

10KW

All-In-One

Solar Power System





## INTRODUCTION

The Energy Storage Controller Inverter Integrated Machine combines the functions of inverter, MPPT solar controller and utility charging to provide stable power supply for power-using equipment in areas with no power, lack of power and unstable power. The product is based on a fully digital intelligent design with advanced SPWM technology, outputting pure sine wave, converting DC power into AC power, suitable for AC loads such as household appliances, power tools, industrial equipment, electronic video and audio. LCD screen display design, real-time display of system operation data and operating status. Comprehensive electronic protection function ensures the whole system is safer and more stable.

## FUNCTIONAL FEATURES



- Pure sine wave inverters;
- Integrated MPPT controller/charger;
- Settable priority of utility and PV power supply;
- Wide PV input voltage;
- Settable battery type, supporting lead-acid and lithium batteries;
- Functions and parameters can be set via the LCD;
- With battery equalization function to optimize battery performance and extend battery life.



## SYSTEM SCHEMATIC

The following figure shows the system application scenario of this product. A complete system includes the following parts:

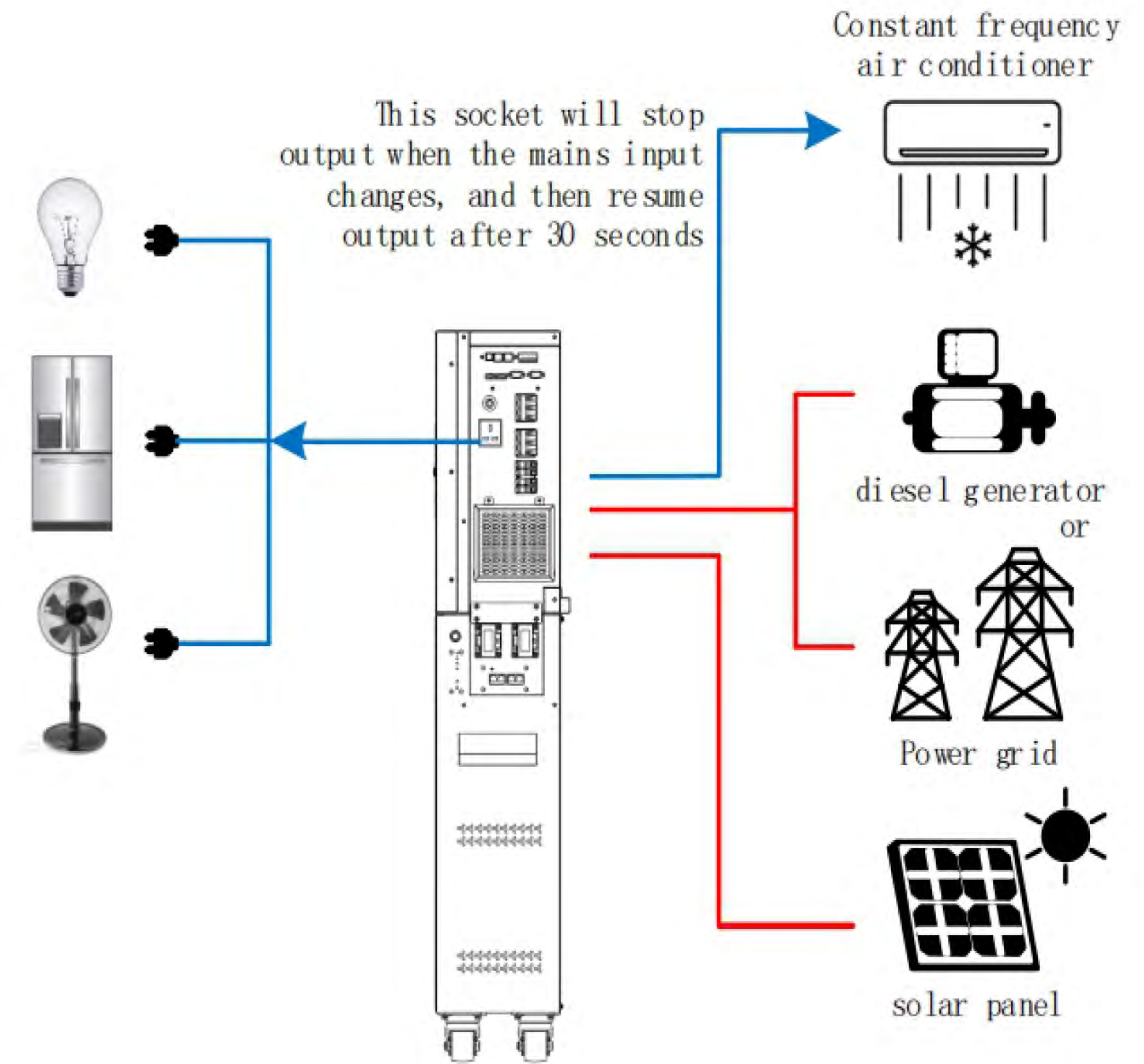
**1. Photovoltaic module:** Convert light energy into DC electric energy, charge the battery through energy storage inverter, or directly reverse it into AC to power the load.

