-> Network Setting

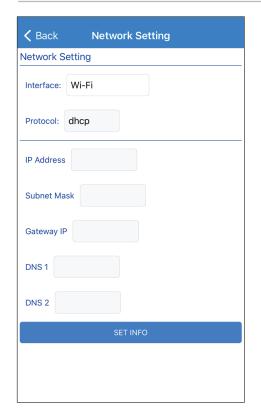


Select "static" for Protocol, after setting the IP information, click "SET INFO".



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 IF

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

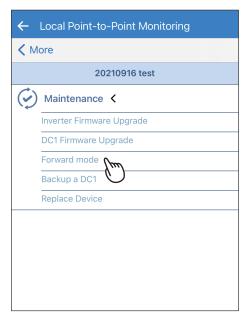
Same as DNS1, this is the alternate DNS.

Click "SET INFO" to complete the setup.

Read the external communication address via this IP.

Forward mode is suitable for third party monitoring systems which have already integrated Delta Modbus RTU protocol in.

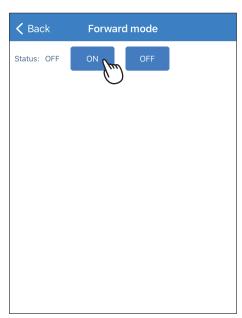
LOCAL SETTING -> Maintenance -> Forward mode



Please contact Delta local service for the password.



Click "OK" to save the settings.



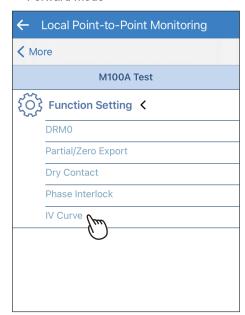
Click "YES".



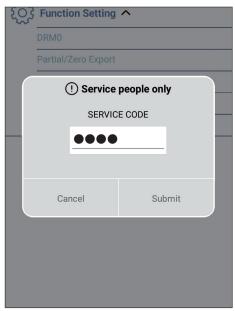
Save complete.



LOCAL SETTING -> Maintenance -> Forward mode



Please contact Delta local service for the password.

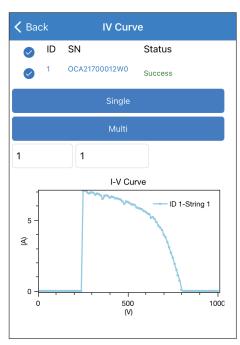


Check the inverter for IV curve scan.

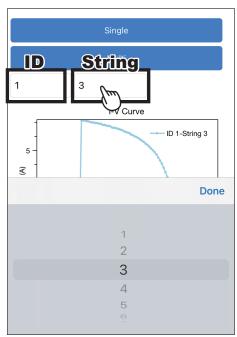


- a. Click "Single", DC1 will scan the IV curve one by one.
- b. Click "Multi", DC1 will scan the IV curve for all inverters at once.
- *We suggest to use "Single" to avoid power drop of your plant.

✓ Back IV Curve
☑ ID SN Status
☑ 1 OCA21700012W0 Standby
Single
Multi



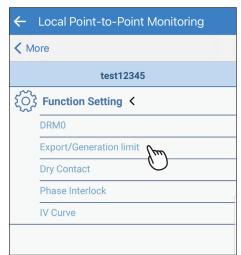
Select ID and String to see the IV curve.



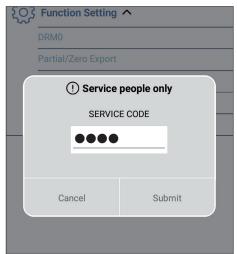
5.4. Dynamic Power Control (Export Limit Control & Generation Limit Control)

DC1

LOCAL SETTING -> Maintenance -> Export/Generation Limit



Please contact Delta local service for the password.



Please select the suitable function accordingly, then fill in the required setting and click "SAVE".



Function: Operation base on different regulation.

