

Pytes









HV4850



Introduction

HV4850 is a high-voltage ESS based on LiFePO4 batteries. It is a new type of energy storage product developed and produced by Pytes. It could be used in various scenarios that require lithium battery energy storage, such as microgrids, photovoltaic ESS, and off grid island ESS, in conjunction with power equipment such as PCS (bidirectional converters) DC chargers, inverters, and UPS. HV4850 could meet the requirements of long cycle life, limited installation space and load-bearing. The HV4850 is equipped with an intelligent battery management system (BMS) that could manage and monitor battery cell information, including voltage, current, and temperature, for easy installation and good compatibility with PCS energy storage requirements; balance the charging and discharging of the battery cells to extend the cycle life. It's also could get real-time reporting of battery status parameters through RS485 or could protocol for external communication.

Features

-  Fully non-toxic, pollution-free, and environmentally friendly;
-  BMS has functions such as over discharge/charging protection, over current protection high/low temperature protection, etc.
-  Flexible configuration, able to match multiple PCS, easy to use;
-  Working temperature range is from 0°C to 50°C, with excellent discharge performance and cycle life;
-  Good safety performance and long cycle life;
-  It can automatically manage the charging/ discharging status, balance the capacity and voltage of each battery cell;
-  Natural air cooling for heat dissipation, reducing system noise and increasing reliability;
-  Embedded design of the standard module is small in size, light in weight, and easy to install and maintain.

Parameter

HV4850

1	Module	HV4850
2	Cell	Lithium Iron Phosphate(LFP)
3	Battery Modules Qty.	8
4	Battery System Capacity(kWh)	19.2kWh
5	Battery System Voltage(Vdc)	384VDC
6	Battery System Capacity(Ah)	50Ah
7	BMS Module	HV4850 BCU
8	Battery Module	HV4850 BMU
9	Battery System Charge Voltage(Vdc)	420VDC
10	Standard Charge Current(A)	25A(0.5C)
11	Max. Charge Current(A)	50A(1C)
12	Discharge Cut-off Voltage(Vdc)	336VDC
13	Standard Discharge Current(A)	25A(0.5C)
14	Max. Discharge Current(A)	50A(1C)
15	Discharge Current(Short Time Max.)	100A@15S
16	Depth of Discharge	90%
17	Efficiency	96%
18	Communication	RS485/CAN/Dry Contact
19	Communication(Wireless)	WiFi
20	Communication(Upper Computer)	RS232
21	Charging Temperature	0~50°C
22	Discharge Temperature	-10°C~50°C
23	Storage Temperature	-10°C~50°C
24	Cycle Life	6000
25	Operation Life	10 years
26	Dimensions(HV4850 Cabinet)	W535mm * D462mm * H940mm
27	Weight(Kg)	230KG
28	Ingress Protection Code	IP20
29	Cooling Strategy	Free cooling
30	Product Certification	CE/IEC62619

HV4850 BMU

1	Cell	Lithium Iron Phosphate (LFP)
2	Capacity(kWh)	2.4KWH
3	Nominal Voltage(Vdc)	48VDC
4	Nominal Capacity(AH)	50Ah
5	Charging Voltage	53.5V
6	Discharge Cut-off Voltage(Vdc)	44.5V
7	Communication	RS485/CAN
8	Communication(Upper Computer)	RS232
9	Charging Temperature	0°C~50°C
10	Discharge Temperature	-10°C~50°C
11	Storage Temperature	-10°C~50°C
12	Dimension(W*D*H,mm)	W440mm * D450mm * H80mm
13	Weight(Kg)	23KG
14	Ingress Protection Code	IP20
15	Cooling Strategy	Free cooling
16	Product Certification	UN38.3

Test conditions: 0.2C charge/discharge @25°C, 80%DOD