

SUB-D11048GP Installation Key Notes

SUB-D-11048GP can be connected in single-phase or three-phase parallel mode, and can also output and connect to the grid.

There are detailed instructions for parallel operation in the manual, please read it carefully.

Pay special attention to the following matters: (Please follow the steps from 1 to 4)

1. Preparation before parallel connection

1.1 Solar Panel Array:

Each inverter has its own solar panel array. Note that SUB11K is 2*MPPT*1 string

1.2 Battery Pack:

The battery pack is shared, so you need to connect the batteries in parallel first, and the diameter and length of the battery wires must be consistent. Note that the wire diameter and circuit breaker will be multiplied after the convergence.

1.3 AC input and output

Carefully read the single-phase or three-phase connection diagram and connect the parallel lines of the inverter mains input and output. Also note that the wire diameter and circuit breaker will be doubled after the confluence.

1.4 Communication line and **current equalizer line** connection

Connect the DB 9 parallel communication line as required. The same-phase parallel machines need to be connected with a **current equalizer line**, and the **current equalizer line cannot be connected between phases**.

1.5 PROGRAM 04 Settings

The settings of PROGRAM 04 can only take effect when the device is in standby mode.

(When the inverter is turned off, the machine will enter standby mode if it is connected to the mains or a PV with sufficient power.)

2. Parallel startup process

Check again: 1. Input and output connections, 2. Communication connections, 3. Battery connections, 4. PROGRAM04 settings

After confirmation, start the machine according to the following process.

- Switch ON Battery
- Switch ON the solar panel and confirm that the LCD PV display is normal
- Switch ON the AC power supply and confirm that the LCD AC power input display is normal
- Under no-load conditions, press the power button of each inverter to start up, and confirm that the output voltage and display of each unit are normal, and there is no parallel fault code, such as 60/71/72, etc.

3. Other parameter settings

3.1 After Program04 is set, except for the clock, which needs to be set for each machine separately, other parameters can be set on any machine in the parallel system, and the parameters of other machines will change accordingly. For details, refer to the setting of single machine conditions.

3.2 In a parallel system, Program 0 2 Maximum charging current (MPPT Charge + Grid Charge) setting

When using lithium batteries and the communication is normal, the charging current will automatically follow the BMS without setting.

When the inverter and lithium battery cannot communicate

Maximum charging current = required value / number of parallel devices

For example: 3*51.2VDC 200AH of lithium battery pack = 600Ah/51.2VDC, 6 inverters in parallel

The maximum charging current of lithium battery is: $600 \times 0.5 = 300\text{Amp}$, $300\text{Amp} / 6 = 50\text{Amp}$

Program 1 1 For the maximum AC charging current setting, refer to Program 02

4. Load test

After the no-load parallel operation is normal and all settings are confirmed to be correct, the load test can be carried out.