Mode: To enable or disable the function

Rates & Plant capacity: Setting of the export power

(Allowable export power = Plant capacity x Rates)

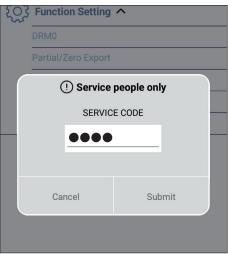
Flex Inverter

For those models in AU/NZ with built-in power meter, export limit and generation limit can be achieved without additional external power meter. Setting as shown as follows:

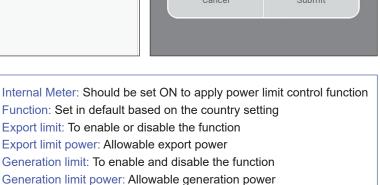
LOCAL SETTING -> Maintenance -> Export/Generation Limit

← Local Point-to-Point Monitoring
✓ More
Function Setting
DRM0
Export/Generation Limit

Please contact Delta local service for the



Make sure the Internal Meter is set "ON", turn on the required function and click "Single SET".





6. Maintenance

This chapter describes different maintaining processes for plants with Delta inverters, such as firmware update, inverter replacement, etc.

6.1. Firmware update

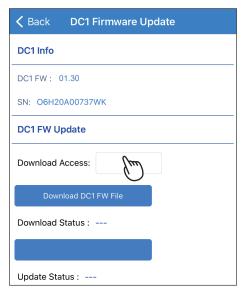
This section shows how to update the firmware for DC1 and WiFi inverter. Please refer to 6.1.1 and 6.1.2 for more details.

6.1.1. DC1 Firmware Update

[DC1 Firmware Update - Delta Server update method]

LOCAL SETTING -> Maintenance -> DC1 Firmware Update

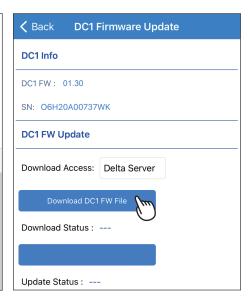
Select Download Access.



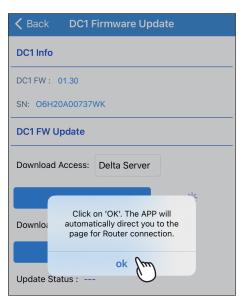
Click "Delta server".



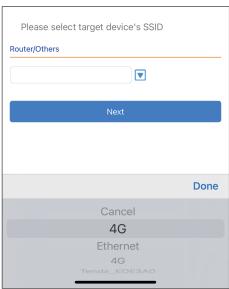
Click "DOWNLOAD DC1 FW FILE".



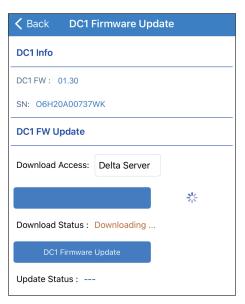
Click "OK".



Select a method to get Internet ability.



Downloading...



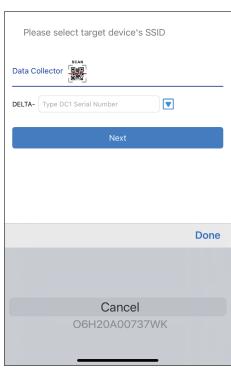
After the FW download, please click "DC1 FIRMWARE UPDATE" to start the updating process.



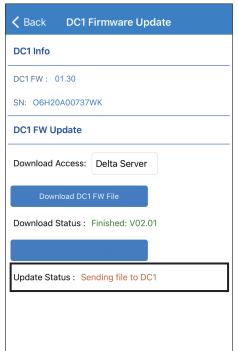
Click "OK".



Select the serial number of the DC1.



Sending file to DC1...



DC1 is updating...



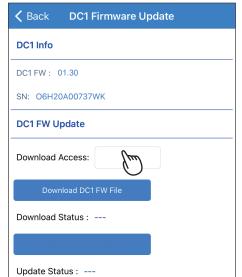
Successfully updated DC1.



