

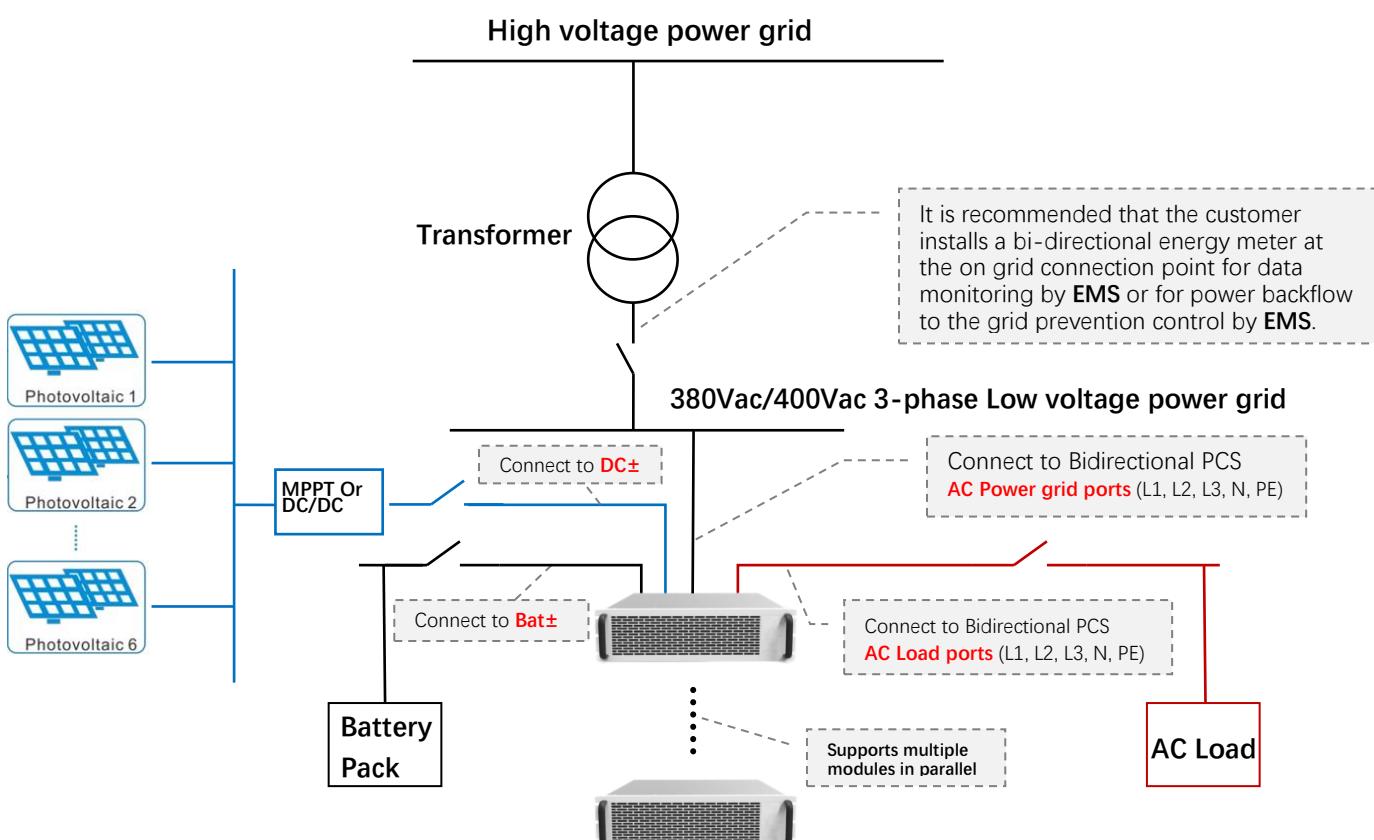
System application connection solution: 1

In this case, the total demanded power of the load is usually less than the total rated power of the PCS (including multi-module parallel connection), the PCS device includes different electrical interfaces between AC power grid ports and AC load ports for connecting the AC power grid and AC load, and the PCS device has a built-in STS switching automatic device, when the AC power grid suddenly loses power, the PCS will switch to the Battery pack to power the AC load.

When AC power grid returns to normal, the built-in STS automatic switching device in PCS can automatically restore the connection of the AC power grid and supply power to the AC load.

In this connection method, PCS can also be used as a peak shaving and valley filling application, that is, PCS+Battery pack can absorb the electrical energy of AC Power grid and store it in the Battery pack during the low electricity price period of AC Power grid. When the electricity price of AC Power grid is high, PCS releases electrical energy to AC load through the battery pack, and of course, Solar MPPT can also supply power to AC load, which can greatly reduce the user's cost of electricity, and these energy commissioning strategies are dispatched by the external third-party EMS.

