

Isuna 10000-20000T unbalanced power supply solution

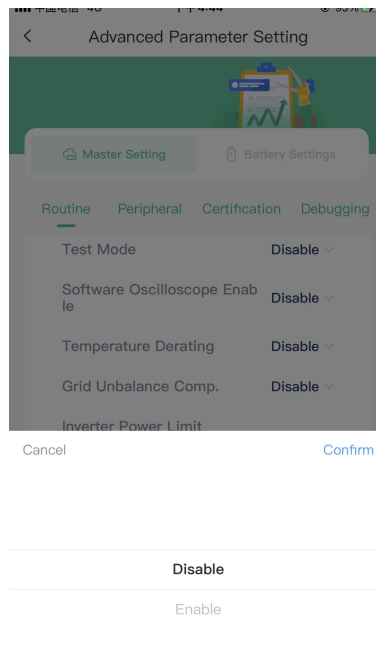
Why do we need three phase unbalanced power supply?

1. Usually in the scenario where single-phase and three-phase loads are used at the same time, it will lead to three-phase unbalanced consumption. Three-phase unbalanced refers to the inconsistency amplitude of the three-phase current or voltage in the power system, and the amplitude exceeds the specified range.
2. Voltage fluctuations caused by running high-power equipment will lead to three-phase unbalanced consumption.
3. Because some countries grid utility requires different export limit, this will need inverter to control the output power of each phase.

How to turn on the Isuna three-phase grid unbalance compensation function?

When it's necessary to supply electricity to the power grid, the grid side needs to balance the three-phase output power, which requires the grid unbalance compensation function.

When you need to use the three-phase unbalance function, you can set it on the APP, Admin - Set up - Advanced Settings - Professional Settings - Grid Unbalance Compensation - Set the setting item to Enable - Confirm to enable it. Three-phase unbalance function.



100% three-phase unbalanced solution for Isuna 10000-20000T

Isuna 10000-20000T inverter series can provide unbalanced output on grid side.

When the power consumed by each phase load in the system is different, the inverter will output corresponding power according to the load of each phase.

Taking Isuna 20000T inverter as an example,

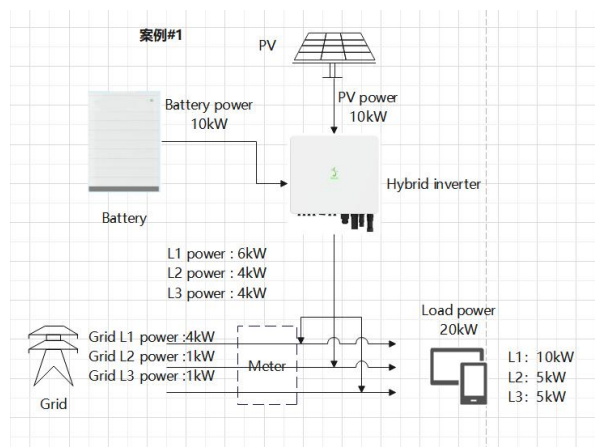
In on-grid mode, Isuna inverter could operate as below cases,

Case #1

L1= 10 kW

L2= 5 kW

L3= 5 kW



In off-grid mode, the isuna inverter can support 100% three-phase unbalance, that

is any phase can support the maximum output power of $20\text{kW}/3=6.67\text{kW}$, and the power difference between any two phases can reach 6.67kW .

In off-grid mode, Isuna inverter could operate as below cases,

Case #1

L1= 6.67 kW

L2= 4 kW

L3= 0 kW

