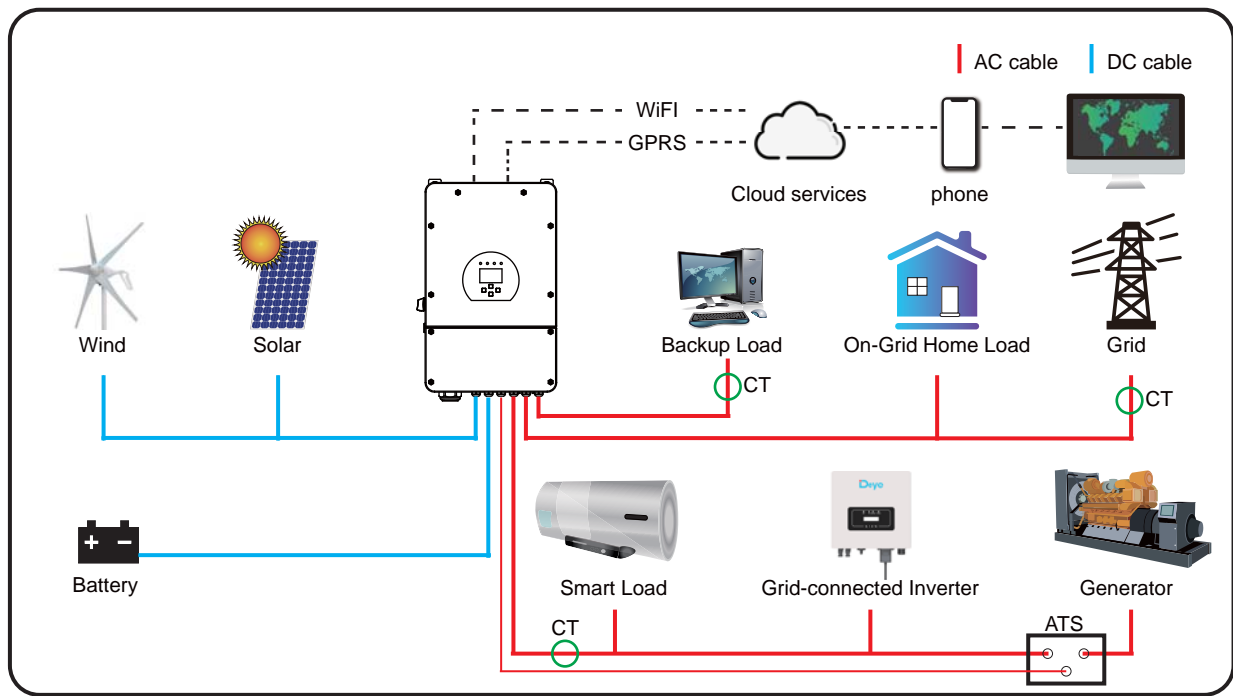




# Residential Energy Storage solutions



## We can offer

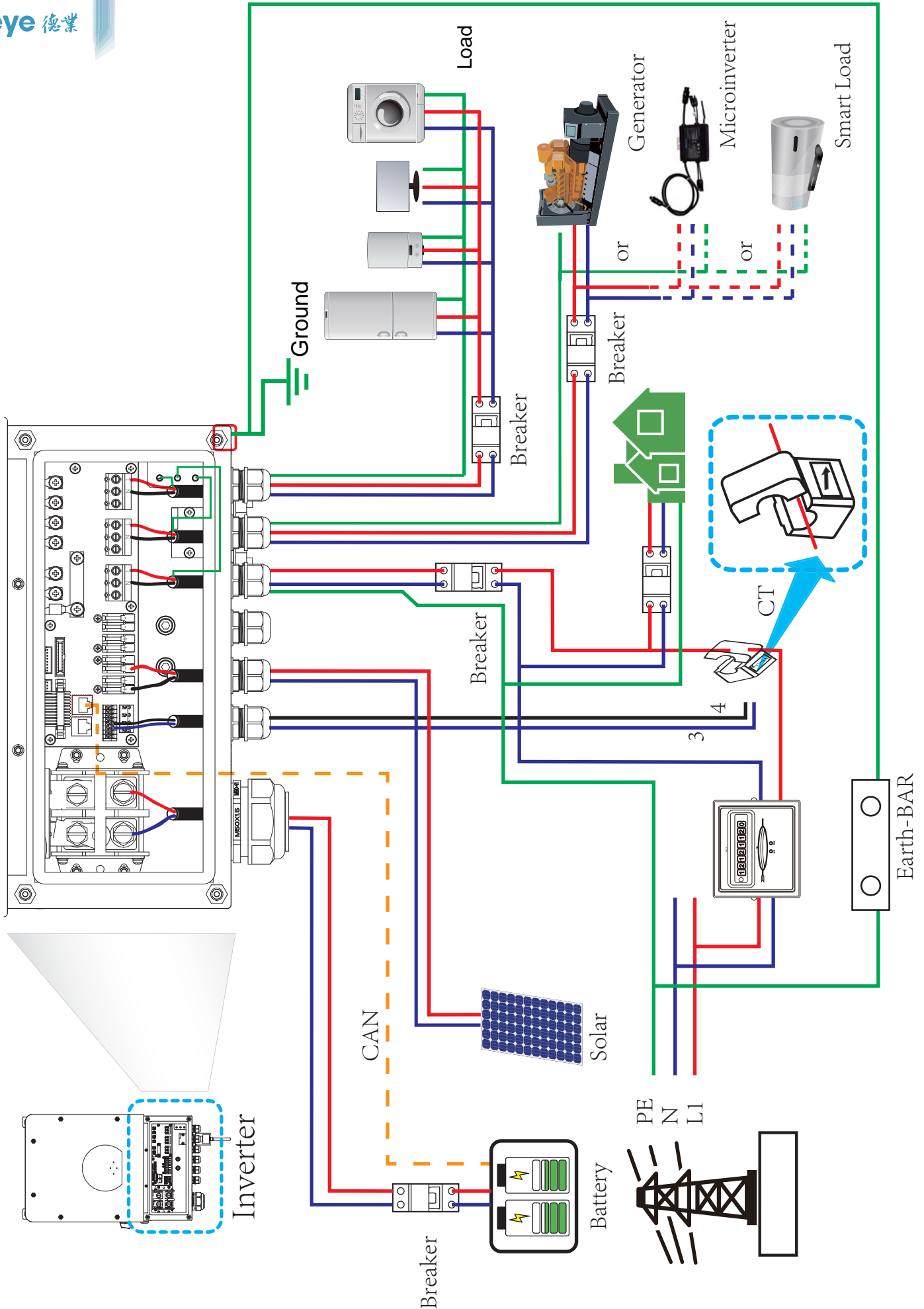
- ◆ Hybrid Inverter
- ◆ Solar panel
- ◆ Battery(AGM&Lithium)
- ◆ Meter/Current Sensor
- ◆ Datalogger(WIFI&GPRS) and APP
- ◆ Solutions &Any customized requirements

## Bring The Sun Home

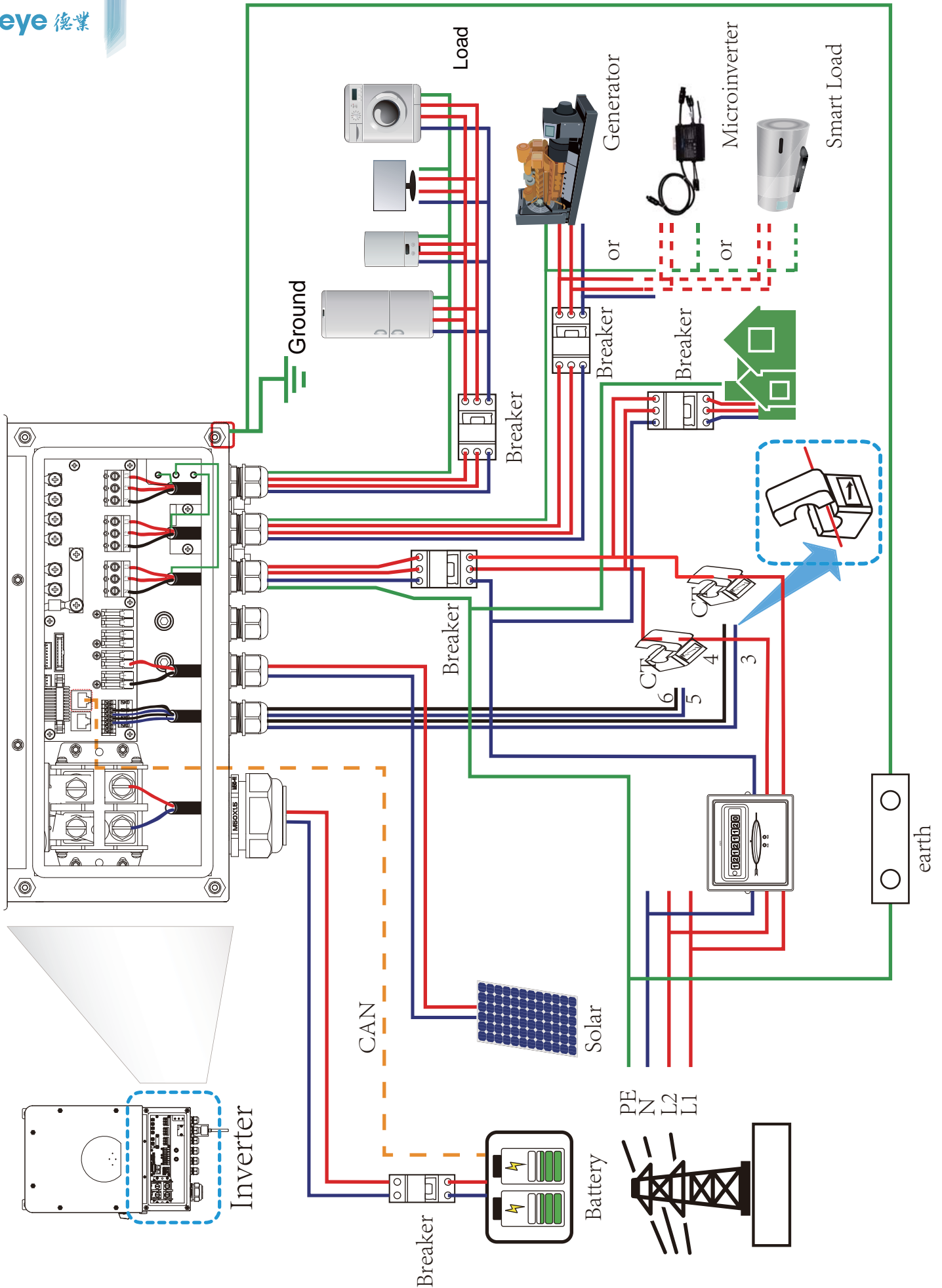


Small, But Powerful

# Wiring System for Inverter(Region:EU)

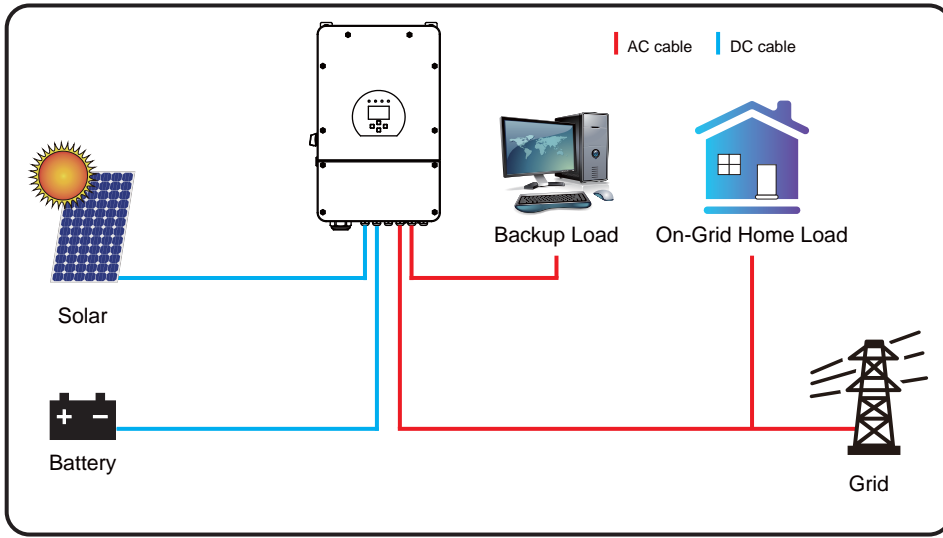


# Wiring System for Inverter(Region:US)



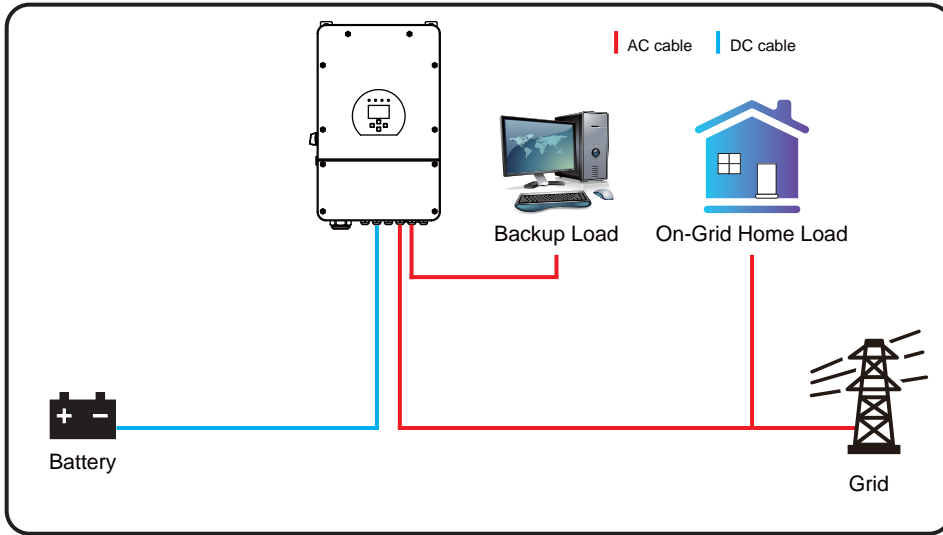


# Backup mode (1.Solar Panel&SmartLoad 2.No Solar)



◆ Maximize Your Power & Savings.