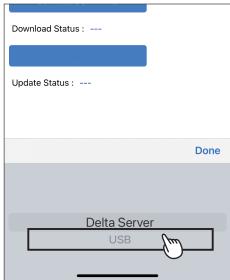
[DC1 Firmware Update - USB update method]

LOCAL SETTING -> Maintenance -> DC1 Firmware Update

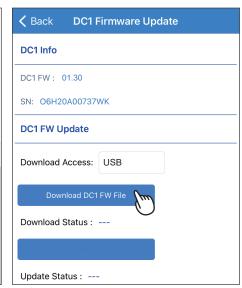
Select Download Access.



Click "USB".



Click "DOWNLOAD DC1 FW FILE".

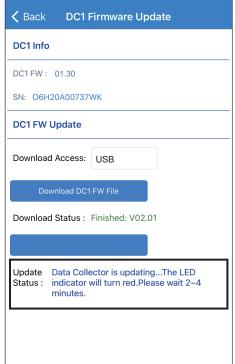


After the FW download,

please click "DC1 FIRMWARE UPDATE" to start the updating process.



DC1 is updating...



Successfully updated DC1.



6.1.2. Inverter FW Update

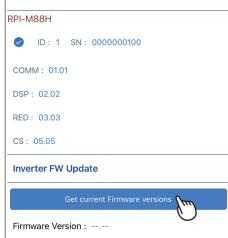
[Inverter FW Update - connection of DC1]

LOCAL SETTING -> Maintenance -> Inverter Firmware Update

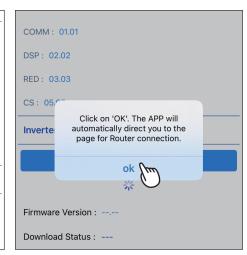
Select the Inverter S/N for FW update.



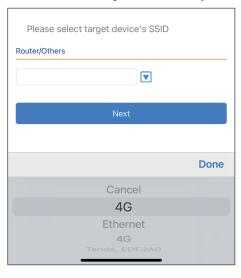
Click "GET CURRENT FIRMWARE VERSIONS".



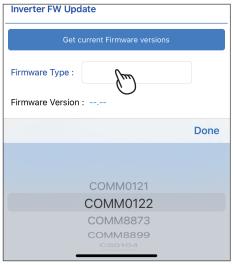
Click "OK".



Select a method to get Internet ability.



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



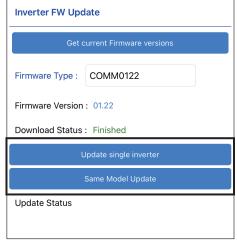
Click "YES".



Downloading...



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



Update single inverter

Only set for the selected Inverter

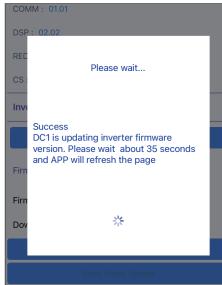
Same Model Update

Inverter settings for all the same models

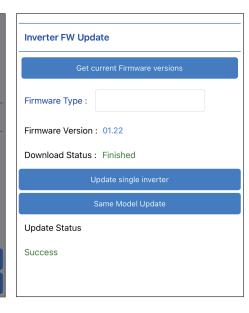
Click "OK".



Updating...



Success.



[Inverter FW Update - connection of inverter]

LOCAL SETTING -> Maintenance -> Firmware Update

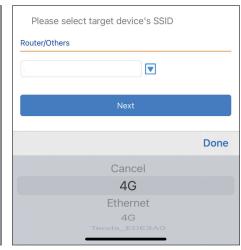
Enter Firmware update page.



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



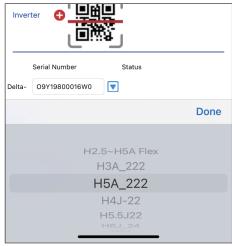
Select a method to get Internet ability.



Click "Inverter Model".



Select a 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...

ProcessorSelectTCP de

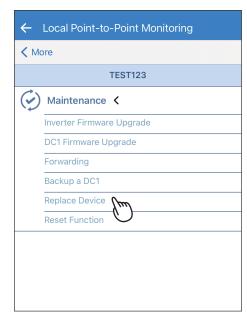


Click "OK".



