Product Specifications

Power Base Max 4013

Home Energy Storage System

Version V1.0

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Contents

1. Introduction

The power base max is the off-grid type of energy storage system which integrated battery system, inverter system and control system. Its application is very convenient, which input can directly connected the power grid, oil machine or photovoltaic panels, output can directly connected to the load. This system can provide a quick solution for photovoltaic energy storage or uninterrupted power supply.

2. Functions

The product adopts the cabinet type, the modular structure design, has the better installation and the transportation convenience. The system is equipped with efficient and accurate battery management system and energy management system, with perfect precharge, predischarge, overcharge, overdischarge, overcurrent, overtemperature and short-circuit protection functions.

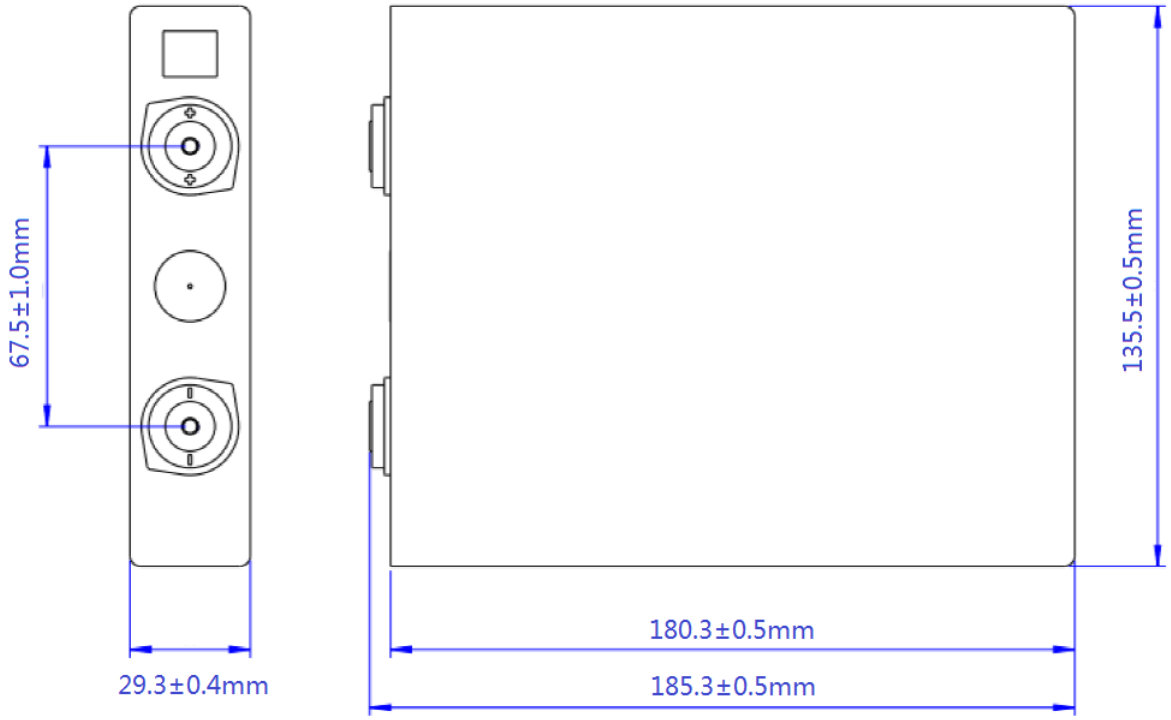
The system is composed of cabinet, battery modules, main control module and split-phase inverter.

The system supports capacity expansion function and supports the parallel use of up to 4 cabinets. It is widely used in household energy storage, off-grid energy storage and other fields. The products have the following characteristics:

- When the grid power is suddenly cut off, stable power supply can be provided independently for users.
- When the power grid does not provide power for a long time, the generator is supported to connect in for power supply and system charging.
- Maximum 13.6kW load.
- It adopts power frequency inverter, with strong carrying capacity, stable and reliable operation and high safety performance.
- The system has three levels of protection function, better guarantee the safety of the product.
- The inverter is integrated with the lithium battery system, which occupies a smaller area and can be installed quickly and easily.
- The frame structure is adopted to realize the arbitrary capacity combination.
- Unique main control box setting can increase product security; can achieve a variety of communication protocols.
- Main control box supports RS485、RS232、CAN communication.
- Supports replacement of old and new lithium battery modules.