100% Self-Consumption PV will charge the Battery first, if you don't want to sell power to grid when the battery is full. Then you can turn on the smart-load function.



◆ No Solar Panel Low cost & Reliable.



# Backup mode (1.Solar Panel&SmartLoad 2.No Solar)

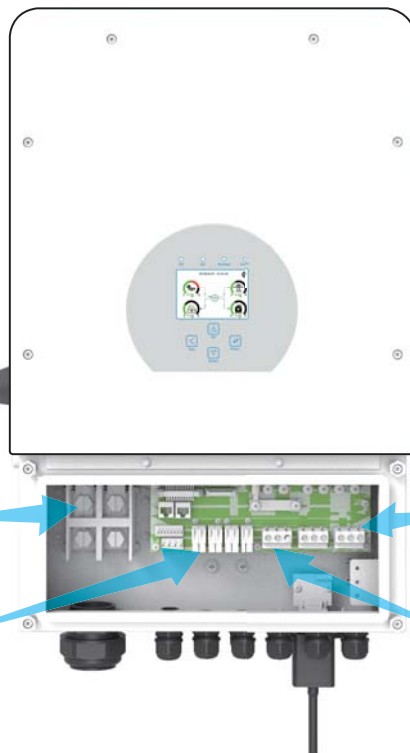
Deye 德業

PV switch---ON

Battery---ON

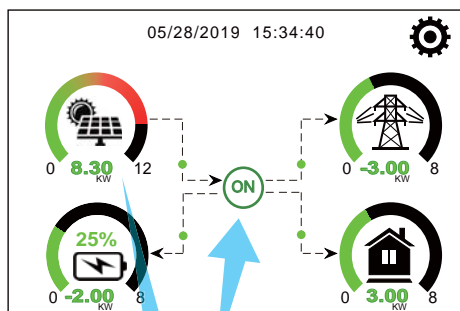
Check the BATT connection

Check the PV connection



Check the LOAD connection

Check the GRID connection



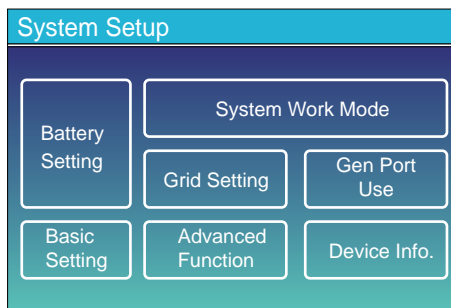
Inverter Running Status

ON: Inverter ON

OFF: Inverter OFF

Fxx: Alarm code Fxx

COMM.: Lost Communication with MCU



Battery Setting: Battery Mode, Charge&Discharge Current, Charge Voltage

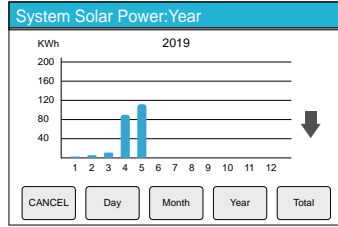
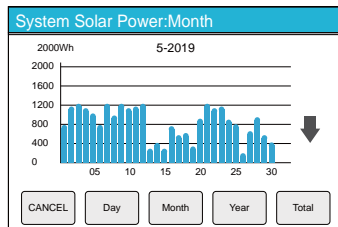
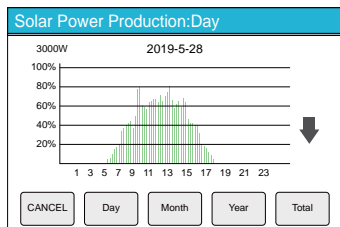
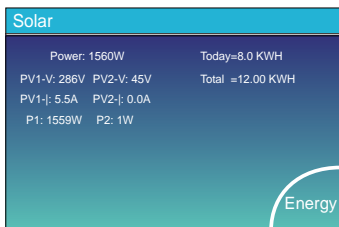
Basic Setting: Time, Beep, Factory Reset, Backlight, Lock out all changes

System Work Mode: Sell Grid, Zero-port to Load&Sell, Zero-port to CT&Sell,

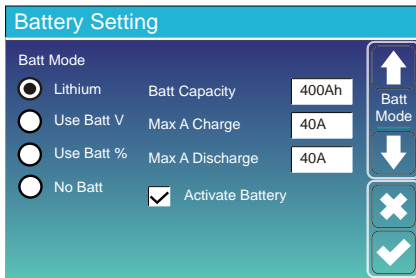
Grid Setting: Grid mode, voltage type, frequency, PF

Gen Port Use: Generator input, Smart Load output, MI input.

Device Info: System version, ID, Alarm codes

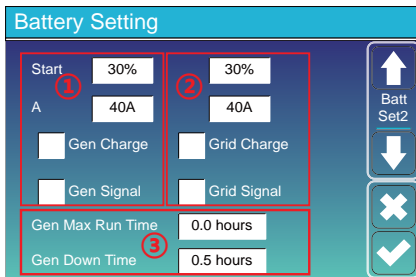


## Battery Setting



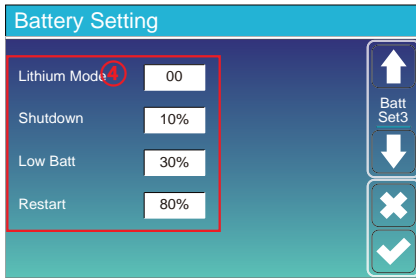
- Batt Mode---Please select 1 2 3 batt mode
  - 1.Lithium--Lithium Battery with BMS
  - 2.Use Batt V--AGM Battery, System works according to voltage
  - 3.Use Batt %--AGM Battery, System works according to SOC
  - 4.NO Batt--inverter can work without battery
- Batt Capacity---Please input the right Capacity of your battery
- Max. Charge&Discharge Current---0-185A
- Activate Battery---Enable

## If you select Lithium



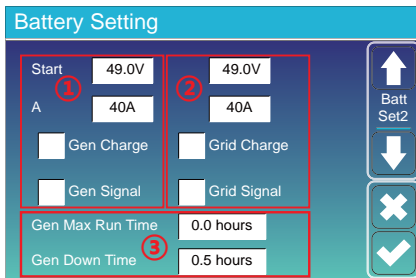
- This is Generator Charge,,please ignore this part if you don't have Generator. ①
- Start =30%---It indicates that the Generator will start when the Battery capacity is less than 30% in Off-grid mode.
- A = 40A---It indicates the Current that the Generator charges the Battery after starting.
- Gen Charge---It indicates the Switch that the Generator charges the Battery.
- Gen Signal ---It indicates whether the Generator's ATS signal is on or off.
- Gen Max RunTime ---It indicates the longest time Generator can run in one day,when time is up, the Generator will be turned off. 24H means that it does not shut down all the time. ③
- Gen DownTime ---It indicates the delay time of the Generator to shut down after it has reached the running time.

- You need set this part about Grid Charge. ②
- Start =30% ---No use, Just for customization.
- A = 40A ---It indicates the Current that the Grid charges the Battery.
- Gen Charge---It indicates the Switch that the Generator charges the Battery.
- Gen Signal ---Disable



- Lithium Mode --This is BMS protocol.Please reference the document (Approved Battery-Deye) ④
- Shutdown 10%--It indicates the inverter will shutdown if the SOC below this value.
- Low Batt 20% --It indicates the inverter will alarm if the SOC below this value.
- Restart 40% --It indicates the restart level when inverter shutdown.

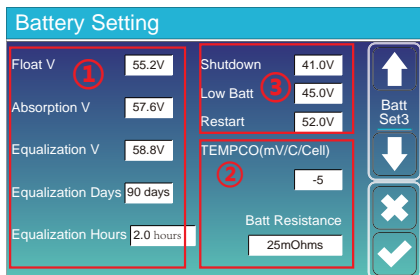
## If you select Use Batt V



- This is Generator Charge,please ignore this part if you don't have Generator. ①
- Start =49V---It indicates that the Generator will start when the Battery voltage is less than 49V in Off-grid mode.
- A = 40A---It indicates the Current that the Generator charges the Battery after starting.
- Gen Charge---The Switch that the Generator charges the Battery.
- Gen Signal ---It indicates whether the Generator's ATS signal is on or off.



Start =49V No use, just for customization. ②  
 A = 40A---It indicates the Current that the Grid charges the Battery.  
 Gen Charge---It indicates the Switch that the Grid charges the Battery.  
 Gen Signal ---It indicates whether the Generator's ATS signal is on or off.  
 Gen Max RunTime ---It indicates the longest time Generator can run in one day,when the time is up, the Generator will be turned off. 24H means that it does not shut down all the time. ③  
 Gen DownTime ---It indicates the delay time of the Generator to shut down after it has reached the running time.

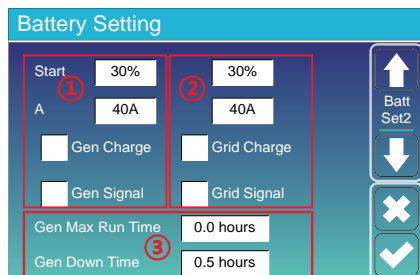


There are 4 stages of charging the Battery. ①

This is for professional installers,you can keep it if you do not know. ②

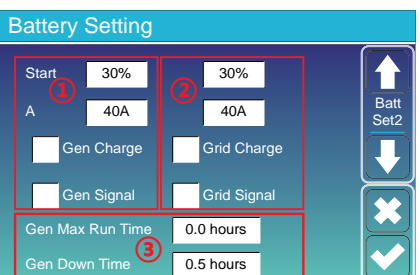
Shutdown 41V--The inverter will shutdown if the Voltage below this value. ③  
 Low Batt 45V--The inverter will alarm if the Voltage below this value.  
 Restart 52V--Restart level when inverter shutdown

## If you select Use Batt %

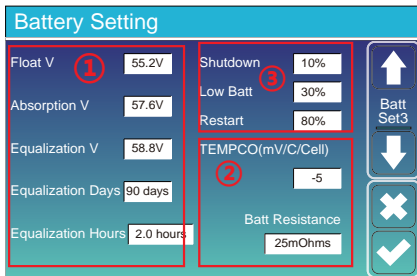


This is Generator Charge,please ignore this part if you don't have Generator. ①  
 Start =30% ---It indicates that the Generator will start when the Battery capacity is less than 30% in Off-grid mode.  
 A = 40A ---It indicates the Current that the Generator charges the Battery after starting.  
 Gen Charge---It indicates the Switch that the Generator charges the Battery.  
 Gen Signal ---It indicates whether the Generator's ATS signal is on or off. ③  
 Gen Max RunTime ---It indicates the longest time Generator can run in one day, when the time is up, the Generator will be turned off. 24H means that it does not shut down all the time.  
 Gen DownTime ---It indicates the delay time of the Generator to shut down after it has reached the running time.

You need to set this part about Grid Charge. ②  
 Start =30%---no use, just for customization.  
 A = 40A---It indicates the Current that the Grid charges the Battery.  
 Grid Charge---The Switch that the Grid charges the Battery.  
 Grid Signal ---Disable



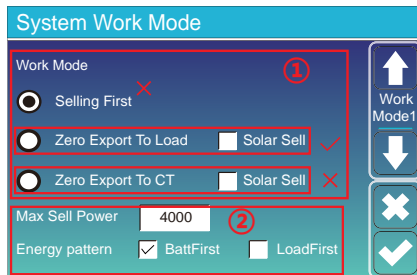
This is Generator Charge,please ignore this part if you don't have Generator. ①  
 Start =30% ---It indicates that the Generator will start when the Battery capacity is less than 30% in Off-grid mode.  
 A = 40A ---It indicates the Current that the Generator charges the Battery after starting.  
 Gen Charge---The Switch that the Generator charges the Battery.  
 Gen Signal ---It indicates whether the Generator's ATS signal is on or off. ③  
 Gen Max RunTime ---It indicates the longest time Generator can run in one day, when the time is up, the Generator will be turned off. 24H means that it does not shut down all the time.  
 Gen DownTime ---It indicates the delay time of the Generator to shut down after it has reached the running time.



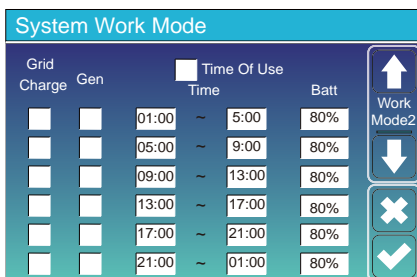
You need to set this part about Grid Charge. ②  
 Start =30%---no use , for customization.  
 A = 40A---It indicates the Current that the Grid charges the Battery.  
 Grid Charge---The Switch that the Grid charges the Battery.  
 Grid Signal ---Disable.

These are 4 stages of charging the Battery . ①  
 This is for professional installers,you can keep default if you do not know. ②  
 Shutdown 10%--the inverter will shutdown if the SOC below this value. ③  
 Low Batt 30%--the inverter will alarm if the SOC below this value.  
 Restart 80%--Restart level when inverter shutdown.

