

## CHARGEEX 384V 100AH (38.4kWh) High Voltage LiFePO4 Battery Energy Storage System

V1.0

Manufactured by ChargeX Aerospace LLC



### 1. System Introduction

This 38.4kWh High Voltage BESS is an indoor battery storage system consisting of 5 units of 76.8V 100Ah 7.68kWh battery modules in series connection and a main control box. The system features an integrated rack design to save installation space. Each battery module has a built-in slave BMS for protection. The main control box acts as the host to collect the whole system information, monitor the system working state, and send instructions to the system via CAN communication.

### 2. System Components

#### 2.1 Battery Module

Each battery module consists of 24pcs LFP/3.2V100Ah LiFePO4 battery cells in series connection, with a rated capacity of 7.68kWh.

No.	Item	Parameter
1	Cell Model	LFP/3.2V100Ah
2	Pack Configuration	24S1P
3	Nominal Voltage	76.8V
4	Rated Capacity	100Ah
5	Rated Energy	7.68kWh
6	Dimension (WHD)	440800138mm
7	Weight	65kg

8	Cooling Method	Air Cooling
9	Cycle Life	≥6000 Cycles
10	Working Voltage	60.0-87.6V
11	Max. Con. Charge Current	100A
12	Max. Con. Discharge Current	100A
13	Peak Discharge Current	120A

## 2.2 Battery System

The system consists of 5 units of 76.8V 100Ah battery modules in series connection and a main control box, with a rated capacity of 384.0V 100Ah 38.4kWh.

No.	Item	Parameter
1	System Configuration	120S1P
2	Number of Battery Modules	5pcs
3	Nominal Voltage	384.0V
4	Rated Capacity	100Ah
5	Rated Energy	38.4kWh
6	Max. Charge Voltage	438.0V
7	Discharge Cut-off Voltage	300.0V
8	Max. Constant Charge Current	100A
9	Max. Constant Discharge Current	100A
10	Peak Discharge Current	120A
11	IP Standard	IP21
12	Communication	CAN/RS485
13	Dimension (LWH)	440800850mm
14	Weight	~360kg

15	Installation	Rack mounted, floor installation
16	Working Temperature	Charge: 0~60°C Discharge: -20~60°C
17	Storage Temperature	0°C~40°C (≤6 months, 60%≤SOC≤90%) 40°C~50°C (≤3 months, 30%≤SOC≤60%)
18	Humidity	0%RH ~95%RH (No condensation)