

# SafeCore

## High Voltage UPS LFP Battery System

# SC-100

## 512V50AH

### Overview

The system adopts lithium iron phosphate cells, which can be applied to UPS, communication and energy storage systems and other large-scale power backup storage fields. With medium and high multiplier cells, it is the perfect solution for emergency power backup of 15 minutes and above, and can also provide customized solutions according to user needs.



### Features

- Adopting high-capacity 6C high rate single battery cell
- Flexible design, modular structure, unlimited expansion
- Dual control for charge & discharge, No gap power supply
- Can communicate with UPS, compatible with a variety of protocols
- Human machine interface HMI
- Lithium iron phosphate cell, high energy conversion efficiency, longevity

### System Parameters

#### SHUIFP51250D (512V50Ah)

Rated voltage(V)	512
Rated capacity(Ah)	50
Voltage range(V)	432~576
Series	160
Peak discharge current(A)	250
Max continuous output power(kW)	97.6
Back-up time	≥15min
Battery pack, PDU configuration	1Master+10Slave
Pack dimension(W*D*H,mm)	440*470*133
HV box dimension(W*D*H,mm)	440*680*222
Cabinet dimension(W*D*H,mm)	600*1000*2000
System weight(kg)	500±10

#### ■ Work Conditions & Communication

Working temp.(Discharge)	-20 C~45 C, recommended 5 C~40 C
Working temp.(Charge)	0 C~45 C, recommended 15 C~30 C
Altitude	Over 2500m
Communication Interface	CAN2.0/RS485
Firefighting Req.	Perfluorohexanone or S-type aerosol(optional)
Protection Level	IP20

#### ■ Certification



UN38.3 RoHS



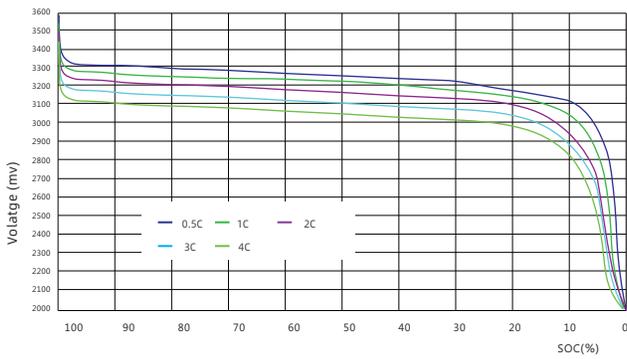
### Single Cluster Cabinet Installation Preview

■ 51.2V50Ah Battery Module

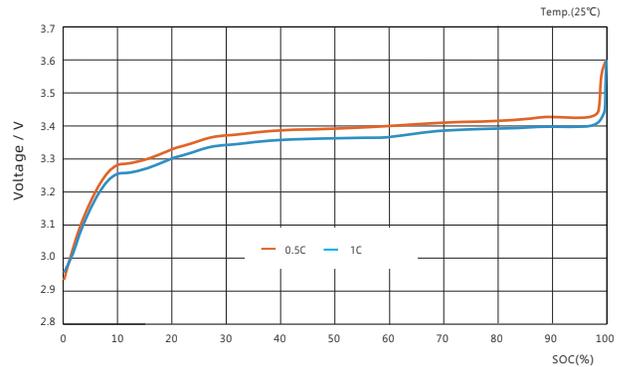


Performance Data					
	Backup Time(min)	15	30	45	60
Value	Constant Power(kw)	97.6	49.3	37.2	25.2
	Constant Current(A)	200	100	75	50

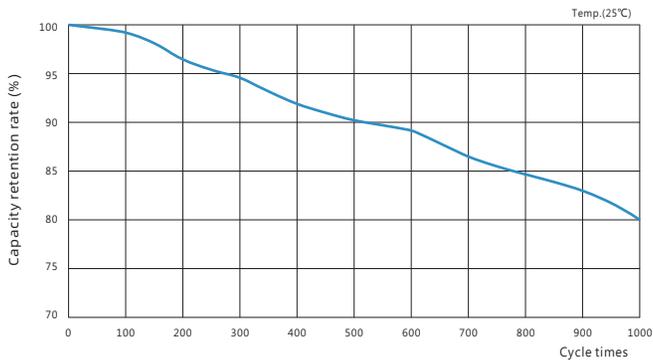
### Cell characteristics curve



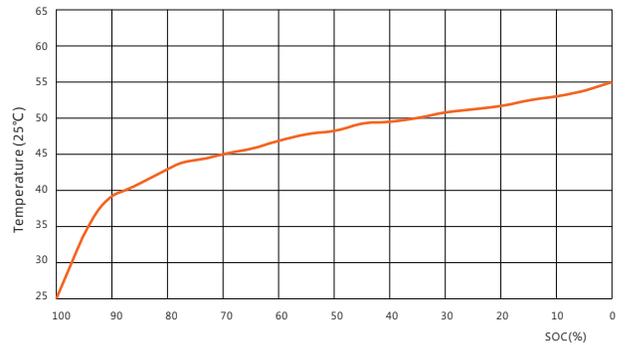
Discharge Curve of Different Discharge Rate at 25°C



Charge Curve of Lithium ion Battery at 25°C



4C Discharge Cycle Life Curve



4C Discharge Temperature Rise Curve