## System Work Mode

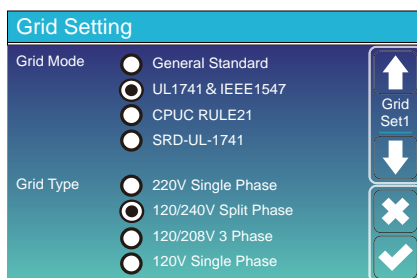


Zero Export To Load+ Disable Solar Sell. ①  
 Max. Sell Power----Modify by yourself ②  
 BattFirst----Solar will charge the battery first,then to the load  
 LoadFirst----Solar will feed-out to the load first,then to the battery



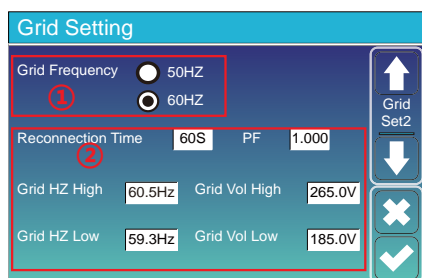
Time of Use----Disable  
 we have six Time of Use,Every time period must be from small to large.  
 Grid Charge---enable,When the actual SOC is smaller than the set value, the grid will charge the battery.  
 Grid Charge---Disable,The grid does not charge the battery.  
 Grid Charge---enable,When the actual SOC is smaller than the set value, the grid will charge the battery.  
 Grid Charge---Disable,The grid does not charge the battery.

## Grid Setting



Please select the correct Grid Mode in your local area. If you are not sure, please choose General Standard.  
 Please select the correct Grid Type in your local area,otherwise the machine will not work or be damaged.





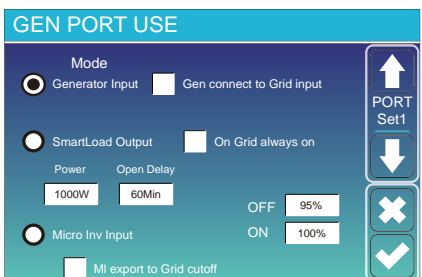
UL1741&IEEE1547, CPUC RULE21, SRD-UL-1741

No need to set the function of this interface.

General Standard

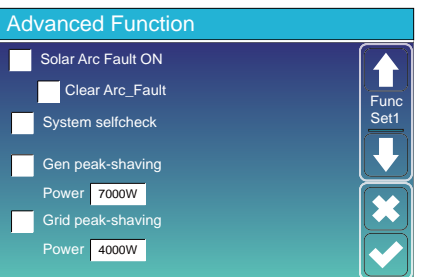
- ① Please select the correct Grid Frequency in your local area.
- ② You can keep this in default value.

## Gen Port Use

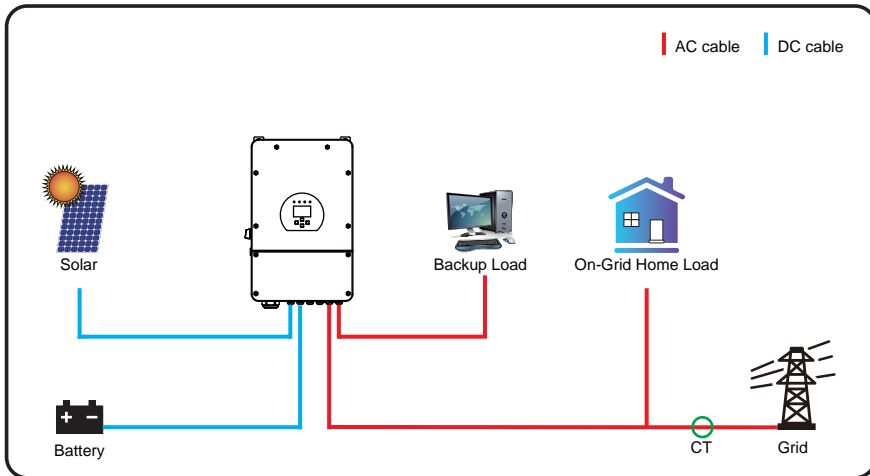


No need to set the function of this interface.

## Advanced Function



Solar Arc Fault ON---This is only for US.  
 System selfcheck---Disable. this is only for factory.  
 Gen Peak-shaving---Disable  
 Grid Peak-shaving---Disable. When the power of the grid exceeds the set value, the inverter will provide the redundant part to ensure that the grid power does not exceed the set value.



## ◆ Zeor-export to Home(CT)

Energy generated by the inverter will not exceed your Home Load.

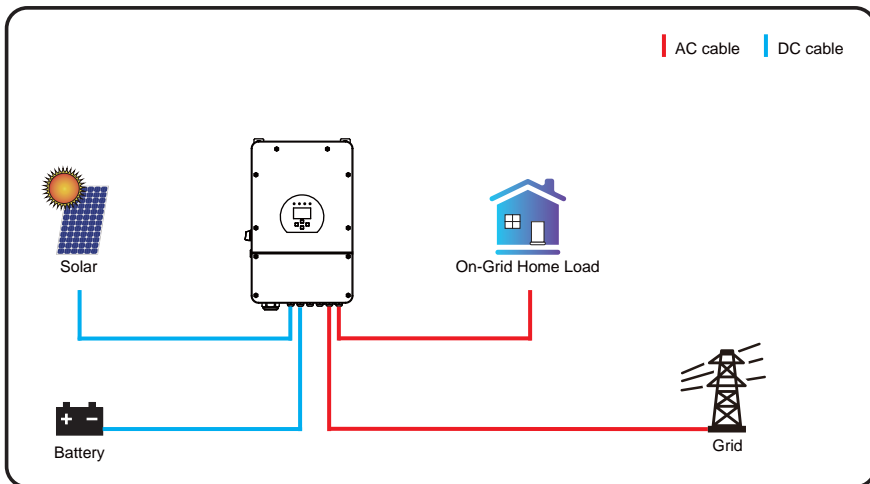
Customer needs to install the external CT.

Single Phase--need one Current sensor.

Split Phase--need two Current sensors.

when the battery is Full and you do not want to sell power to Grid, then you can turn on the Smart-Load function.

100% Self Consumption.



## ◆ Zeor-export to Load

Energy generated by the inverter will not exceed your Backup Load. Inverter has Integrated with Current Sensor. Do not need external CT.

when the battery is Full and energy does not need to be fed out to Grid, open Smart-Load. 100% Self Consumption.



# Zero-export

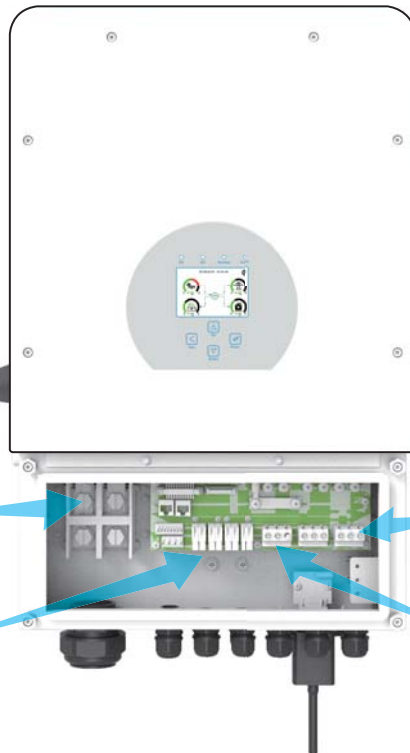
Deye 德業

PV switch---ON

Battery---ON

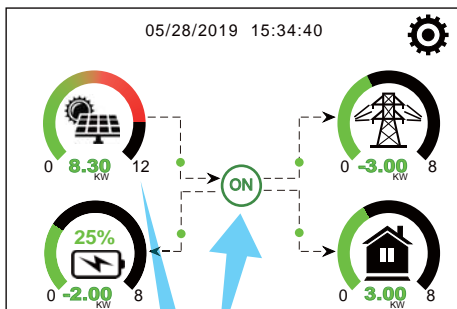
Check the BATT connection

Check the PV connection



Check the LOAD connection

Check the GRID connection



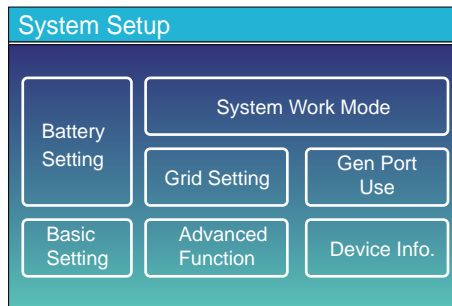
Inverter Running Status

ON: Inverter ON

OFF: Inverter OFF

Fxx: Alarm code Fxx

COMM.: Lost Communication with MCU



Battery Setting: Battery Mode, Charge&Discharge Current, Charge Voltage

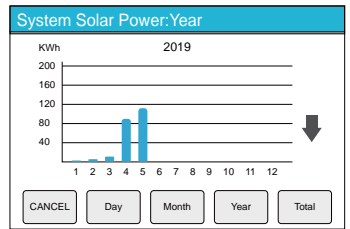
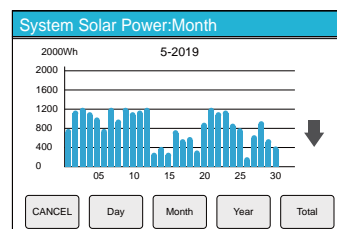
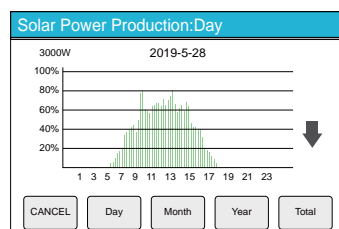
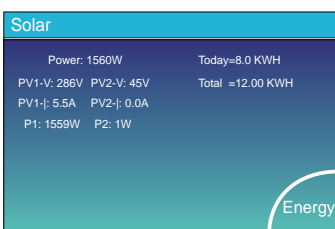
Basic Setting: Time, Beep, Factory Reset, Backlight, Lock out all changes

System Work Mode: Sell Grid, Zero-port to Load&Sell, Zero-port to CT&Sell,

Grid Setting: Grid mode, voltage type, frequency, PF

Gen Port Use: Generator input, Smart Load output, MI input.

Device Info: System version, ID, Alarm codes





## Battery Setting

**Battery Setting**

Batt Mode

Lithium    Batt Capacity    400Ah

Use Batt V    Max A Charge    40A

Use Batt %    Max A Discharge    40A

No Batt     Activate Battery

↑ Batt Mode

↓

✕

✓

- Batt Mode---Please select 1 2 3 batt mode.
  - 1.Lithium--Lithium Battery with BMS .
  - 2.Use Batt V--AGM Battery, System works according to voltage .
  - 3.Use Batt %--AGM Battery, System works according to SOC.
  - 4.NO Batt--System has no Battery, it becomes On-Grid inverter.
- Batt Capacity---Please select the right Capacity of your battery.
- Max. Charge&Discharge Current---0-185A
- Activate Battery---Enable

## If you select Lithium

**Battery Setting**

Start

A

Gen Charge     Grid Charge

Gen Signal     Grid Signal

Gen Max Run Time

Gen Down Time

↑ Batt Set2

↓

✕

✓

This is Generator Charge, if you don't have a generator, please ignore this part. ①

Start =30%---It means that when the battery capacity is less than 30% and inverter is in the off-grid mode, the generator will start. ③

A = 40A---It means the current that the generator charges the battery after its starting.

Gen Charge---It means the switch that generator charges the battery.

Gen Signal ---It means whether the generator's ATS signal is on or off.

Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H shows that the generator will always be running without shutting down.

Gen DownTime ---It means the delay time after the generator reaches the running time.

This is Grid Charge, you need to select. ②

Start =30%---no use, for customization.

A = 40A---It means the current that the grid charges the battery.

Gen Charge---It means the switch that the grid charges the battery.

Gen Signal ---Disable

**Battery Setting**

Lithium Mode

Shutdown

Low Batt

Restart

↑ Batt Set3

↓

✕

✓

Lithium Mode--This is BMS protocol, please reference the document (Approved Battery-Deye) . ④

Shutdown 10%--the inverter will shutdown if the SOC below this value.

Low Batt 30%--the inverter will alarm if the SOC below this value.

Restart 80%--Restart level when inverter shutdown.

## If you select Use Batt V

**Battery Setting**

Start

A

Gen Charge     Grid Charge

Gen Signal     Grid Signal

Gen Max Run Time

Gen Down Time

↑ Batt Set2

↓

✕

✓

This is Generator Charge, if you do not have a generator, please ignore this part . ①

Start =49V---It means when the battery voltage is less than 49V and the inverter is off-grid, the generator will start. ③

A = 40A---It means the current that the generator charges the battery after starting-up.

Gen Charge---It means the switch that the generator charges the battery.

Gen Signal ---It indicates whether the generator's ATS signal is on or off.

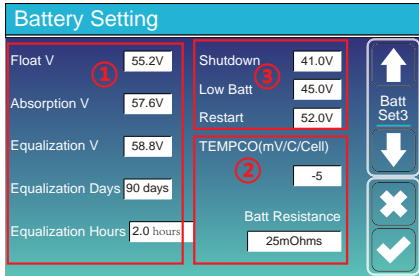
Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It means the delay time of the generator to shut down after it has reached the run time.



# Zero-export

Start =49V no use, for customization. ②  
 A = 40A---It represents the current that the grid charges the battery.  
 Grid Charge----It indicates the switch that the grid charges the battery.  
 Grid Signal ---disable.

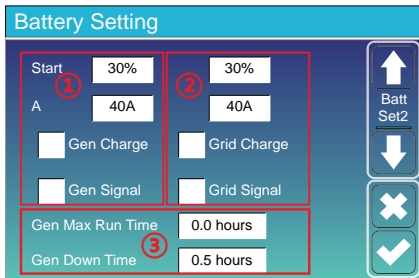


These are 4 stages of charging the Battery . ①

This is for professional installers,you can keep default if you do not know. ②

Shutdown 41V--the inverter will shutdown if the Voltage below this value. ③  
 Low Batt 45V--the inverter will Alarm if the Voltage below this value.  
 Restart 52V--Restart level when inverter shutdown.