3. Basic Features

3.1. Cell Parameters



No.	Items	Parameters	
1	Cell Type	LiFePO4 Prismatic	
2	Nominal Capacity	50Ah	
3	Nominal Voltage	3.2V	
4	Maximum Charge Current	Continuous	3C
5		Peak for 30s	5C
6	Maximum Discharge Current	Continuous	3C
		Peak for 30s	5C
7	Temperature Range	Charging	0℃～55℃
		Discharging	-20℃-55℃
		Recommended Working	15℃～35℃
8	Weight	1395±50g	

3.2. Battery Module Parameters

No.	Items	Parameters
1	Model	ZR-FS4850-1630P1
2	Cell Configuration	16S1P
3	Nominal Capacity	50Ah
4	Nominal Energy	2560Wh
5	Weight (Approx.)	33kg
6	Dimensions (W*D*H)	440*408*133 mm (Handles and connectors are not included)

3.3. Main Control Module Parameters

No.	Items		Parameters
1	Model		ZR-MC100-200E
2	Operation Voltage Range		18V~72V
3	Maximum Operation Current		≤300A
4	Communication	RS232	Battery Module Parallel
		LCD	RS485 , Monitoring Devices
		CAN/RS485	communication interface with PC
5	Weight		12kg±300g
6	Dimensions (W*D*H)		440*502*133 mm (Handles and connectors are not included)

3.4. System Features

Item	Value
Rated Energy	40kWh
Battery Module Type	ZR-FS4850-1630P1
Inverter Module Type	Schneider 865-6848-21 CONEXT XW PRO
Rated Power	6800W*2(13600W)
Waveform	Pure sine wave/same as input(bypass mode)
Nominal Output Voltage RMS	Split phase 120/240 V +/- 3%
Output Frequency	50Hz/60Hz
Inverter Efficiency (Peak)	95.1%
Transfer Time	8ms
Operating temperature	0℃ ~40℃
AC Input	
AC 1 (grid) input current (selectable limit)	3 – 60 A (60 A default)
AC 2(generator) input current (selectable limit)	3 – 60 A (60 A default)
AC input voltage limits	L-L: 156 - 280 V (240 V nominal)
AC input frequency range	52 – 68 Hz (allowable)
Mechanical Specifications	
Dimension(W*H*D)	1900mm*1600mm/900mm
Net weight （Approximate ）	900kg