This section describes how to replace a inverter when it is registered under a DC1.

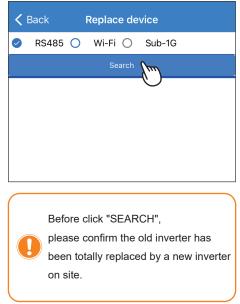
LOCAL SETTING -> Maintenance -> Replace Device



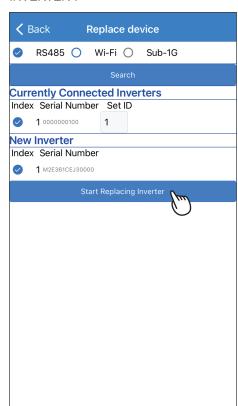
Please contact Delta local service for the password.



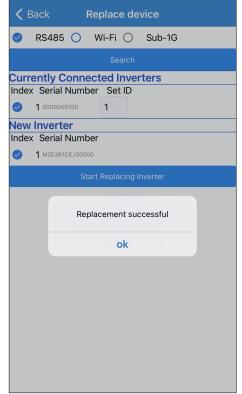
Select the connection method of DC1 and inverter then click "SEARCH".



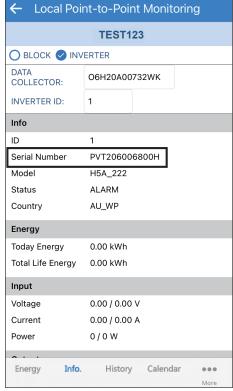
Select the two inverters that are going to swap, then click "START REPLACING INVERTER".



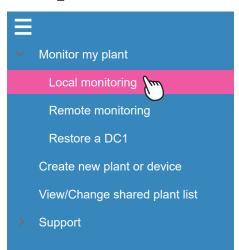
Replacement successful.



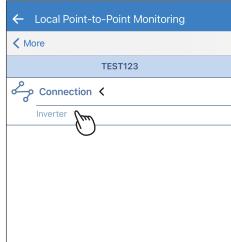
After replacement complete, users can go to the INFO page to check if the serial number has been successfully replaced.



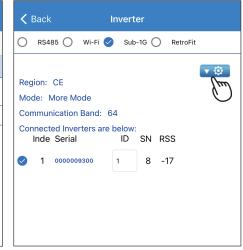
This process is to add an inverter to DC1 with SUB_1G communication.



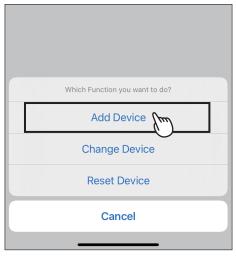
LOCAL SETTING -> Connection -> Inverter



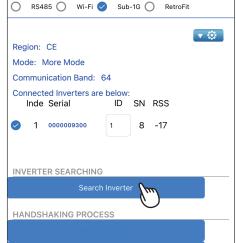
Click the Icon



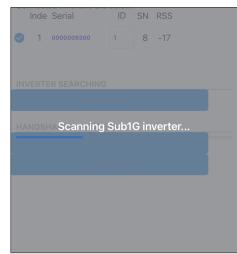
Click "Add Device".



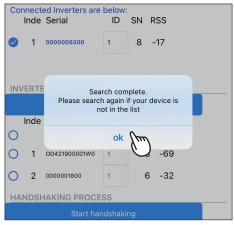
Click "SEARCH INVERTER".



Scanning SUB-1G inverter...



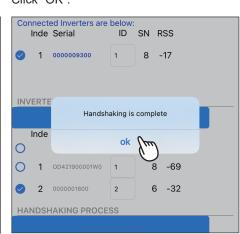
Click "OK".



Select the serial number of the inverter that is going to be added to DC1.



Click "OK".



Click "SUB-1G MONITOR ON".



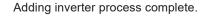
Click "OK".