## If you select Use Batt %



This is Generator Charge,If you do not have a generator, please ignore this part . ①

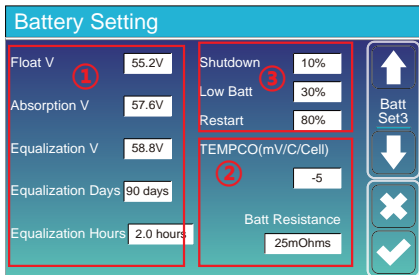
Start =30%---It means that when the battery capacity is less than 30% and the inverter is in the off-grid mode, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.  
 Gen Charge---It represents the switch that the generator charges the battery.  
 Gen Signal ---It indicates whether the generator's ATS signal is on or off.  
 Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up,the generator will be turned off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay time of the generator to shut down after it has reached the running time.

This is Grid Charge, you need select. ②

Start =30%---no use, for customization.  
 A = 40A---It represents the current that the grid charges the battery.  
 Grid Charge---It represents the switch that the grid charges the battery.  
 Grid Signal ---Disable

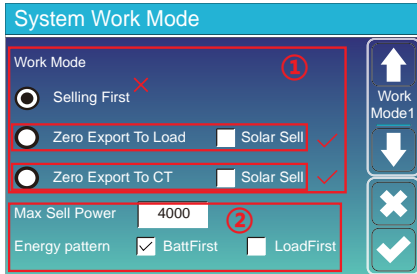


These are 4 stages of charging the Battery. ①

This is for professional installers,you can keep default if you do not know. ②

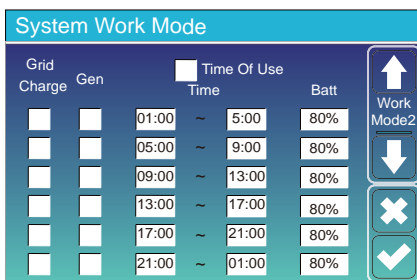
Shutdown 10%--the inverter will shutdown if the SOC below this value. ③  
 Low Batt 20% --the inverter will alarm if the SOC below this value.  
 Restart 40% --Restart level when inverter shutdown.

## System Work Mode



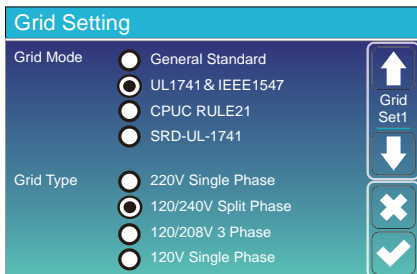
Zero Export To Home+ Disable Solar Sell  
or Zero Export To Load+ Disable Solar Sell ①

Max. Sell Power----Modfiy by yourself.  
BattFirst----Solar will charge the battery first,then to the load.  
LoadFirst----Solar will feed-out to the load first,then to the battery.

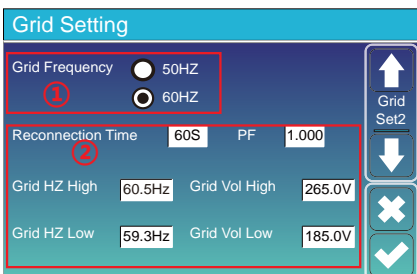


Time of Use----Disable

## Grid Setting



Please choose your local Grid Mode, if you are not sure, please choose General Standard.  
You must choose your local Grid Type correctly, otherwise the machine will not work or be damaged.



UL1741&IEEE1547, CPUC RULE21, SRD-UL-1741

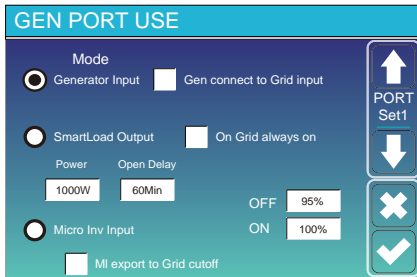
Don't need to set the value of this interface.

General Standard

① Please choose your local Grid Frequency.

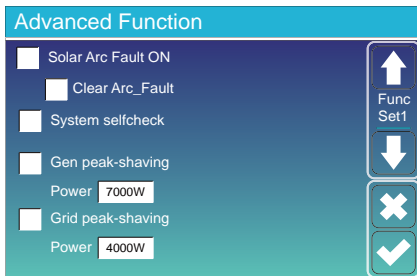
② You can keep this in default value.

## Gen Port Use



No need to set the function of this interface.

## Advanced Function

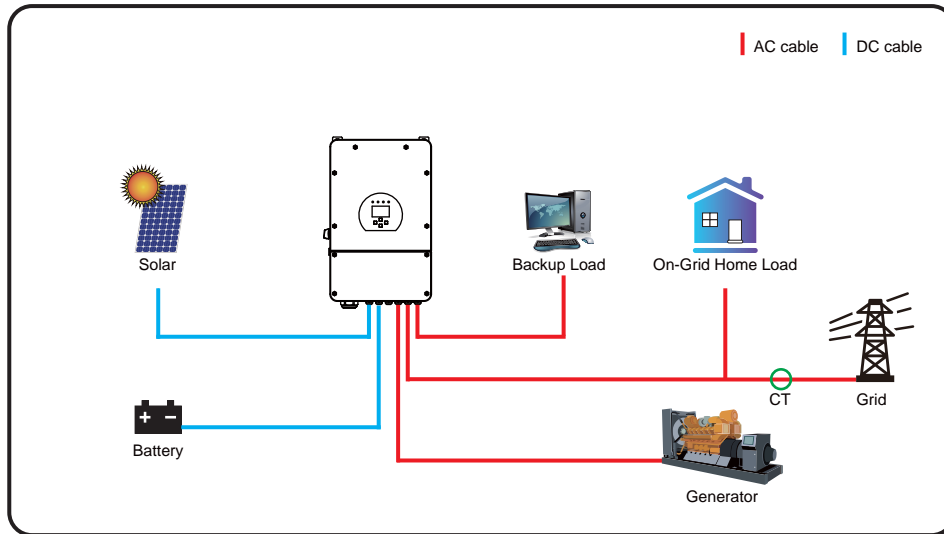


Solar Arc Fault ON---This is only for US.

System selfcheck---Disable. this is only for factory.

Gen Peak-shaving---Disable

Grid Peak-shaving---Disable When the power of the grid exceeds the rated value of it, the inverter will provide the redundant part to ensure that the grid will not overload.



## ◆Maximize Benefits,Six time of use

Increasing Self-Consumption & Control the Solar

During the Day, energy will charge the Battery.At night the Battery energy will feed to the Home-Load.

## ◆Peak Shaving-To Grid

You can enable Peak Shaving function,and set the peaking shaving power on the LCD or APP.

## ◆UPS,Power Supply for Important Loads

Connected to the backup side of the inverter,such as computers. When the grid fails, the system automatically switches to backup mode within 10ms.

## ◆Generator connector/ATS Single

Automatically start and shutdown Generator---Microgrid.

## ◆Peak Shaving-To Generator

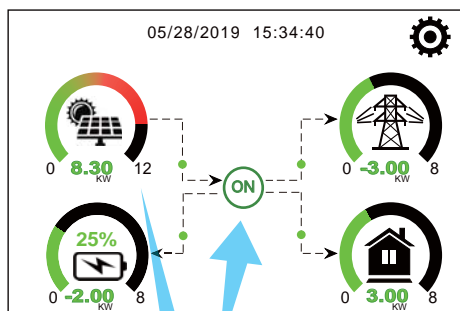
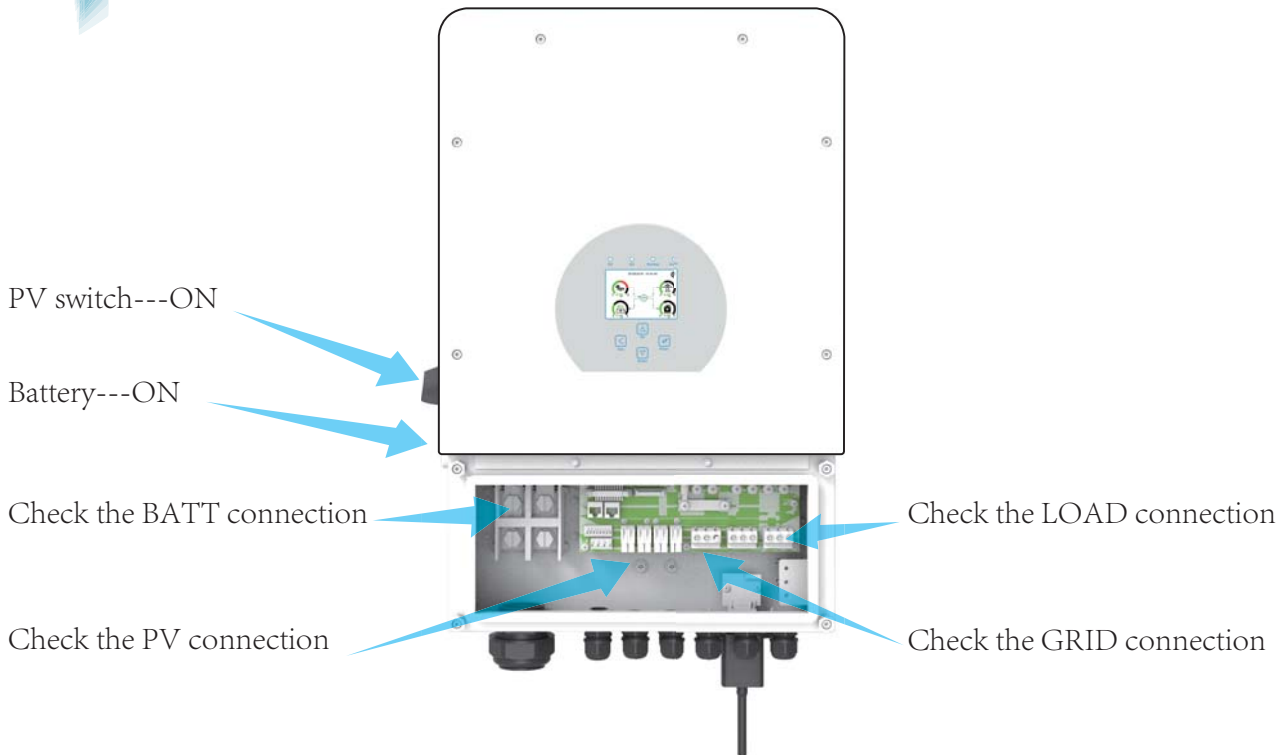
You can enable Peak Shaving function,and set the peaking shaving power on the LCD or APP.





# Solar Sell + Time of Use + Generator

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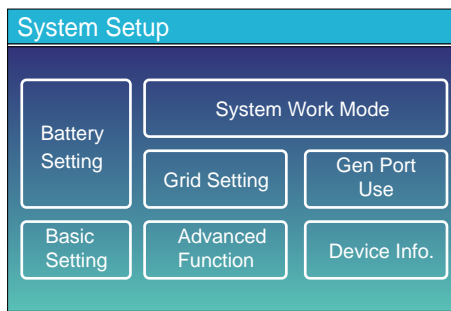
Inverter Running Status

ON: Inverter ON

OFF: Inverter OFF

Fxx: Alarm code Fxx

COMM.: Lost Communication with MCU



Battery Setting: Battery Mode, Charge&Discharge Current, Charge Voltage

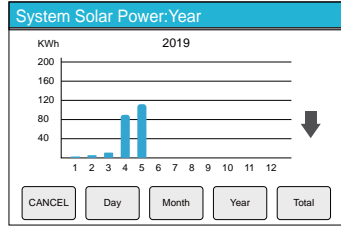
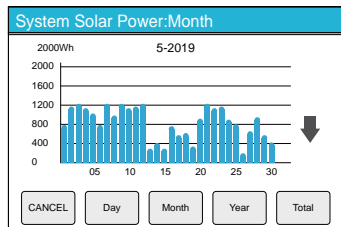
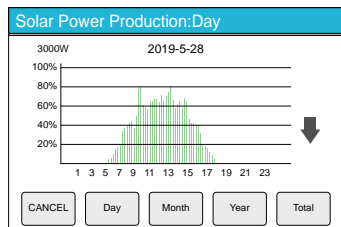
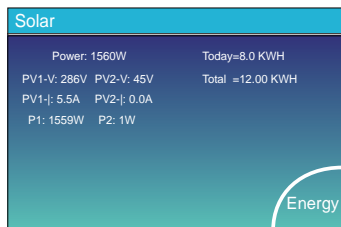
Basic Setting: Time, Beep, Factory Reset, Backlight, Lock out all changes

System Work Mode: Sell Grid, Zero-port to Load&Sell, Zero-port to CT&Sell,

Grid Setting: Grid mode, voltage type, frequency, PF

Gen Port Use: Generator input, Smart Load output, MI input.

Device Info: System version, ID, Alarm codes





# Solar Sell + Time of Use + Generator

## Battery Setting

- Batt Mode---Please select 1 2 3 batt mode
  - 1.Lithium--Lithium Battery with BMS
  - 2.Use Batt V--AGM Battery, System work according to voltage
  - 3.Use Batt %--AGM Battery, System work according to SOC
  - 4.NO Batt--System has no Battery, it becomes On-Grid inverter
- Batt Capacity---Please enter the right Capacity of your battery
- Max. Charge&Discharge Current---0-185A
- Activate Battery---Enable

## If you select Lithium

This is Generator Charge, If you do not have a generator, please ignore this part. ①

Start =30%---It means that when the battery capacity is less than 30% and the inverter is in the off-grid mode, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.

Gen Charge---It represents the switch that the generator charges the battery.