**2. Utility or generator:** Connected at the AC input, it can supply power to the load and charge the battery at the same time. If no utility or generator is connected, the system can also operate normally, when the load power is provided by the battery and PV module.

**3. Battery:** The role of the battery is to ensure the normal use of power for the system load when the solar energy is insufficient and there is no utility power.

**4. Household load:** It can access various household and office loads, including refrigerators, lamps, TV sets, fans, air conditioners and other AC loads.

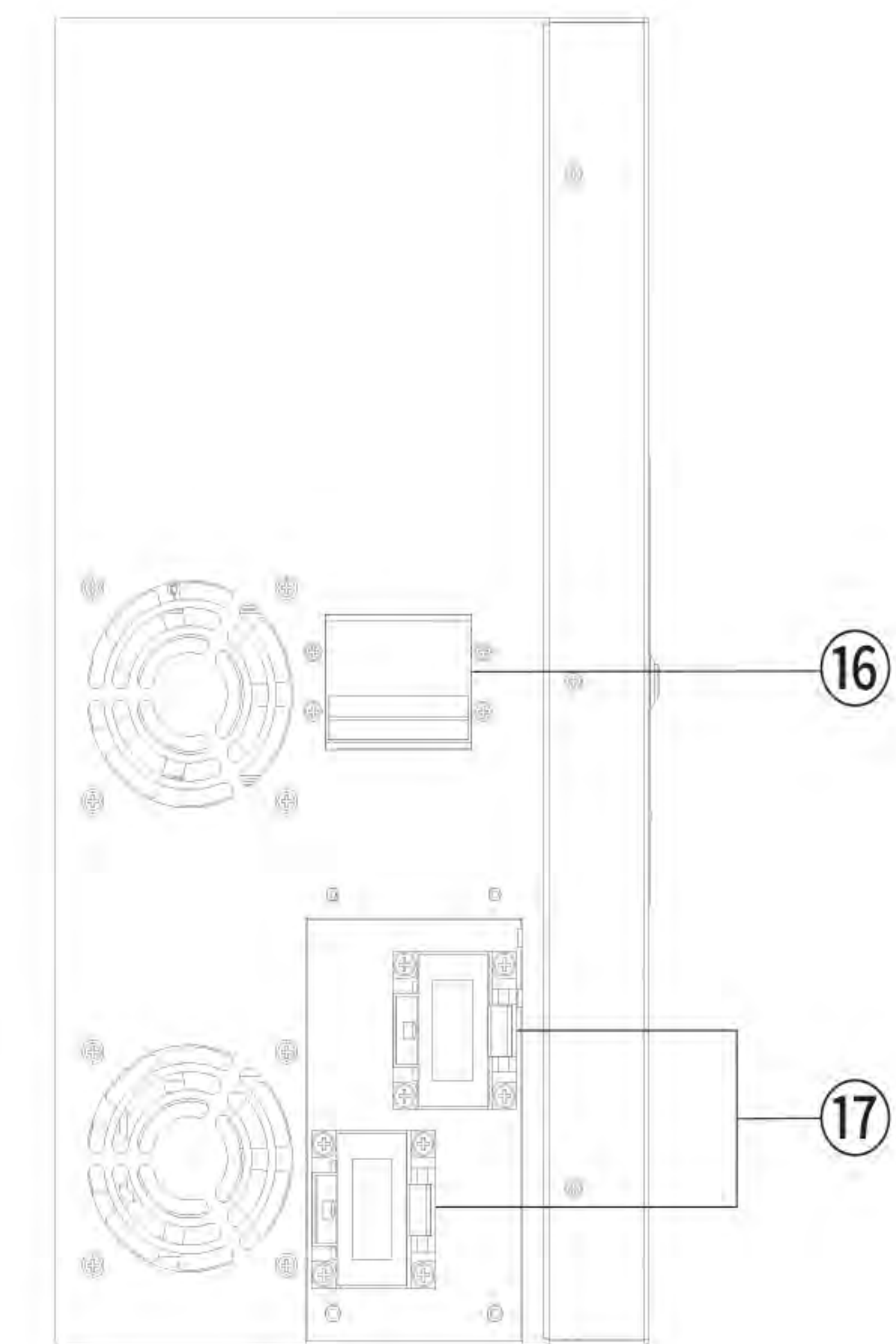
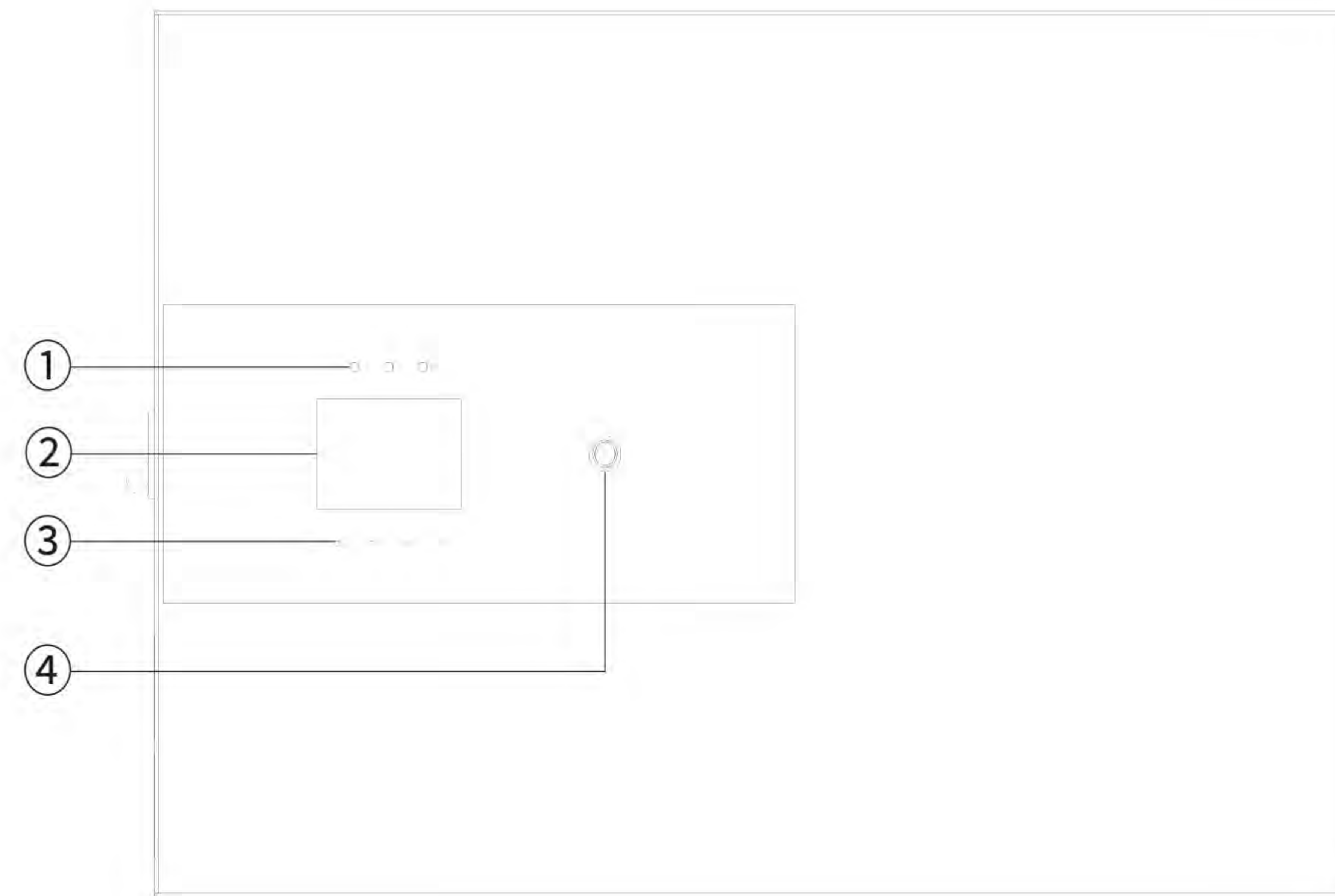
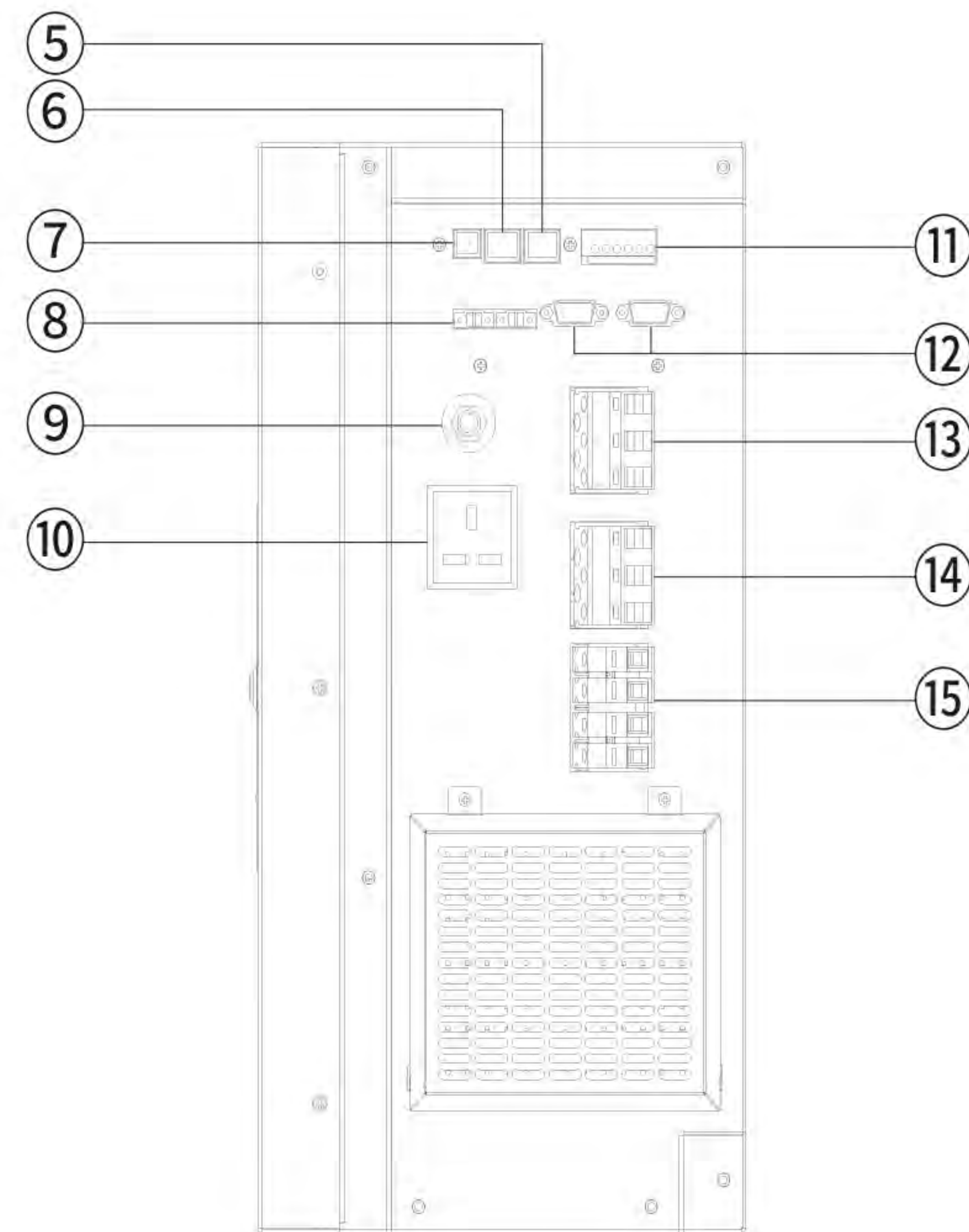
**5. Energy Storage Controller Inverter Integrated Machine:** The energy conversion device of the whole system.