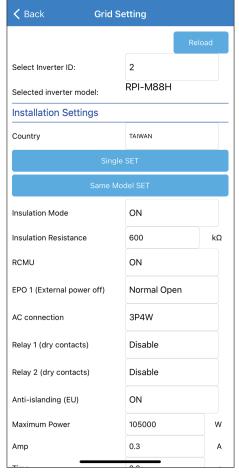


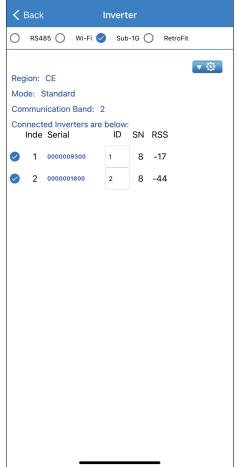
APP will direct to grid setting page.



Confirm and modify the setting value.







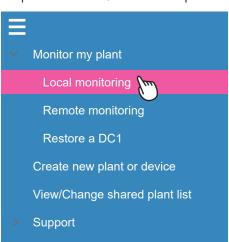
6.4. Back up DC1

ATTENTION

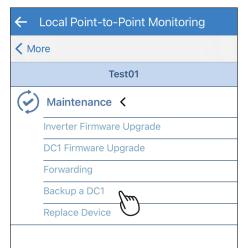


- A USB stick is needed for backup function.
- User can refer to Chapter 4.2.3 for resoring DC1.

Click Menu-->Local monitoring, then select LOCAL SETTING -> Maintenance the plant with the DC1 to be backup.



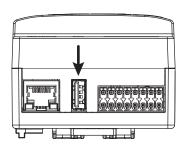
-> Backup a DC1



Please contact Delta local service for the password.



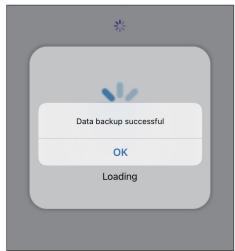
Connect the USB with DC1.



Click "BACKUP"



Backup success.



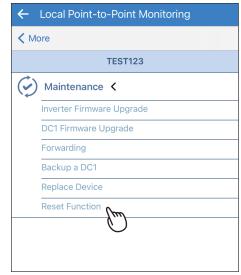
6.5. Reset DC1

- * This function is only for Sub1G communication.
- * Please contact local service for the password.

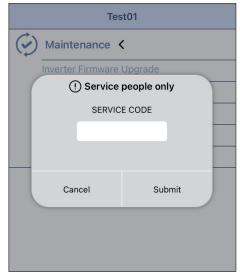
Click Menu-->Local monitoring, then select LOCAL SETTING -> Maintenance the plant with the DC1 to be reset.

Monitor my plant Local monitoring \m Remote monitoring Restore a DC1 Create new plant or device View/Change shared plant list Support

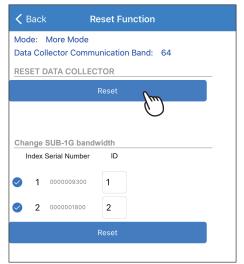
-> Reset Function



Please contact Delta local service for the password.



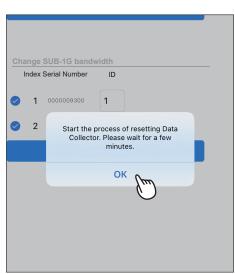
Click "RESET".

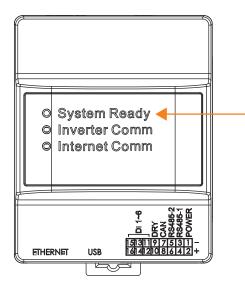


Click "YES".



Click "OK".



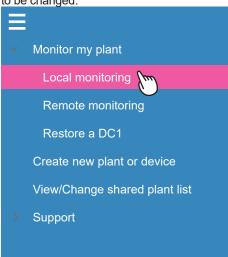


When resetting is done, the LED "System Ready" will turn red and after a while be back to green.

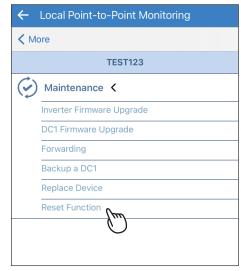
6.6. Change SUB-1G bandwidth

- * This function is only for Sub1G communication.
- * Please contact local service for the password.