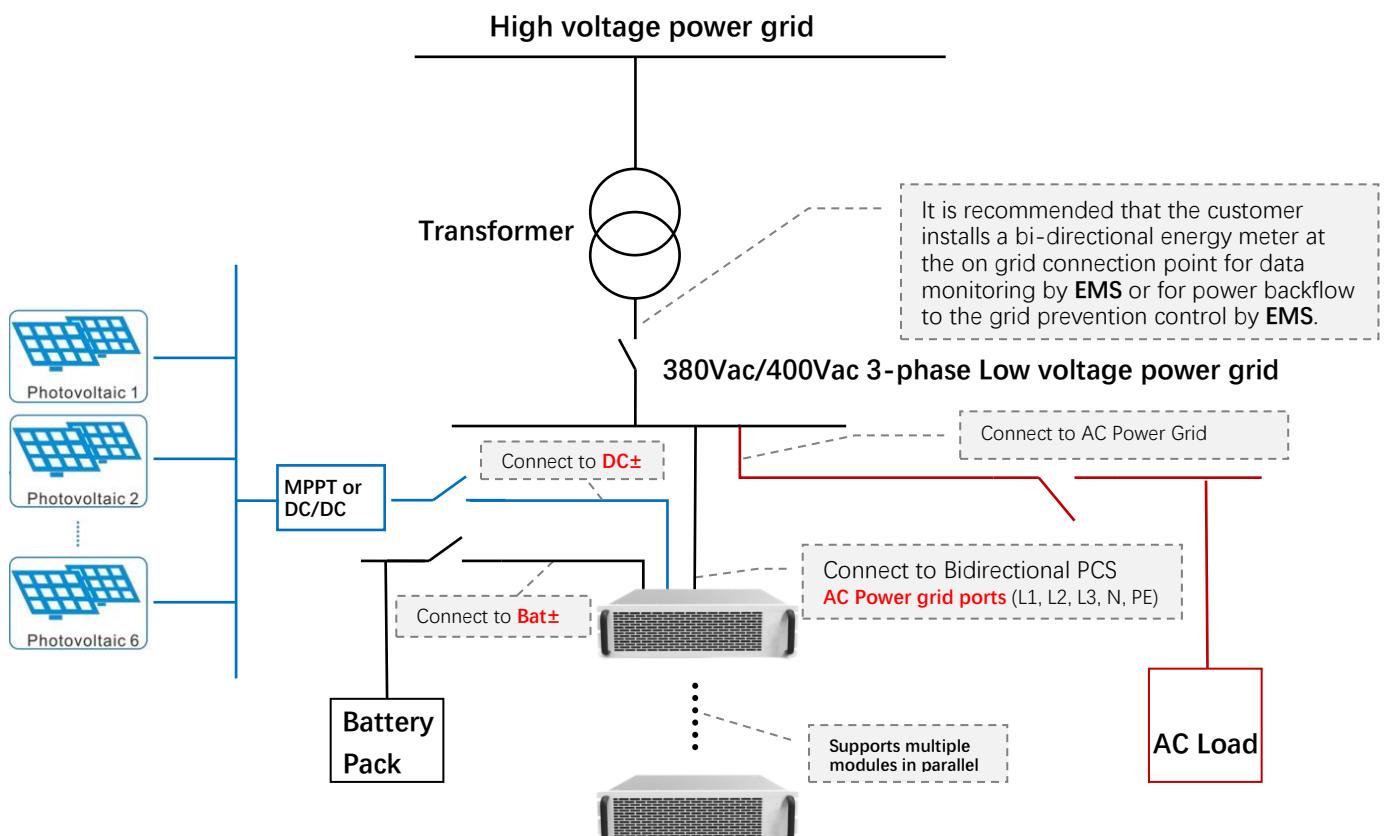
It is **important** to note that for this System application connection solution, the load demand of the AC load should be **less than** the total rated power of the PCS.



System application connection solution: 2

In this case, the total required power of the load usually exceeds or far exceeds the total rated power of the PCS (including multiple modules in parallel). Therefore, in this case, the AC Power grid ports inside the PCS are directly connected to the AC Power Grid, and the AC load is also connected to the AC Power Grid. The AC load can be powered by both PCS and AC Power Grid, and the power demand of the AC load exceeding PCS can be provided by the AC Power Grid. Therefore, this connection method allows the total required power of the AC load to be greater than or far exceeding the total power of the PCS.

In this connection method, in most cases, PCS is only used as a peak shaving and valley filling application, that is, PCS+Battery pack can absorb the electrical energy of AC Power grid and store it in the Battery pack during the low electricity price period of AC Power grid. When the electricity price of AC Power grid is high, PCS releases electrical energy to AC load through the battery pack, and of course, Solar MPPT can also supply power to AC load, which can greatly reduce the user's cost of electricity, and these energy commissioning strategies are dispatched by the external third-party EMS.



Bidirectional PCS Connection Diagram:

