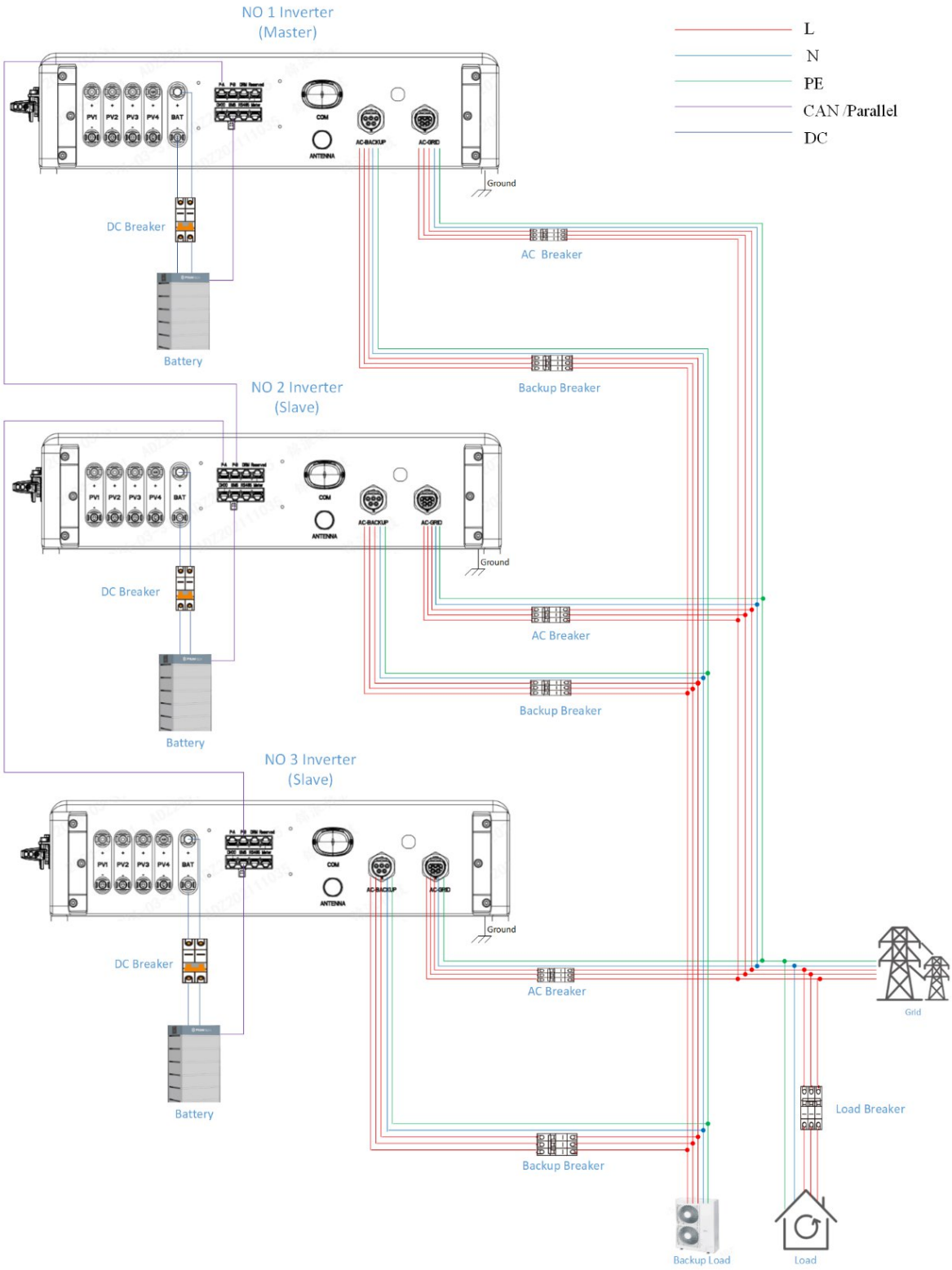
# S6-EH3P(3-10)K-H

# Parallel communication and parameter setting instructions.

## 1. Parallel system wiring diagram.

1. When connecting inverters in parallel mode, it is compulsory to match their same models; for instance, pair an 11KW inverter with another 11KW inverter. Do not install inverters in parallel mode from different model.
2. Before parallel connection, verify that both inverters are operating using the same firmware version.
3. Up to 6 pcs hybrid inverters can be installed together in parallel mode.
4. The meter and data logger only need to be connected to the master. But for updating the FW, each inverter should connect to its own datalogger.
5. For multiple inverters in parallel, all inverters should be connected to the same ground point to eliminate the possibility of a voltage potential existed between inverter grounds.
6. PV input: Each inverter should have its own PV strings connected to it, as per the DC input PV specifications of the inverter.
7. Battery input: each inverter is separately connected to the 120-600V battery system.
8. Power grid output and backup output from the inverter should be connected in parallel as per the diagram given below.