Gen Signal ---It indicates whether the generator's ATS signal is on or off.

Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It means the delay time after the generator reaches the running time.

This is Grid Charge, you need select. ②

Start =30%---no use, for customization.

A = 40A---It represents the current that the grid charges the battery.

Gen Charge---It represents the switch that the grid charges the battery.

Gen Signal ---Disable.

Lithium Mode--This is BMS protocol, please reference the document (Approved Battery-Deye) . ④

Shutdown 10%--the inverter will shutdown if the SOC below this value.

Low Batt 30%--the inverter will alarm if the SOC below this value.

Restart 80%--Restart level when inverter shutdown.

## If you select Use Batt V

This is Generator Charge, If you do not have a generator, please ignore this part. ①

Start =49V---It means that when the battery voltage is less than 49V and the inverter is in the off-grid mode, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.

Gen Charge---It represents the switch that the generator charges the battery.

Gen Signal ---It indicates whether the generator's ATS signal is on or off.

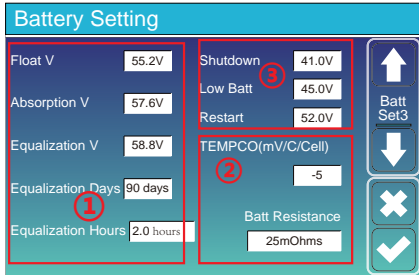
Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay time of the generator to shut down after it has reached the running time.



# Solar Sell + Time of Use + Generator

Start =49V no use, for customization. ②  
 A = 40A---It represents the current that the grid charges the battery.  
 Grid Charge---It represents the switch that the grid charges the battery.  
 Grid Signal ---Disable.

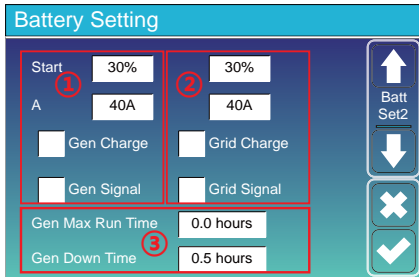


These are 4 stages of charging the Battery . ①

This is for professional installers,you can hold default if you do not know ②

Shutdown 41V--the inverter will shutdown if the Voltage below this value. ③  
 Low Batt 45V--the inverter will alarm if the Voltage below this value.  
 Restart 52V--Restart level when inverter shutdown.

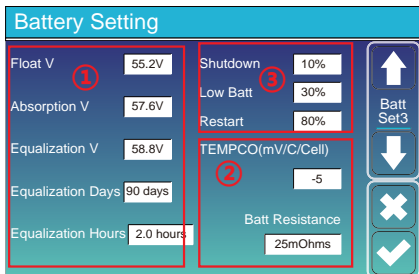
## If you select Use Batt %



This is Generator Charge,If you do not have a generator, please ignore this part . ①  
 Start =30%---It means that when the battery capacity is less than 30% and the inverter is off-grid, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.  
 Gen Charge---Enable.It represents the switch that the generator charges the battery.  
 Gen Signal ---Enable.It indicates whether the generator's ATS signal is on or off.  
 Gen Max RunTime ---It means the longest time that generator can run in a day.When time is up, the generator will be switched off. 24H means that it does not shut down all the time.  
 Gen DownTime ---It means the delay time after the generator reaches the running time.

This is Grid Charge, you need select. ②  
 Start =30%---no use, for customization.  
 A = 40A---It represents the current that the grid charges the battery.  
 Gen Charge---It represents the switch that the grid charges the battery.  
 Gen Signal ---Disable



These are 4 stages of charging the Battery . ①

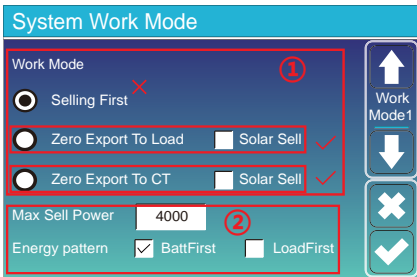
This is for professional installers,you can hold default if you do not know. ②

Shutdown 10%--the inverter will shutdown if the SOC below this value. ③  
 Low Batt 30% --the inverter will alarm if the SOC below this value.  
 Restart 80% --Restart level when inverter shutdown.



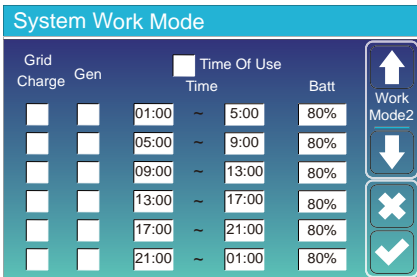
# Solar Sell + Time of Use + Generator

## System Work Mode



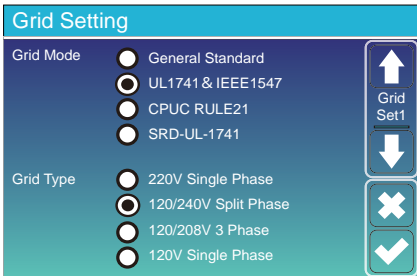
Zero Export To Home+ Solar Sell ①  
or Zero Export To Home+ Solar Sell

Max. Sell Power----Modify by yourself ②  
BattFirst----Solar will charge the battery first,then to the load  
LoadFirst----Solar will feed-out to the load first,then to the battery

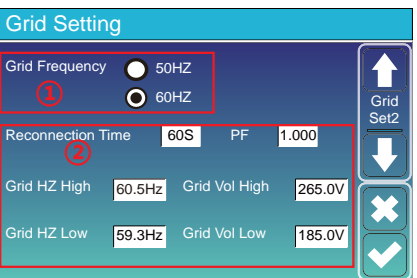


Time of Use----Enable  
we have six time of use,Every time period must be from small to large.  
Grid Charge---enable,When the actual SOC is smaller than the set value, the grid will charge the battery.  
Grid Charge---Disable,The grid does not charge the battery.  
Grid Charge---enable,When the actual SOC is smaller than the set value, the grid will charge the battery.  
Grid Charge---Disable,The grid does not charge the battery.

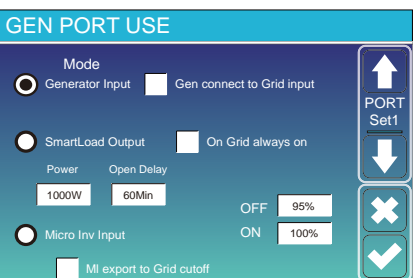
## Grid Setting



Please select the correct Grid Mode in your local area. If you are not sure, please choose General Standard.  
Please select the correct Grid Type in your local area,otherwise the machine will not work or be damaged.



UL1741&IEEE1547, CPUC RULE21, SRD-UL-1741  
No need to set the function of this interface.  
General Standard  
① Please select the correct Grid Frequency in your local area.  
② You can keep this in default value.



Generator Input---Enable



## Advanced Function

### Advanced Function

- Solar Arc Fault ON
- Clear Arc\_Fault
- System selfcheck
- Gen peak-shaving  
Power
- Grid peak-shaving  
Power

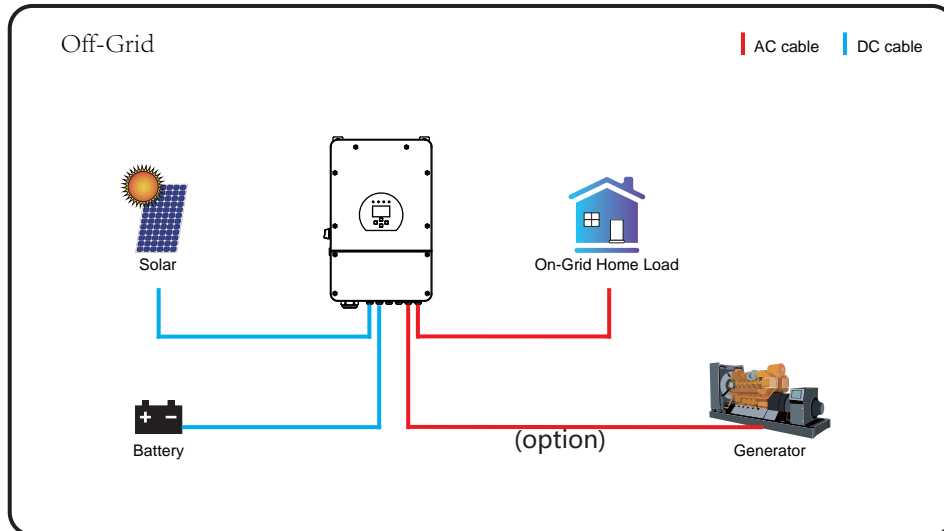


Solar Arc Fault ON---This is only for US.

System selfcheck---Disable. this is only for factory.

Gen Peak-shaving---Enable When the power of the generator exceeds the rated value of it, the inverter will provide the redundant part to ensure that the generator will not overload.

Grid Peak-shaving---Enable When the power of the grid exceeds the set value, the inverter will provide the redundant part to ensure that the grid power does not exceed the set value.

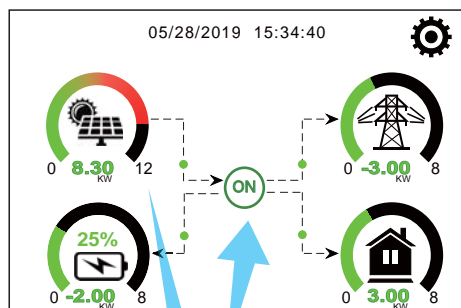
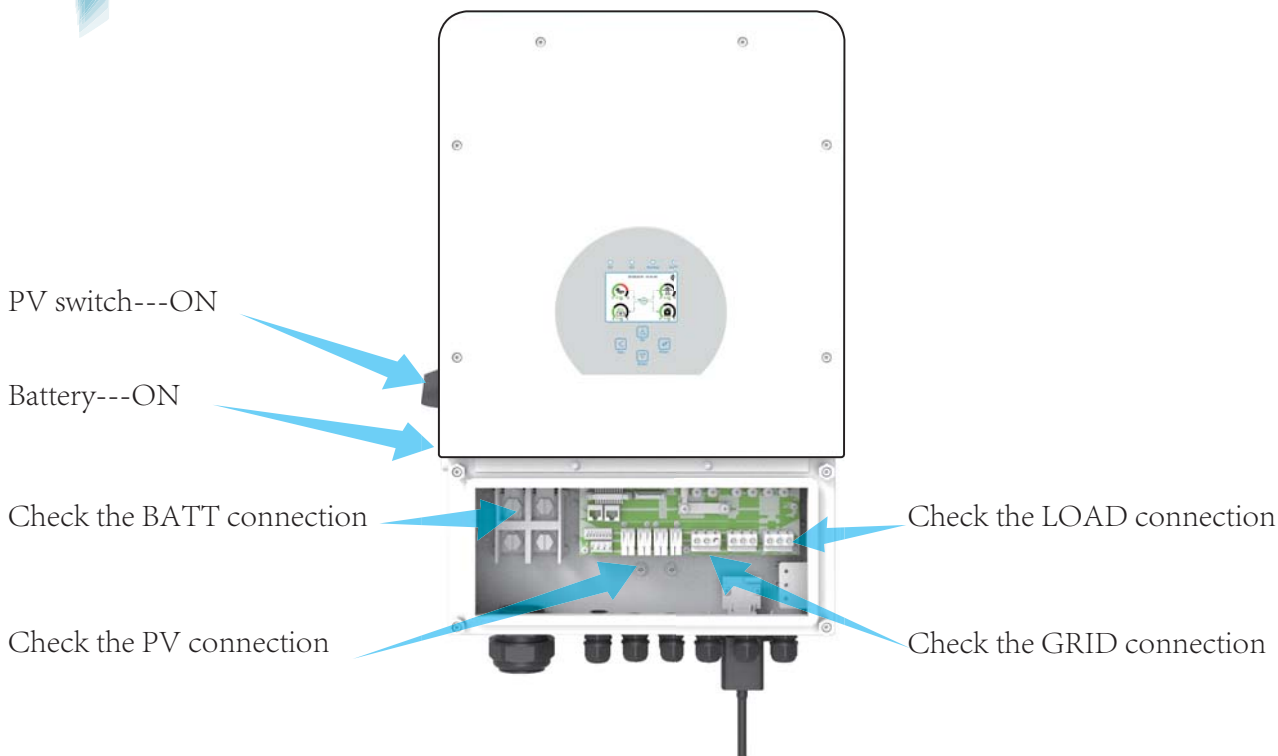


- ◆ 48V Battery DC/DC Isolated
- ◆ 230V Single Phase, 120/240V Split Phase
- ◆ Peak Power 16000W 10S
- ◆ Up to 185A Fast Charge Form Generator @95.5% Efficiency
- ◆ Peak-Shaving to Generator
- ◆ Generator Max Run Time and Down Time
- ◆ ATS Single



# Off-Grid + Generator

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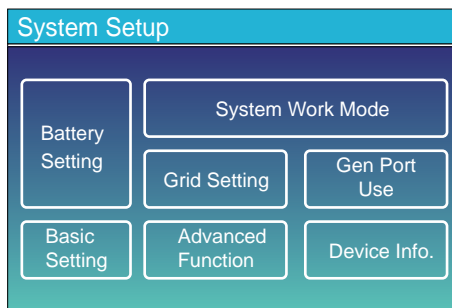
Inverter Running Status

ON: Inverter ON

OFF: Inverter OFF

Fxx: Alarm code Fxx

COMM.: Lost Communication with MCU



Battery Setting: Battery Mode, Charge&Discharge Current, Charge Voltage

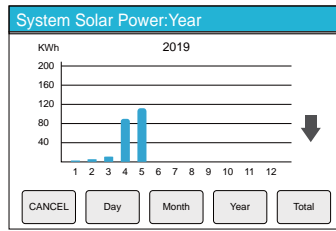
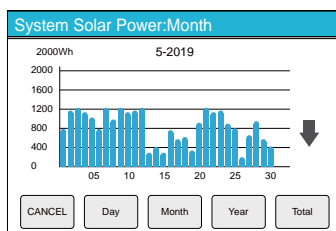
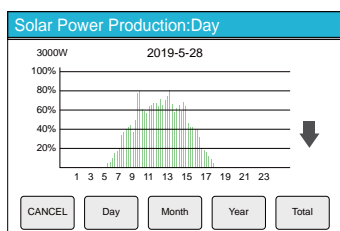
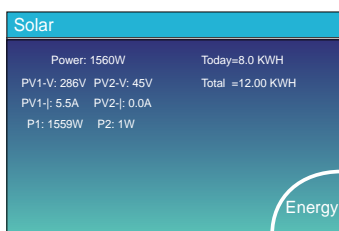
Basic Setting: Time, Beep, Factory Reset, Backlight, Lock out all changes

System Work Mode: Sell Grid, Zero-port to Load&Sell, Zero-port to CT&Sell,

Grid Setting: Grid mode, voltage type, frequency, PF

Gen Port Use: Generator input, Smart Load output, MI input.