System schematic



## INTERFACE DESCRIPTION



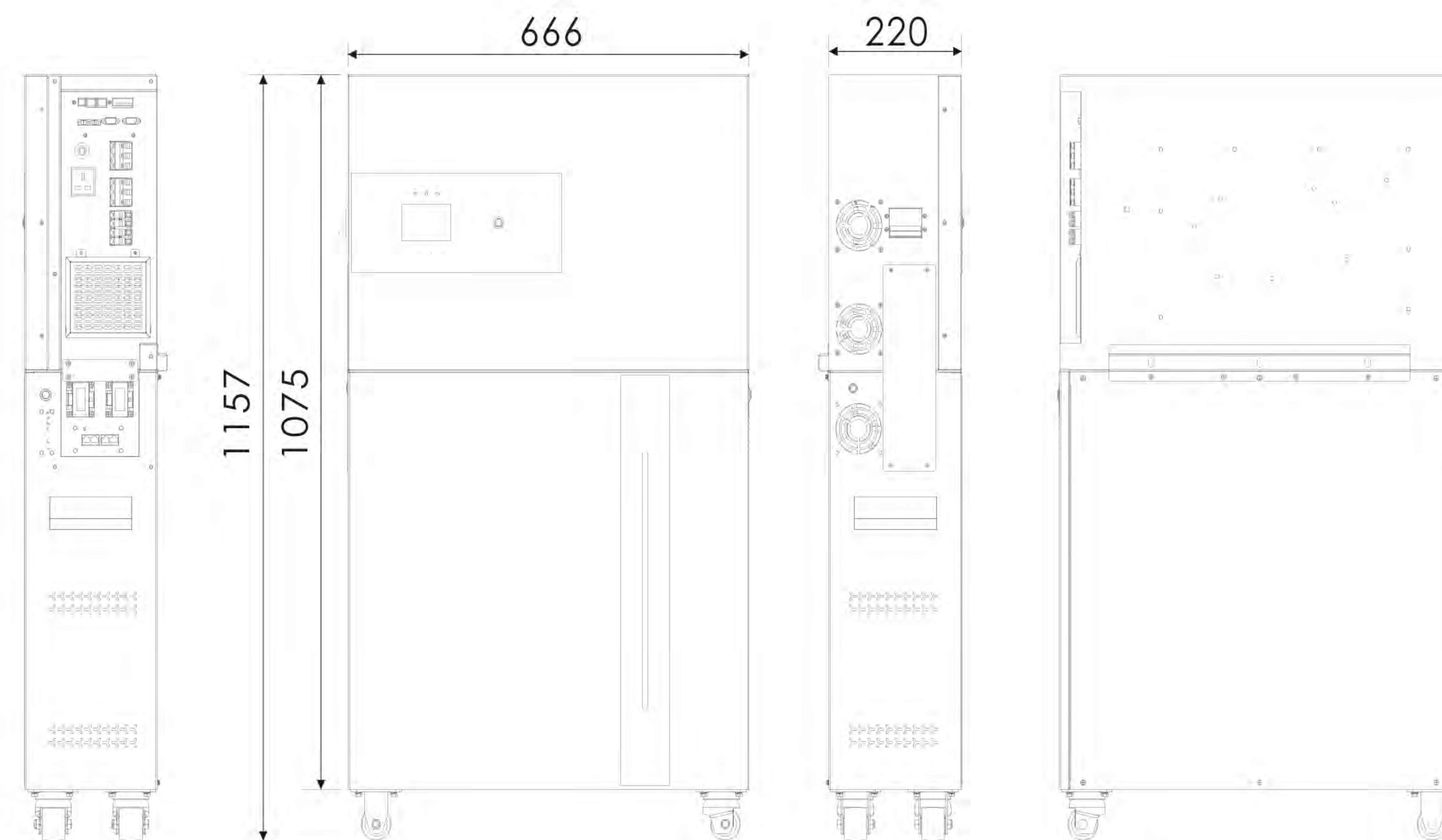
1. LED indicator	7. USB port	13. load output interface
2. LCD display	8. Current equalization detection port (for parallel use only)	14. grid-power input interface
3. Function buttons	9. Circuit break switch	15. PV connectors
4. Switch button	10. AC230V OUT	16. Battery circuit breaker
5. RS485-2/CAN	11. Dry contact port	17. Battery interface
6. RS485-1	12. Parallel port (reserved port)	



**PRODUCT DESCRIPTION**

Model	DQ1906E10K-02
Rated Power	10KW
Lithium Battery	300Ah/51.2V
AC Output Voltage	230VAC
AC Output Frequency	50/60Hz
AC Input Voltage Range	230VAC
AC Input Frequency	50/60Hz
Maximum PV Voltage	500VDC
MPPT Voltage Range	90-450VDC
PV Charge Current	150A
Maximum Input Current	27A*2
Temperature For Operation	-10-+50°C
Temperature For Storage	-15 -+60°C
External Dimensions	666*1157*220mm
Max. Number Of Parallel	6 sets
Warranty	3 years

Product Size (Unit: mm)



DQ1906E10K-02 10KW



## APPLICATION



1. PV station
2. Wind Grid side power station
3. Frequency regulation
4. Grid side
5. Industrial and commercial

-New-energy generation: Effectively smoothen the power output to decrease the impact to the grid

-Generate according to the plan and correct forecast errors-Reduce the peak and fill the valley

-Grid frequency modulation with AVC and AGC functions-Electricity of transmission and distribution-Smart Grid

- Micro-grid- Reduce the peak and fill the valley-Military Base, smelter, chemical plant, paper mill, airport, wharf and others.