# S6 EH3P (3-10)K Parallel System Diagram




## 2. Individual Inverter state

Before doing the parallel setup, it is essential to verify the individual normal functioning of each inverter. By this way you can avoid parallel inverter anomalies caused by the original parameter settings of a single inverter. Set each inverter one by one and make sure they work fine and there are no alarms and then connect the parallel cable as explained above.

### 3. Parallel communication connection

There are two RJ45 ports in the inverter (Parallel A (the left one) & Parallel B (the right one)) designed for communication between multiple Solis S6 hybrids. We adopt CAN protocol as the communication protocol, and the ports are not able to be used for any other purpose besides daisy-chaining Solis S6 hybrids together.

Connecting the network cable to the parallel port of the master and slave (master machine's parallel-A port should connect to slave machine's parallel-B), then connect the slave's parallel-A port to next slave's Parallel-B port, the later machine connecting like this in turns.

Figure 1 : RJ45 Plug

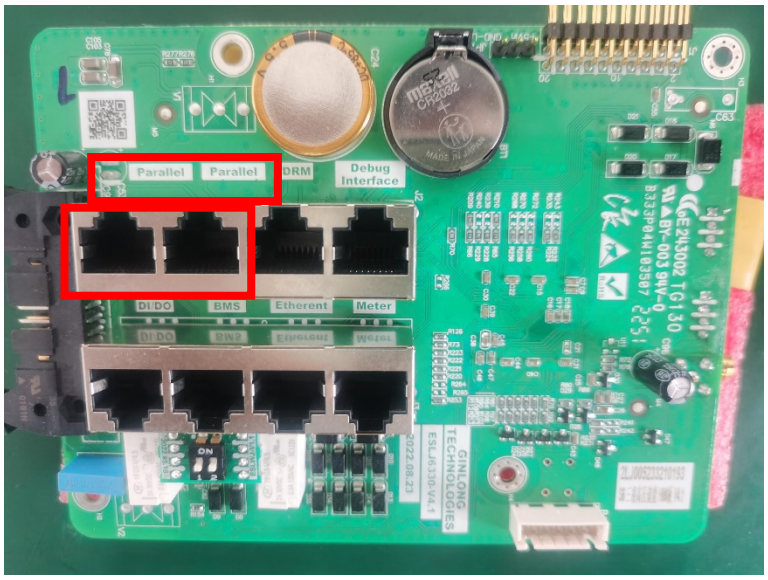


Figure 2 Parallel port

## 4. Dip Switch Settings


Setting the dip switches 1&2 of the first and the last inverter to: ON,

And other slave inverters in the middle to: OFF.

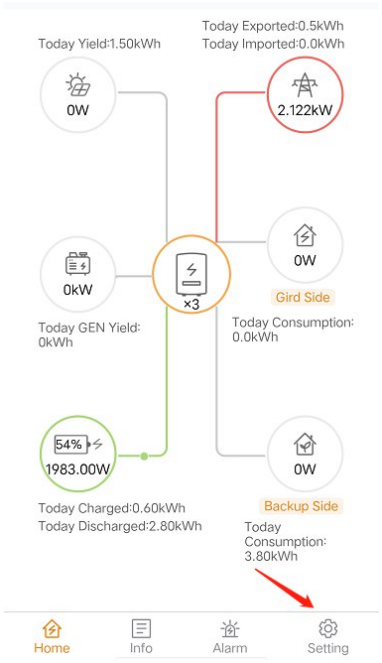
For example:

1. if you have 2 inverters connected in parallel mode, both dip switches should be turn on at “ON” position,
2. if there are 3 inverters in parallel mode, the **first** and **last** inverter’s dip switches should be on “ON” position, the **middle** one should keep the dip switches on “OFF” position.