Device Info: System version, ID, Alarm codes

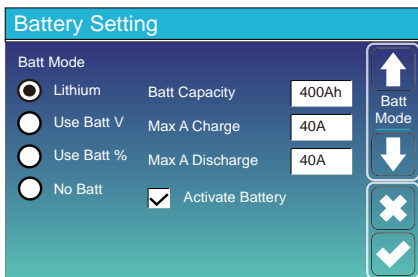




# Off-Grid + Generator

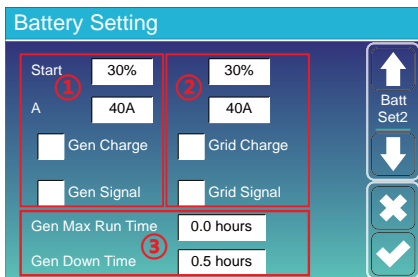


## Battery Setting



- Batt Mode---Please select 1 2 3 batt mode
  - 1.Lithium--Lithium Battery with BMS
  - 2.Use Batt V--AGM Battery, System work according to voltage
  - 3.Use Batt %--AGM Battery, System work according to SOC
  - 4.NO Batt--System have no Battery, it is become On-Grid inverter
- Batt Capacity---Please enter the right Capacity of your battery
- Max. Charge&Discharge Current---0-185A
- Activate Battery---Enable

## If you select Lithium



This is Generator Charge, If you do not have a generator, please ignore this part. ①

Start =30%---It means that when the battery capacity is less than 30% and the inverter is in the off-grid mode, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.

Gen Charge---It represents the switch that the generator charges the battery.

Gen Signal ---It indicates whether the generator's ATS signal is on or off.

Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay time of the generator to shut down after it has reached the running time.

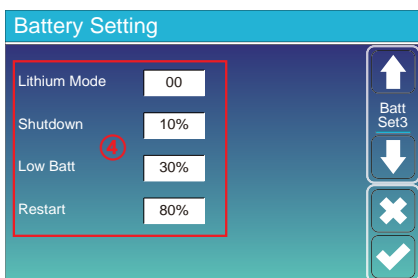
This is Grid Charge, On-Grid only ②

Start =30%---no use, for customization.

A = 40A---It represents the current that the grid charges the battery.

Gen Charge---It represents the switch that the grid charges the battery.

Gen Signal ---Disable



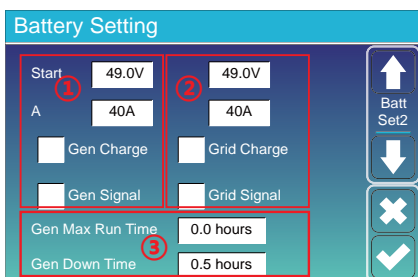
Lithium Mode--This is BMS protocol, please reference the document (Approved Battery-Deye) . ④

Shutdown 10%--the inverter will shutdown if the SOC below this value.

Low Batt 30%--the inverter will alarm if the SOC below this value.

Restart 80%--Restart level when inverter shutdown.

## If you select Use Batt V



This is Generator Charge, If you do not have a generator, please ignore this part. ①

Start =49V---It means that when the battery voltage is less than 49V and the inverter is off-grid, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.

Gen Charge---It represents the switch that the generator charges the battery.

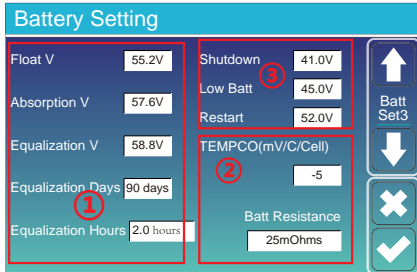
Gen Signal ---It indicates whether the generator's ATS signal is on or off.

Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay time of the generator to shut down after it has reached the running time.



Start =49V no use, for customization. ②  
 A = 40A---It represents the current that the grid charges the battery.  
 Gen Charge---It represents the switch that the grid charges the battery.  
 Gen Signal ---It indicates whether the grid's ATS signal is on or off.

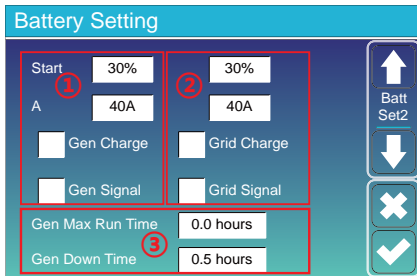


These are 4 stages of charging the Battery. ①

This is for professional installers, you can keep default if you do not know ②

Shutdown 41V--the inverter will shutdown if the Voltage below this value. ③  
 Low Batt 45V--the inverter will alarm if the Voltage below this value.  
 Restart 52V--Restart level when inverter shutdown.

## If you select Use Batt %



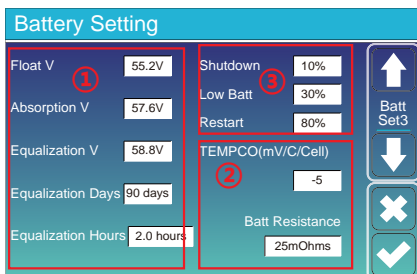
This is Generator Charge, If you do not have a generator, please ignore this part. ①  
 Start =30%---It means that when the battery capacity is less than 30% and the inverter is off-grid, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.  
 Gen Charge---It represents the switch that the generator charges the battery.  
 Gen Signal ---It indicates whether the generator's ATS signal is on or off.  
 Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay of the generator to shut down after it has reached the running time.

This is Grid Charge, you need select. ②

Start =30%---no use, for customization.  
 A = 40A---It represents the current that the grid charges the battery.  
 Gen Charge---It represents the switch that the grid charges the battery.  
 Gen Signal ---Disable



These are 4 stages of charging the Battery. ①

This is for professional installers, you can hold default if you do not know. ②

Shutdown 10%--the inverter will shutdown if the SOC below this value. ③  
 Low Batt 20% --the inverter will alarm if the SOC below this value.  
 Restart 40% --Restart level when inverter shutdown.



# Off-Grid + Generator

## System Work Mode

System Work Mode

Work Mode

- Selling First
- Zero Export To Load  Solar Sell
- Zero Export To CT  Solar Sell

Max Sell Power

Energy pattern  BattFirst  LoadFirst

In Off-Grid mode, Don't need to set this page.

System Work Mode

Grid Charge Gen    Time Of Use

Time	Batt
01:00 ~ 05:00	80%
05:00 ~ 09:00	80%
09:00 ~ 13:00	80%
13:00 ~ 17:00	80%
17:00 ~ 21:00	80%
21:00 ~ 01:00	80%

In Off-Grid mode, Don't need to set this page.

## Grid Setting

Grid Setting

Grid Mode

- General Standard
- UL1741 & IEEE1547
- CPUC RULE21
- SRD-UL-1741

Grid Type

- 220V Single Phase
- 120/240V Split Phase
- 120/208V 3 Phase
- 120V Single Phase

Grid Mode---Select General Standard  
Grid Type---Please select the correct Grid Type in your local area.

Grid Setting

Grid Frequency  50HZ  60HZ

Reconnection Time  PF

Grid HZ High  Grid Vol High

Grid HZ Low  Grid Vol Low

- Please select the correct Grid Frequency in your local area.
- You can hold this in default value.

## Gen Port Use

GEN PORT USE

Mode

- Generator Input  Gen connect to Grid input
- SmartLoad Output  On Grid always on
- Micro Inv Input

Power  Open Delay

OFF  ON

MI export to Grid cutoff

Generator Input---Enable



## Advanced Function

### Advanced Function

- Solar Arc Fault ON
- Clear Arc\_Fault
- System selfcheck
- Gen peak-shaving  
Power: 7000W
- Grid peak-shaving  
Power: 4000W



Solar Arc Fault ON---This is only for US.

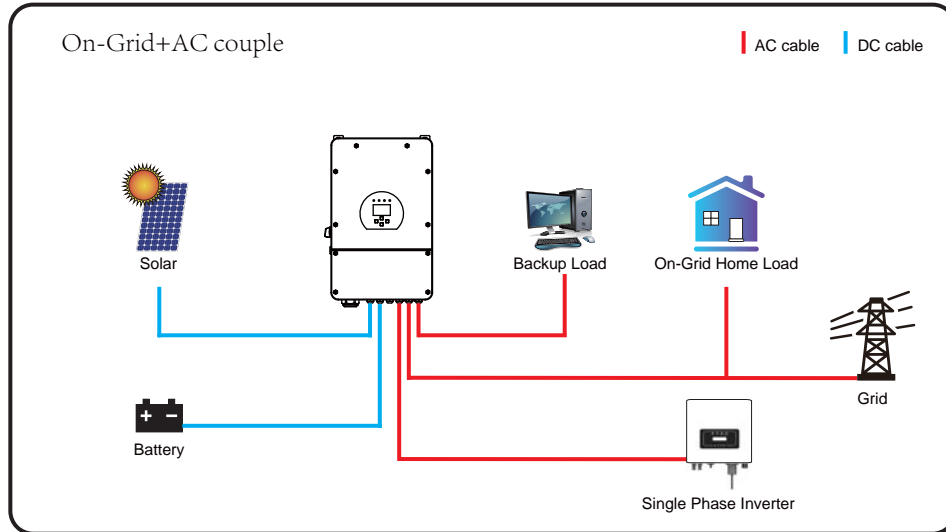
System selfcheck---Disable. this is only for factory.

Gen Peak-shaving---Enable When the power of the generator exceeds the rated value of it, the inverter will provide the redundant part to ensure that the generator will not overload.

Grid Peak-shaving---Disable

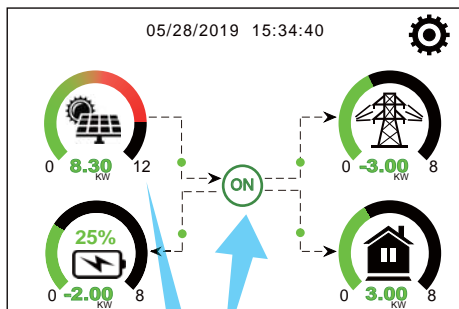
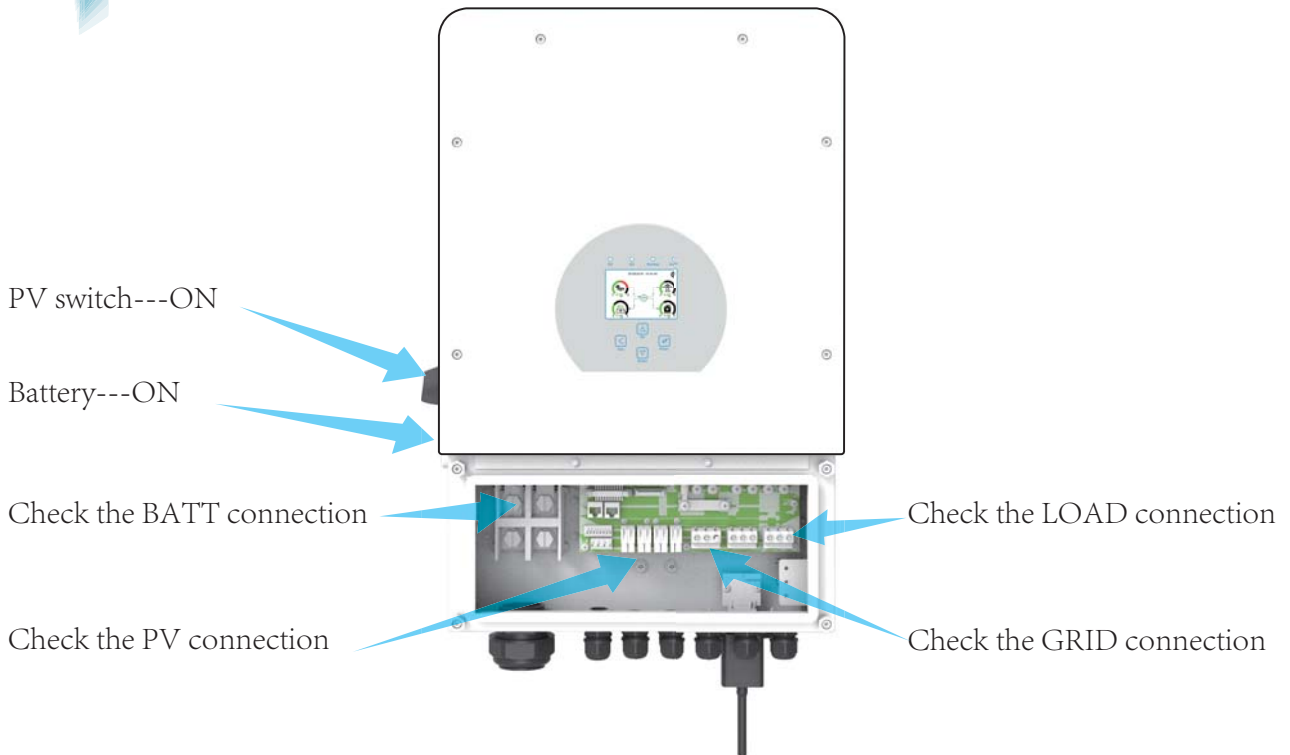


