EG4 18 KPV Commissioning guide.

For single-unit installation(Off Grid)

Note: This guide is to be used after the physical installation is complete

Note: For the best use case, ensure all settings are programmed per user/site requirements.

Step 1- Ensure all inverter connections are correct,all input and output breakers of the system are off.

Step 2-Turn on the system's DC breakers(between inverter and batteries is equipped), master battery beaker on.

Step 3 - For **Off-Grid** applications, press the gear icon on the display and set the following settings

Basic:

1. Zero Export- Enabled

Charging:

1. Operating Mode- Use SOC
2. Bat Charge Current Limit- 250A
3. Charge first (PV)- Disabled (Optional)
4. Charge first power- 6 KW (Situational)
5. Stop charge first SOC(%)- 100%
6. Generator
    A. Charge Current Limit- 60A
    B. Gen Rated Power- 24 KW (size of generator)
    C. Charge Start SOC(%)- 20
    D. Charge end SOC(%)- 100
7. AC Couple (Optional, Must have AC couple enabled in Advanced Settings)

Discharging:

1. Operating Mode- Use SOC
2. Discharge Current Limit (A)- 250
3. Discharge Start Power (W)- 100
4. Off-Grid Cut-off (%)- 20

Advanced:

1. PV Input- PV1, PV2, PV3 Independent (Situational)
2. MODBUS addr- 1
3. VPV Start (V)- 140
4. Off-Grid Output- Enabled
5. Seamless Switch- Enabled
6. Run Without Grid- Enabled
7. Ac Couple- Enabled (Optional and Situational)
8. Pv Arc- Enabled
9. EPS Output Without Battery- Disabled (Situational)
10. Grid Type- 240V/120V
11. Grid Freq- 60
12. Grid Regulation- 2:USA (rule21) or UL1741
13. Reconnect Time(S)- 300
14. Battery Type- 2:Lithium
15. Lithium Brand- 0:Lithium_0
16. Lead Capacity(AH)- 600 (only needed for Lead Acid Batteries)
17. Parallel Role- 1 Phase Master
18. R Phase
19. Share Battery (Enabled)

This will be for all customers who would like to have Smart Loads enabled but also want to hook up the generator to charge batteries. You will wire the generator to the grid input, and your smart loads into the generator input for this scenario. The generator will only be able to charge batteries.

1. Discharge
    A. Smart Loads (Must turn on in advance first)
        - Start PV Power (KW)- 6 (Situational)
        - Smart Load Start SOC (%)- 90
        - Smart Load End SOC (%)- 60
    2. Advanced
        A. Micro-Grid- Enabled (Situational, please see page 54 & 61 of the manual for more info)
        B. Smart Load- Enabled
        C. Run Without Grid- Enabled

Step 4:Power down the system to ensure that all the settings have been implemented.

Step 5: Turn on the System's DC breakers(batteries first the inverter breakers).

Step 6: Ensure that the PV voltage meets specifications per page – of the manual.Then turn on PV power at the disconnect and at the inverter.

Step 7: Switch on the AC output breakers on the inverter.

Step 7:Turn on the Breakers in your load panel.

For single unit installation(Grid tie/Exporting)

Step 1- Ensure all inverter connections are correct ,all input and output breakers of the system are off.

Step 2-Turn on the system's DC breakers(between inverter and batteries is equipped),master battery beaker on.

Step 3 - For grid tie/exporting applications press the gear icon on the display and set the following settings

Basic:

1. Export to Grid- Enabled
2. Max Export to Grid (KW)- 12 KW (Situational)
3. Zero Export- Disabled

Charging:

1. AC Charge- Enabled
2. According to SOC/Volt- Enabled
3. AC Charge Power- 6 KW (Situational)
4. Start AC Charge SOC(%)- 20
5. Stop AC Charge SOC(%)- 100%
6. AC Couple (Must enable in Advanced settings first)
    A. Start SOC(%)- 25
    B. End SOC(%)- 30

Discharging:

1. On-Grid Cut-Off(%)- 20
2. Grid Peak-shaving- Enabled (Situational, please see page 54 of the manual for more info)
3. Peak-Shaving power(KW)- 6 KW (Situational)
4. Start SOC 1- 80
5. Start SOC 2- 50

Advanced:

1. Meter or CT- 1: CT
2. MODBUS addr- 1
3. Meter Type- 0:1 Phase Meter
4. CT Ratio- 1/3000
5. AC Couple- Enabled (Optional)
6. Run Without Grid- Enabled

Advanced 2:

This will be for all customers that would like to have Smart Loads enabled. Your smart loads will be connected to the Generator port.

1. Discharge
    A. Smart Loads (Must enable in advance first)
        - Start PV Power (KW)- 6 (Situational)
        - Smart Load Start SOC (%)- 90
        - Smart Load End SOC (%)- 60
2. Advanced
    A. Micro-Grid- Disabled
    B. Smart Load- Enabled (Situational, please see page 54 of the manual for more info)
    C. Run Without Grid- Enabled

Step 4:Power down the system to ensure that all the settings have been implemented.

Step 5: Turn on the System's DC breakers(batteries first the inverter breakers).

Step 6: Ensure that the PV voltage meets specifications per page __ of the manual.Turn on PV(at the disconnect and the at the inverter).

Step 7:Switch on the AC breaker at the inverter.

Step 8:Switch on the AC output breakers on the inverter and at the load panel.

Wifi Dongle setup/end user accounts

Note: step up will be the same on both the phone application and the web browser.

Step 1 : Plug the wifi dongle up to the inverter and power the inverter until the wifi dongle is solid.

Step 2: Go to the wifi setting(in the setting on your mobile device or the both left corner of your laptop/computer)

Step 3: connect to the dongle(in the list of wifi it should show up as the S/N of the dongle)

Step 4: Enter 10.10.10.1 in your device's web browser(both username and password is **admin**).

Step 5 Navigate to the Station mode settings page and press scan.

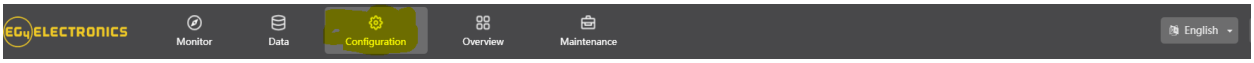
Step 6 select the Wifi network you want to connect to then click ok and input the password to the wifi.

Step 7 After saving the setting the dongle will reset and three lights will be solid.

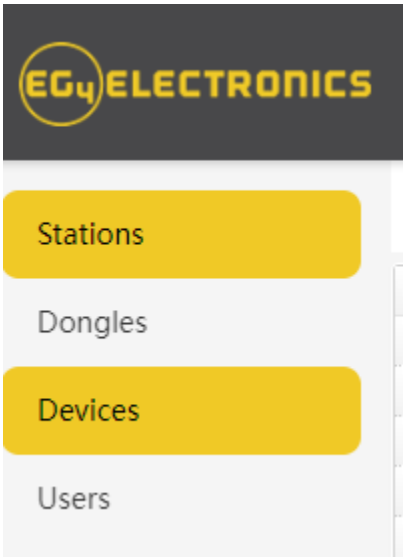
Step 8; You can now create/log in to your monitoring app.

For End users please follow these steps in the Web browser.

Step 1:Navigate to configuration at the to of the screen



Step 2: On the navigation screen select users on the left side



Step 3: select add end user at the top of the page

Step 4: fill out the information tab and click add.