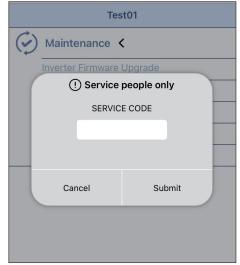
Click Menu-->Local monitoring, then select the plant whose SUB-1G bandwidth needs to be changed.



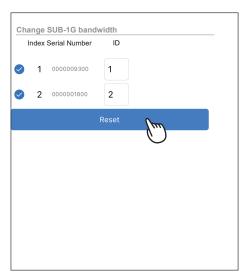
LOCAL SETTING -> Maintenance -> Reset Function



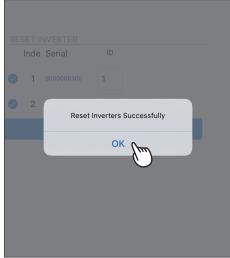
Please contact Delta local service for the password.



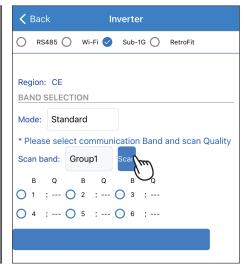
Click "Change"



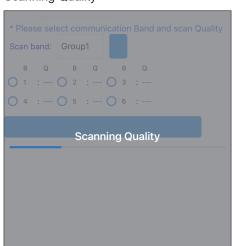
Click "OK".



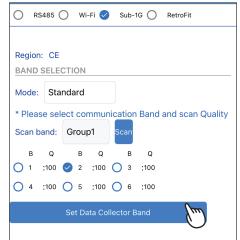
Select Mode and Scan band, click "Scan".



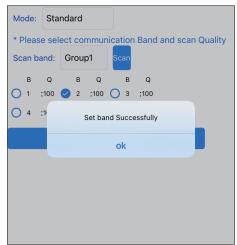
Scanning Quality



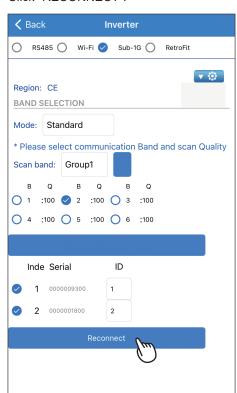
Select the proper bandwidth with good communication quality (100 is the best), and click "SET DATA COLLECTOR BAND"



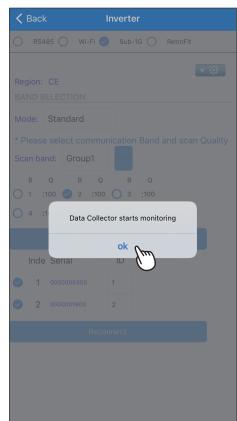
Set band Successfully.



Click "RECONNECT".



Click "OK".



Change finished.



7. Error Message and Troubleshooting

7.1. Error Event Histroy

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



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

7.2. Communication Troubleshooting

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

[Flex Inverter with MyDeltaSolar Cloud]

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 Inverter with 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 theck 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 theck 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 theck 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 MyDeltaSolar 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 theck 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. App Error Dialog Display

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

Error indication	Contents	Workaround
Cloud Register Failed	Register to cloud server fail	 Please confirm whether this DC1 has been registered on the cloud. Please confirm if Inverter has been registered on the cloud. Please confirm if DC1 has internet connection. Please confirm that the user account password is correct.
timeout	Set wifi inverter time out	Please confirm the communication quality between DC1 and inverter. Please confirm if Inverter has started. Please confirm if the smartphone is connected to DC1.
PASSWORD •••• You don't have permission LOGIN CANCEL	Insufficient permission warning message	Please enter the correct permission password.
Please connect your mobile device to the Data Collector OK Please connect your mobile device to the Data Collector. When the LED turns green. Wi-Fi connection is available. OK	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	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	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.
Click on 'OK'. The APP will automatically direct you to the page for Data Collector connection.	DC1 has not been connected.	Please confirm the connection between DC1 and the mobile device, and make sure there is only one mobile device connected to the DC1.