# Microinverter AC couple (On-Grid/Off-Grid)

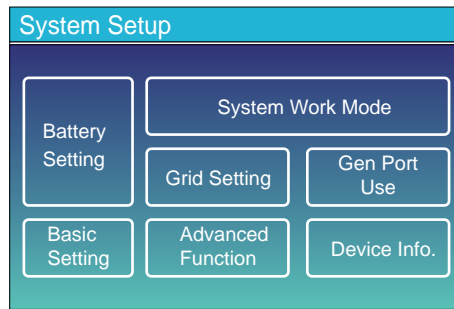




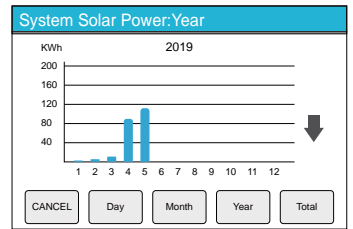
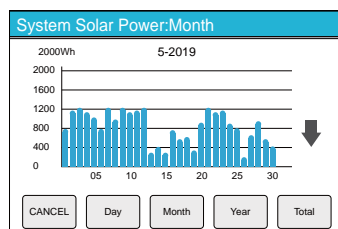
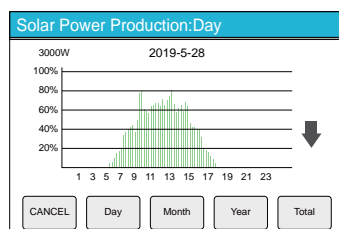
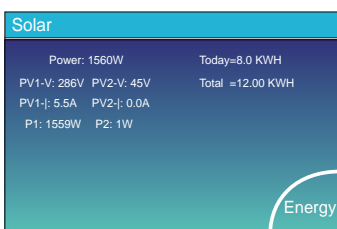
# Microinverter AC couple (On-Grid/Off-Grid)



Inverter Running Status  
 ON: Inverter ON  
 OFF: Inverter OFF  
 Fxx: Alarm code Fxx  
 COMM.: Lost Communication with MCU



Battery Setting: Battery Mode, Charge&Discharge Current, Charge Voltage  
 Basic Setting: Time, Beep, Factory Reset, Backlight, Lock out all changes  
 System Work Mode: Sell Grid, Zero-port to Load&Sell, Zero-port to CT&Sell,  
 Grid Setting: Grid mode, voltage type, frequency, PF  
 Gen Port Use: Generator input, Smart Load output, MI input.  
 Device Info: System version, ID, Alarm codes



# Microinverter AC couple (On-Grid/Off-Grid)



## Battery Setting

- Batt Mode---Please select 1 2 3 batt mode
  - 1.Lithium--Lithium Battery with BMS
  - 2.Use Batt V--AGM Battery, System works according to voltage
  - 3.Use Batt %--AGM Battery, System works according to SOC
  - 4.NO Batt--System have no Battery, it becomes On-Grid inverter
- Batt Capacity---Please enter the right Capacity of your battery
- Max. Charge&Discharge Current---0-185A
- Activate Battery---Enable

## If you select Lithium

This is Generator Charge, If you do not have a generator, please ignore this part. ①

Start =30%---It means that when the battery capacity is less than 30% and the inverter is off-grid, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.

Gen Charge---It represents the switch that the generator charges the battery.

Gen Signal ---It indicates whether the generator's ATS signal is on or off.

Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay of the generator to shut down after it has reached the run time.

This is Grid Charge, you need select ②

Start =30%---no use, for customization.

A = 40A---It represents the current that the grid charges the battery.

Grid Charge---It represents the switch that the grid charges the battery.

Grid Signal ---Disable

Lithium Mode--This is BMS protocol, please reference the document (Approved Battery-Deye) . ④

Shutdown 10%--the inverter will shutdown if the SOC below this value.

Low Batt 20%--the inverter will alarm if the SOC below this value.

Restart 40%--Restart level when inverter shutdown

## If you select Use Batt V

This is Generator Charge, If you do not have a generator, please ignore this part. ①

Start =30%---It means that when the battery capacity is less than 30% and the inverter is off-grid, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.

Gen Charge---It represents the switch that the generator charges the battery.

Gen Signal ---It indicates whether the generator's ATS signal is on or off.

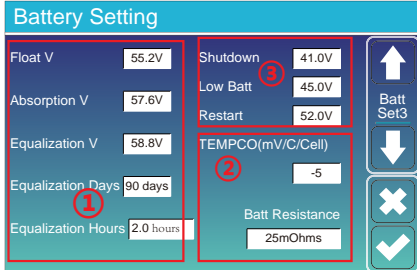
Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay of the generator to shut down after it has reached the running time.



# Microinverter AC couple (On-Grid/Off-Grid)

Start =49V no use , for customization. ②  
 A = 40A---It represents the current that the grid charges the battery.  
 Gen Charge----It represents the switch that the grid charges the battery.  
 Gen Signal ---It indicates whether the grid's ATS signal is on or off.

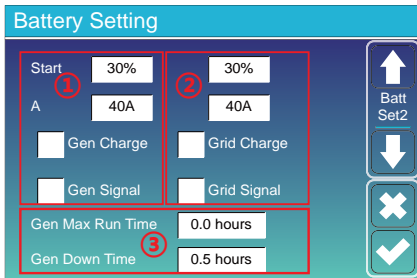


These are 4 stages of charging the Battery voltage. ①

This is for professional installers,you can hold default if you do not know. ②

Shutdown 41V--the inverter will shutdown if the Voltage below this value. ③  
 Low Batt 45V--the inverter will shutdown if the Voltage below this value.  
 Restart 52V--Restart level when inverter shutdown

## If you select Use Batt %



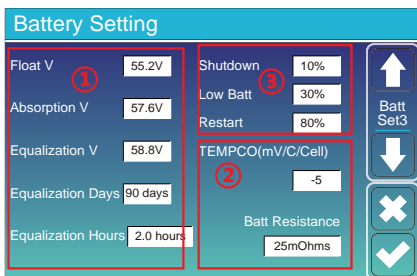
This is Generator Charge,If you do not have a generator, please ignore this part. ①  
 Start =30%---It means that when the battery capacity is less than 30% and the inverter is off-grid, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.  
 Gen Charge---It represents the switch that the generator charges the battery.  
 Gen Signal ---It indicates whether the generator's ATS signal is on or off.  
 Gen Max RunTime ---It means the longest time that generator can run in a day.When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay of the generator to shut down after it has reached the running time.

This is Grid Charge. ②

Start =30%---no use , for customization.  
 A = 40A---It represents the current that the grid charges the battery.  
 Grid Charge---It represents the switch that the grid charges the battery.  
 Grid Signal ---Disable.



These are 4 stages of charging the Battery . ①

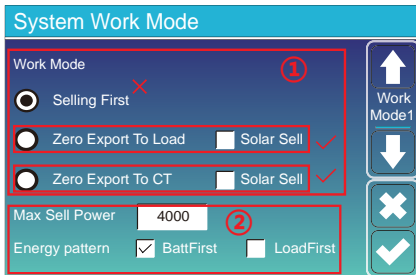
This is for professional installers,you can hold default if you do not know. ②

Shutdown 10%--the inverter will shutdown if the SOC below this value. ③  
 Low Batt 20% --the inverter will alarm if the SOC below this value.  
 Restart 40% --Restart level when inverter shutdown.



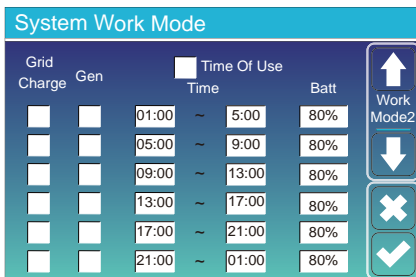
# Microinverter AC couple (On-Grid/Off-Grid)

## System Work Mode



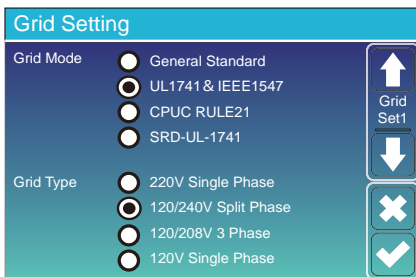
Zero Export To Home+ Solar Sell ①  
 or Zero Export To Home+ Solar Sell

Max. Sell Power----Modify by yourself. ②  
 BattFirst----Pv will charge the battery first,then to the load.  
 LoadFirst----Pv will feed-out to the load first,then to the battery.

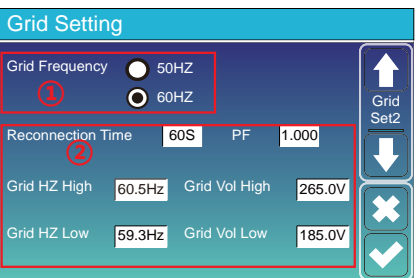


Time of Use----Enable  
 we have six time of use,Every time period must be from small to large.  
 Grid Charge---enable,When the actual SOC is smaller than the set value, the grid will charge the battery.  
 Grid Charge---Disable,The grid does not charge the battery.  
 Grid Charge---enable,When the actual SOC is smaller than the set value, the grid will charge the battery.  
 Grid Charge---Disable,The grid does not charge the battery.

## Grid Setting

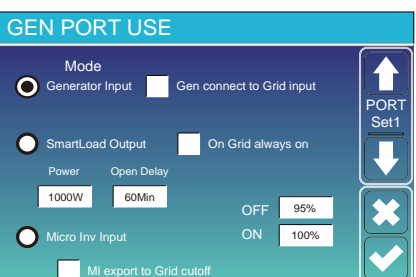


Please select the correct Grid Mode in your local area. If you are not sure, please choose General Standard.  
 Please select the correct Grid Type in your local area,otherwise the machine will not work or be damaged.



UL1741&IEEE1547, CPUC RULE21, SRD-UL-1741  
 No need to set the function of this interface.  
 General Standard  
 ① Please select the correct Grid Frequency in your local area.  
 ② You can keep this in default value.

## Gen Port Use



Micro Inv Input---Enable





# Microinverter AC couple (On-Grid/Off-Grid)



## Advanced Function

### Advanced Function

- Solar Arc Fault ON
- Clear Arc\_Fault
- System selfcheck
- Gen peak-shaving  
Power: 7000W
- Grid peak-shaving  
Power: 4000W



Solar Arc Fault ON---This is only for US.

System selfcheck---Disable. this is only for factory.

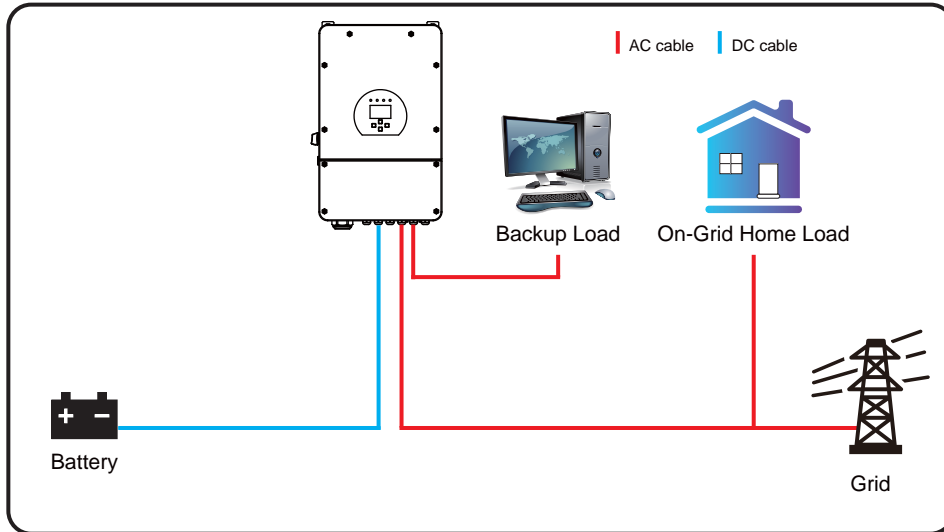
Gen Peak-shaving---Disable

Grid Peak-shaving---Disnable. inverter will provide redundant parts to ensure that the grid power does not exceed the set value in this interface.



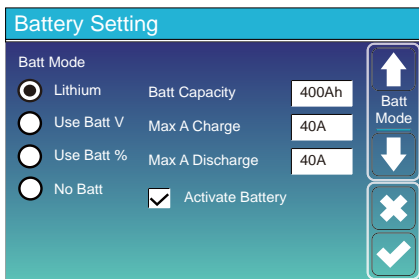
# Peak valley electricity

Deye 德業



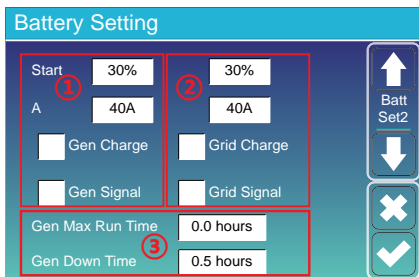


## Battery Setting



- Batt Mode---Please select 1 2 3 batt mode
  - 1.Lithium--Lithium Battery with BMS.
  - 2.Use Batt V--AGM Battery, System work according to voltage.
  - 3.Use Batt %--AGM Battery, System work according to SOC.
  - 4.NO Batt--System has no Battery, it becomes On-Grid inverter.
- Batt Capacity---Please enter the right Capacity of your battery.
- Max. Charge&Discharge Current---0-185A.
- Activate Battery---Enable .