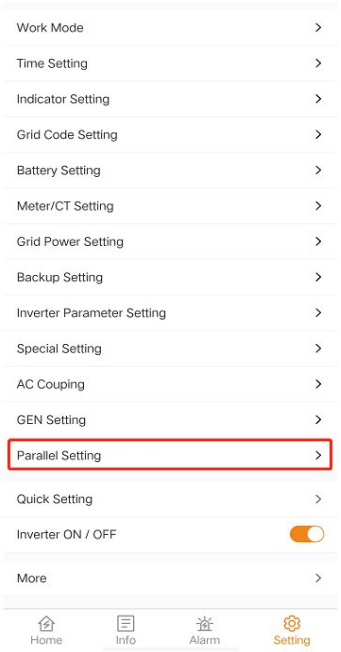
**Note**: The dip switch upward means ON and downward means OFF

### Parallel parameter setting on APP

(1) Enter Solicsloud APP and click into the "Setting" interface, then go to the "Parallel Settings" setting.



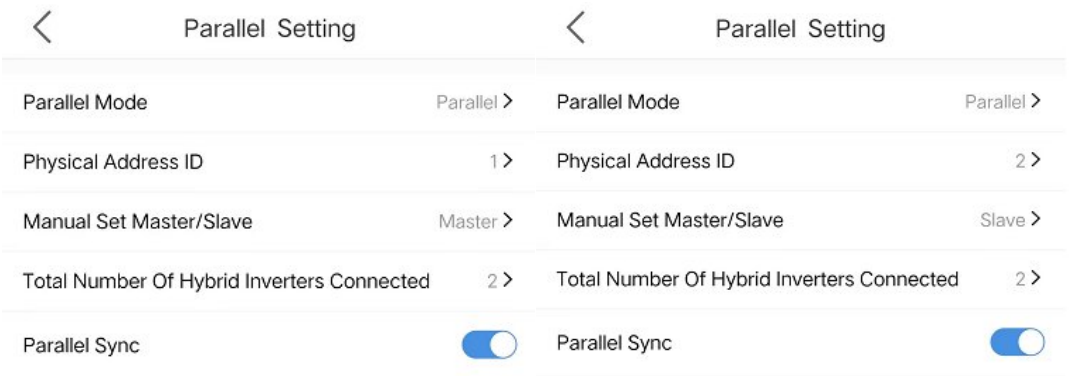

Set the master to the following parameters

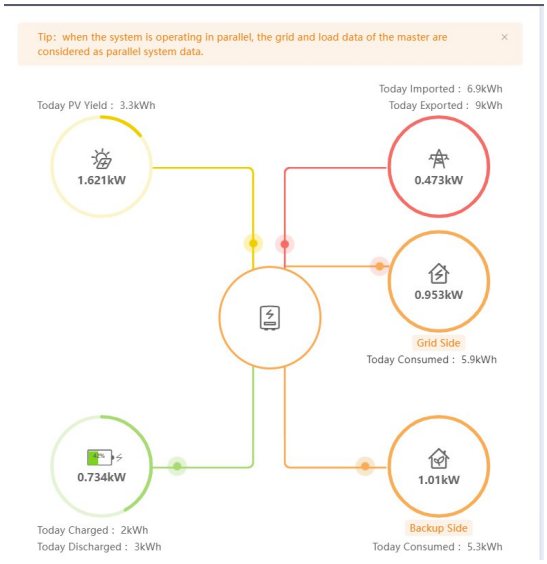



Set the slave to the following parameters

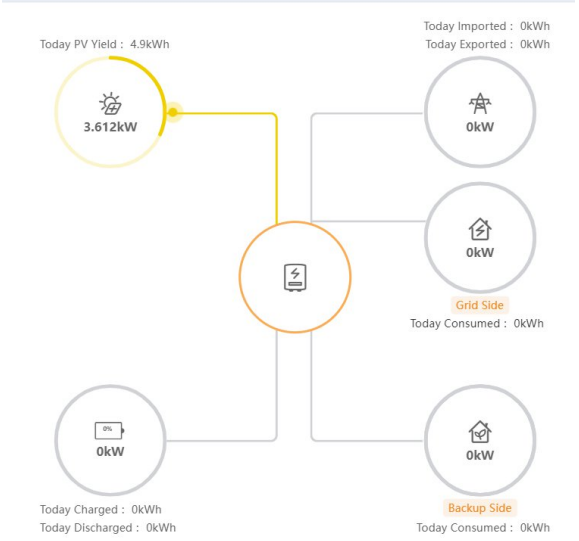
## 5. parameter specification

When the system is operating in parallel mode, then working modes and other settings can be synchronously set through the master machine, rather than setting them separately for each slave inverters. It is convenient for customer to configure the whole parallel system. Also, the data of grid side and load side of the master should be considered as whole parallel system's data. Then you should set the physical address ID from 1to the last inverter (for master, the number is 1, for slave, the number range form 2 until 5(the total machines number -1))






Master Inverter energy flow interface




Slave Inverter energy flow interface