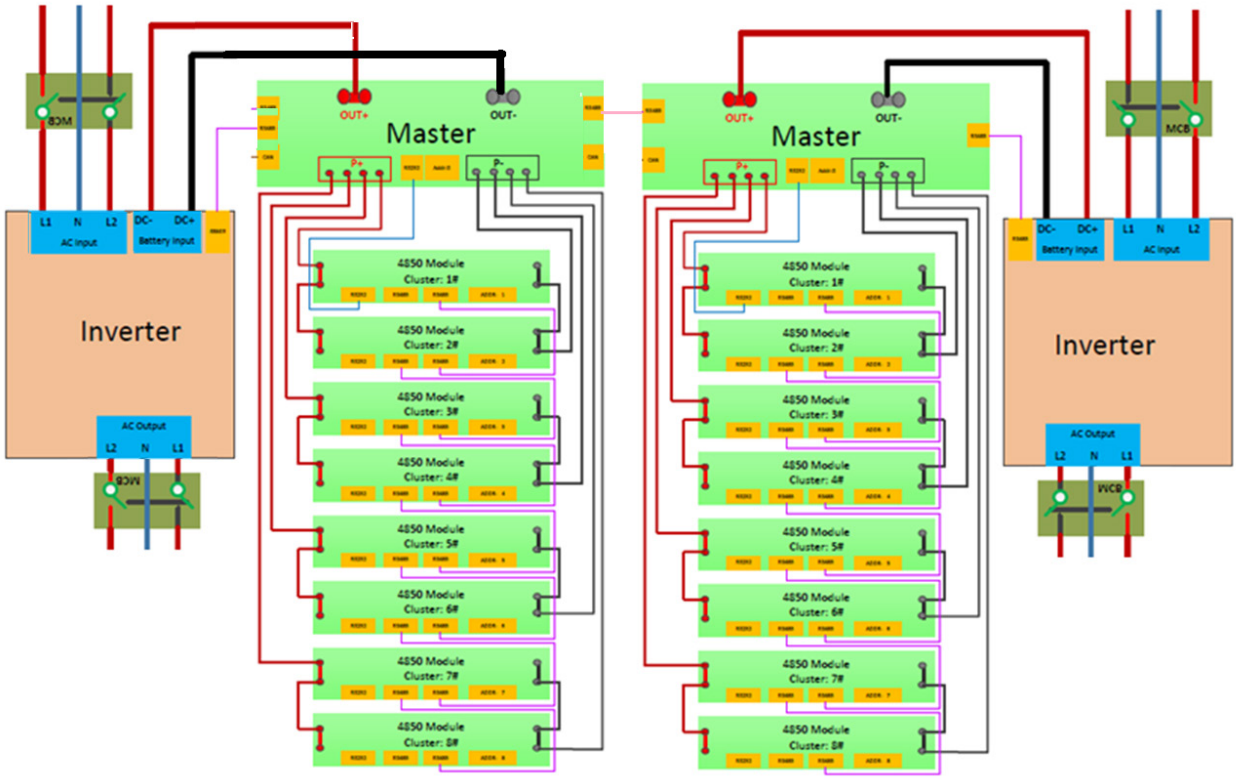
4. System Structure

4.1. System Features

The application architecture of the system is shown as follows:

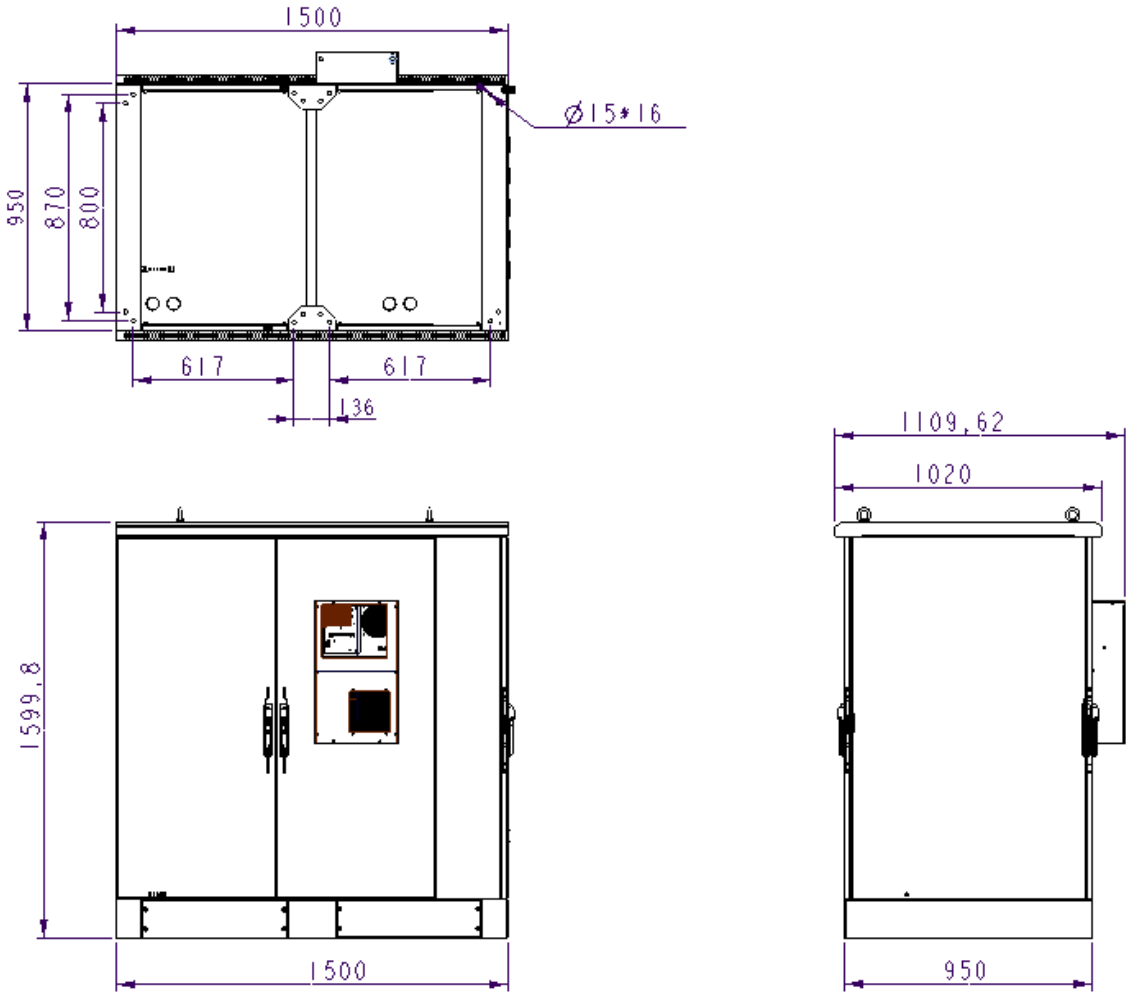
4.2. System Wiring Schematic

The system wiring schematic of the system is shown as follows:

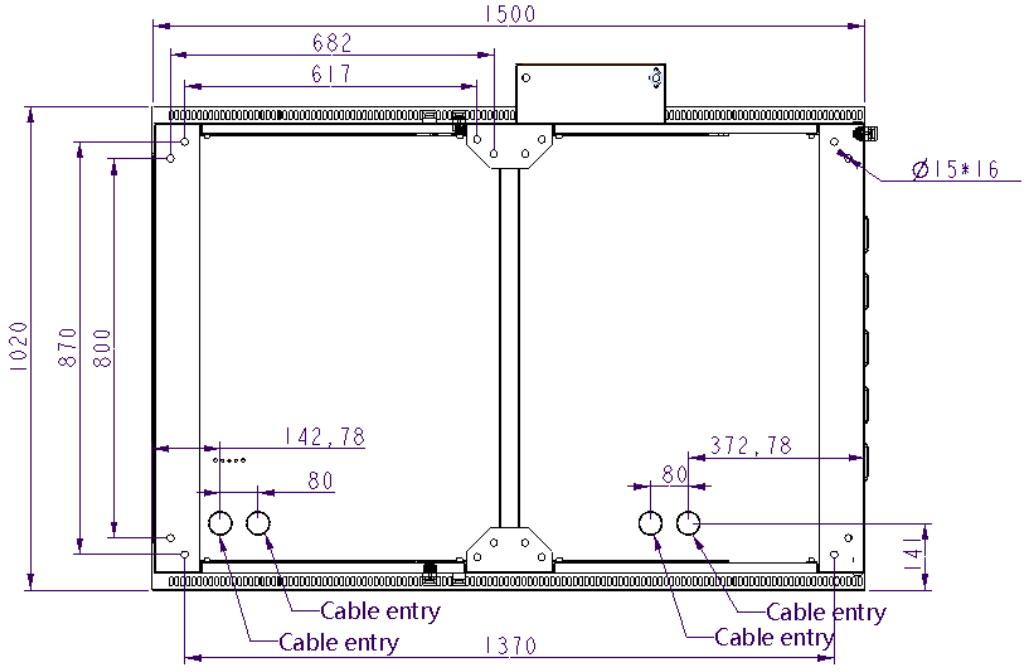


5. Appearance

5.1. Dimensional drawing（Unit:mm）



Front



Unit : mm

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