## If you select Lithium



This is Generator Charge, If you do not have a generator, please ignore this part. ①

Start =30%---It means that when the battery capacity is less than 30% and the inverter is off-grid, the generator will start. ③

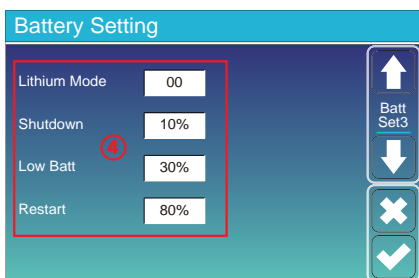
A = 40A---It represents the current that the generator charges the battery after starting-up.

Gen Charge---It represents the switch that the generator charges the battery.

Gen Signal ---It indicates whether the generator's ATS signal is on or off.

Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay of the generator to shut down after it has reached the running time.



This is Grid Charge, you need select ②

Start =30%---no use, for customization.

A = 40A---It represents the current that the grid charges the battery.

Gen Charge---It represents the switch that the grid charges the battery.

Gen Signal ---Disable.

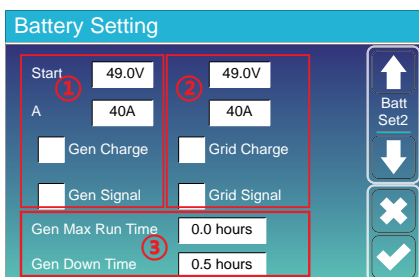
Lithium Mode--This is BMS protocol, please reference the document (Approved Battery-Deye) . ④

Shutdown 10%--the inverter will shutdown if the SOC below this value.

Low Batt 20%--the inverter will alarm if the SOC below this value.

Restart 40%--Restart level when inverter shutdown.

## If you select Use Batt V



This is Generator Charge, If you do not have a generator, please ignore this part. ①

Start =30%---It means that when the battery capacity is less than 30% and the inverter is off-grid, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.

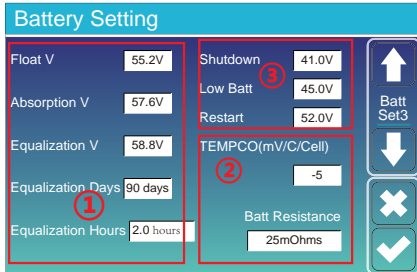
Gen Charge---It represents the switch that the generator charges the battery.

Gen Signal ---It indicates whether the generator's ATS signal is on or off.

Gen Max RunTime ---It means the longest time that generator can run in a day. When time is up, the generator will be switched off. 24H means that it does not shut down all the time.

Gen DownTime ---It represents the delay of the generator to shut down after it has reached the running time.

Start =49V no use , for customization. ②  
 A = 40A---It represents the current that the grid charges the battery.  
 Gen Charge----It represents the switch that the grid charges the battery.  
 Gen Signal ---It indicates whether the grid's ATS signal is on or off.

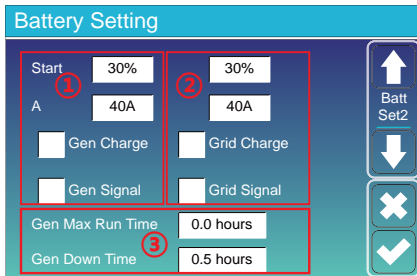


This is Battery 4 tages charge voltage. ①

This is for professional installers,you can hold default if you do not know. ②

Shutdown 41V--the inverter will shutdown if the Voltage below this value. ③  
 Low Batt 45V--the inverter will shutdown if the Voltage below this value.  
 Restart 52V--Restart level when inverter shutdown.

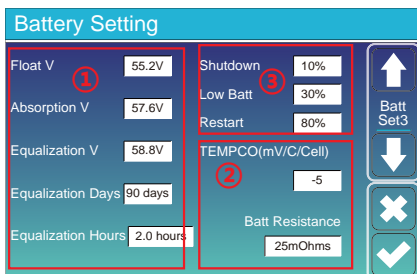
## If you select Use Batt %



This is Generator Charge,If you do not have a generator, please ignore this part . ①  
 Start =30%---It means that when the battery capacity is less than 30% and the inverter is off-grid, the generator will start. ③

A = 40A---It represents the current that the generator charges the battery after starting-up.  
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 Gen DownTime ---It represents the delay of the generator to shut down after it has reached the running time.

This is Grid Charge. ②  
 Start =30%---no use , for customization.  
 A = 40A---It represents the current that the grid charges the battery.  
 Gen Charge---It represents the switch that the grid charges the battery.  
 Gen Signal ---Disable.



These are 4 stages of charging the Battery . ①

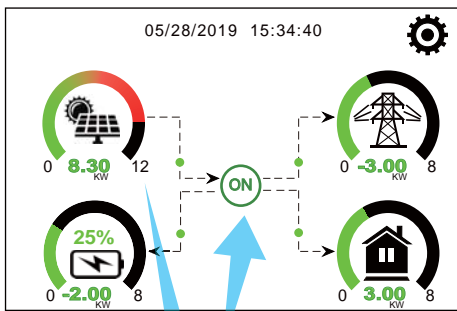
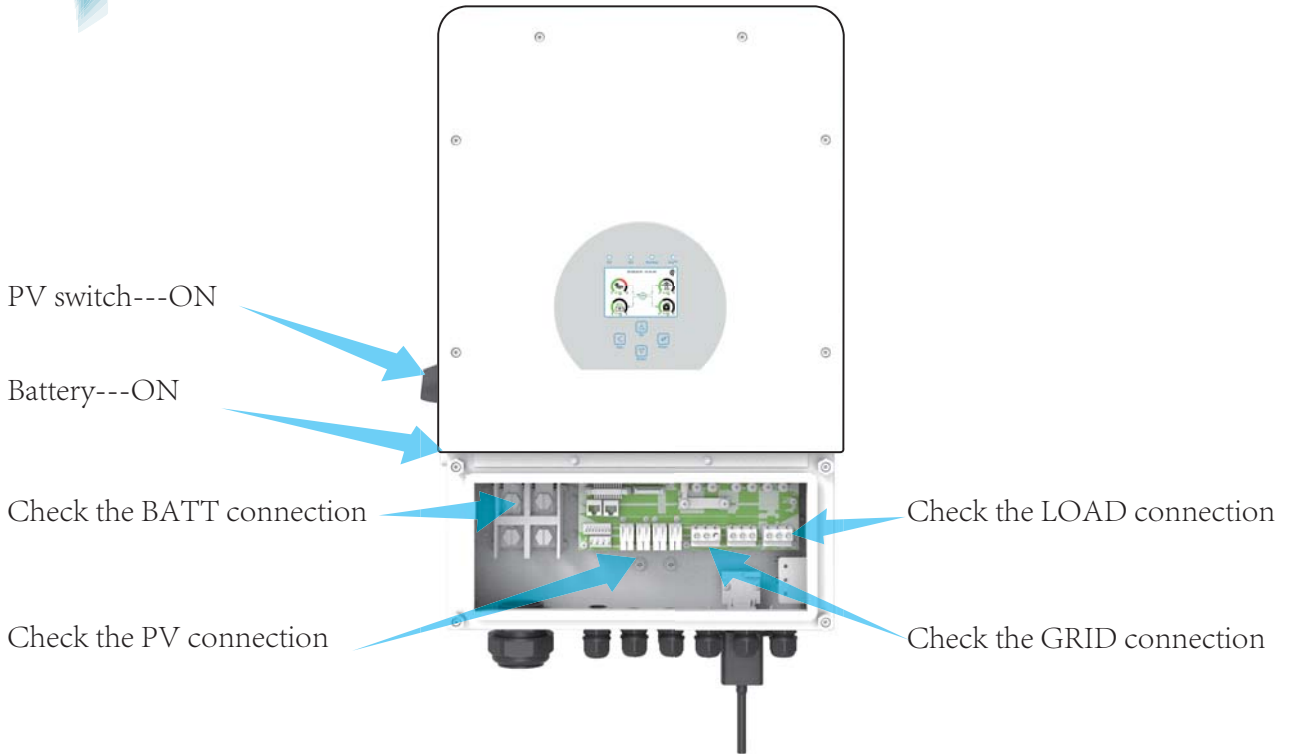
This is for professional installers,you can hold default if you do not know. ②

Shutdown 10%--the inverter will shutdown if the SOC below this value. ③  
 Low Batt 20% --the inverter will alarm if the SOC below this value.  
 Restart 40% --Restart level when inverter shutdown.



# Peak valley electricity

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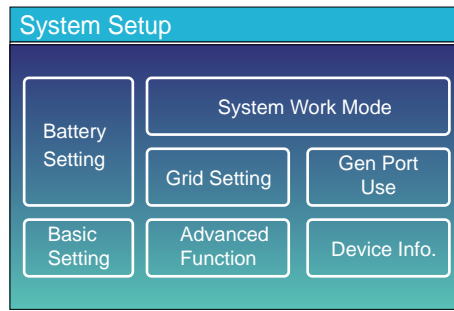
Inverter Running Status

ON: Inverter ON

OFF: Inverter OFF

Fxx: Alarm code Fxx

COMM.: Lost Communication with MCU



Battery Setting: Battery Mode, Charge&Discharge Current, Charge Voltage

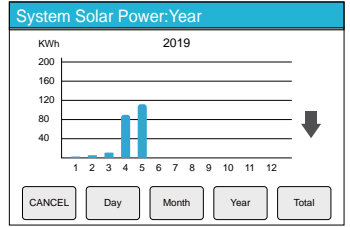
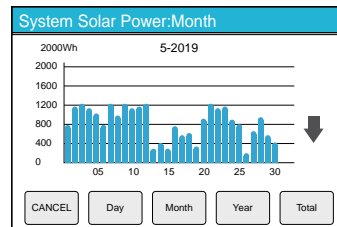
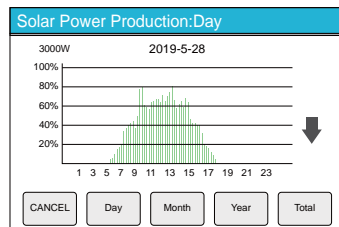
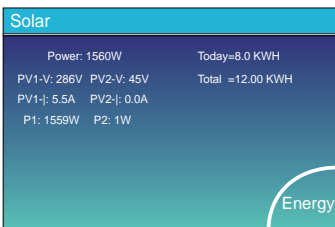
Basic Setting: Time, Beep, Factory Reset, Backlight, Lock out all changes

System Work Mode: Sell Grid, Zero-port to Load&Sell, Zero-port to CT&Sell,

Grid Setting: Grid mode, voltage type, frequency, PF

Gen Port Use: Generator input, Smart Load output, MI input.

Device Info: System version, ID, Alarm codes



## System Work Mode

System Work Mode

Work Mode

- Selling First
- Zero Export To Load  Solar Sell
- Zero Export To CT  Solar Sell

Max Sell Power: 4000

Energy pattern:  BattFirst  LoadFirst

Selling First

1

Max. Sell Power----Modify by yourself

2

Energy pattern----no use

System Work Mode

Grid Charge Gen Time of Use Time Batt

<input type="checkbox"/>	<input type="checkbox"/>	01:00 ~ 5:00	80%
<input type="checkbox"/>	<input type="checkbox"/>	05:00 ~ 9:00	80%
<input type="checkbox"/>	<input type="checkbox"/>	09:00 ~ 13:00	80%
<input type="checkbox"/>	<input type="checkbox"/>	13:00 ~ 17:00	80%
<input type="checkbox"/>	<input type="checkbox"/>	17:00 ~ 21:00	80%
<input type="checkbox"/>	<input type="checkbox"/>	21:00 ~ 01:00	80%

Time of Use----Enable

At Valley electricity:Enable Grid Charge&set Batt 100%

At Peak electricity:Disable Grid Charge&set Batt 10%-20%

we have six time of use,Every time period must be from small to large.

Grid Charge---enable,When the actual SOC is smaller than the set value, the grid will charge the battery.

Grid Charge---Disable,The grid does not charge the battery.

Grid Charge---enable,When the actual SOC is smaller than the set value, the grid will charge the battery.

Grid Charge---Disable,The grid does not charge the battery.

## Grid Setting

Grid Setting

Grid Mode

- General Standard
- UL1741 & IEEE1547
- CPUC RULE21
- SRD-UL-1741

Grid Type

- 220V Single Phase
- 120/240V Split Phase
- 120/208V 3 Phase
- 120V Single Phase

Please select the correct Grid Mode in your local area. If you are not sure, please choose General Standard.

Please select the correct Grid Type in your local area,otherwise the machine will not work or be damaged.

Grid Setting

Grid Frequency

- 50HZ
- 60HZ

Reconnection Time: 60S PF: 1.000

Grid HZ High: 60.5Hz Grid Vol High: 265.0V

Grid HZ Low: 59.3Hz Grid Vol Low: 185.0V

UL1741&IEEE1547, CPUC RULE21, SRD-UL-1741

No need to set the function of this interface.

General Standard

1 Please select the correct Grid Frequency in your local area.

2 You can keep this in default value.

## Gen Port Use Advanced Function

GEN PORT USE

Mode

- Generator Input  Gen connect to Grid input
- SmartLoad Output  On Grid always on

Power: 1000W Open Delay: 60Min OFF: 95% ON: 100%

Micro Inv Input  MI export to Grid cutoff

Advanced Function

- Solar Arc Fault ON
- Clear Arc\_Fault
- System selfcheck
- Gen peak-shaving Power: 7000W
- Grid peak-shaving Power: 4000W

Do not set this two pages