

# **Product Solution**

Edition:		V1. 0	
Release date:		2021/03-01	
Customer(客户)	:		
Battery model name (电	池型号):	48V50Ah-15S1P-A0	
Applicable Products (遠			
Doc. No: (编号):		Spec-Pack-3100	
Customer approval(客户承认) Comment (备注):  Customer's signature/ Date(客户签名/日期):			
Approved 核准	Checked 审核	Prepared 制定	



#### REVISION AND UPDATES 更改记录

REVISED 更改项 目	DESCRIPTION 内容描述	Date 更改日期
1.0	New Issue	2021-03-01



**Copyright** ©shenzhen UFO Power Technologies Co., Ltd. 2020-2022. All rights reserved.

Non-written consent of the Company, any organization and individual cannot extract and copy the contents of this document, in part or in whole, in any form to disseminate.

#### **Trademark Notice**

UFO trademarks are all owned by shenzhen UFOPower Technologies Co., Ltd.

All other trademarks or registered trademarks mentioned in this document are owned by their respective owners.

#### **Declaration**

- The specification details the performance of the LiFePO4 battery pack. Please read the specification
  carefully before operations and please abide by relevant industrial safety regulations. We will not be
  responsible for any damage to the product due to improper operations or use under conditions that
  are not prescribed in the specification.
- 2. As the product version upgrades or other reasons, this document is subject to change without notice. Unless otherwise agreed, this document only as a guide, all statements, information, and recommendations in this document do not constitute any express or implied warranty.

#### **Contact information:**

ADD: The 4th Floor, No. 8 Workshop Building, Shao Pai Industrial Area, five Community, Long Gang Street, Long Gang District, Shenzhen 518116

TEL: 0086 755 84535976 FAX: 0086 755 28436910

http://www.ufo-battery.com



## 1. Product Specification(产品技术规格)

Table 1 (表 1)

	No.	Item	General Parameter		Remark
	(序号)	(项目)	(常規	观参数)	(备注)
	1	Combination method (组合方式)	15S1P		
		Rated Capacity (额定容量)	Typical (标称容量)	50Ah	Standard discharge after Standard charge(package) (标准充电后标准放电(针对电池组))
	2		Minimum (最小容量)	49Ah	
	3	Factory <b>Voltage</b> (出厂电压)	48-	49.5V	Mean Operation Voltage (即工作电压)
	Voltage at end of  4 Discharge 37.5V  (放电终止电压)		7. 5V	Discharge Cut-off Voltage (放电截止电压)	
Package 电池组	5	Charging Voltage (充电电压)	54.75V(CC-CV)		
	6	Internal Impedance (内阻)	<	$40$ m $\Omega$	Internal resistance measured at AC 1KHz after 50% charge (半电态下用交流法测量内阻)
		(1 3121)	,	10	The measure must uses the new batteries that within one week after shipment and cycles less than 5 times (使用出货后不到一个星期及循环次数少于 5 次的新电池测量)
		Standard charge	Constant	Current 10A	Charge time : Approx 6 h
		(标准充电)	Constant Vo	oltage 54.75V	(充电时间: 大约 6个小时)
			0.050	C cut-off	
	7			电流 10A	
				Ē: 54.75V	
		T · · · · ·	截止电流	ቪ: 0.05C)	
		Limiting current (限流充电)	:	10A	Software startup(软件启动)
		Standard discharge		Current 10A	
	8	(标准放电)		age 37.5V	
				も流 10 <b>A</b>	
			截止电压	<b>37.</b> 5V)	



9	Maximum Continuous Charge Current (最大充电持续电流)	25A	0-45° C
10	Maximum Continuous Discharge Current  (最大放电持续电流)	50A	
11	Operation Temperature Range (工作温度范围)	Charge: 0~45 °C  Discharge: -20~55 °C	60±25%R.H. Bare Cell (单体电池储存湿度范围)
12	Storage Temperature Range (储存温度范围)	Less than 12 months:-10~35℃ (小于 12 月: -10~35℃) less than 3 months:-10~45℃ (小于 3 个月: -10~45℃) Less than 7 day:-20~65℃ (小于 7 天: -20~65℃)	60±25%R.H. at the shipment state (出货状态时的湿度范围)
13	Dimensions(尺寸)	D400*W442*H130mm	Include case
14	Weight (重量)	31kg	Include case
15	Volumetric specific energy (体积比能量)	104.4WH/L	Include case
16	Gravimetric specific energy (质量比能量)	77.4 WH/KG	Include case



The BMS have all functions which are:(该BMS系统具有以下一些功能)

overcharge detection function(过充电保护功能) over discharge detection function(过放电保护功能) over current detection function(过电流保护功能)

short detection function (短路保护功能)

Temperature detection function温度保护功能

balance function (均衡功能)

communicate function (通讯功能)

Alarm function (告警功能)

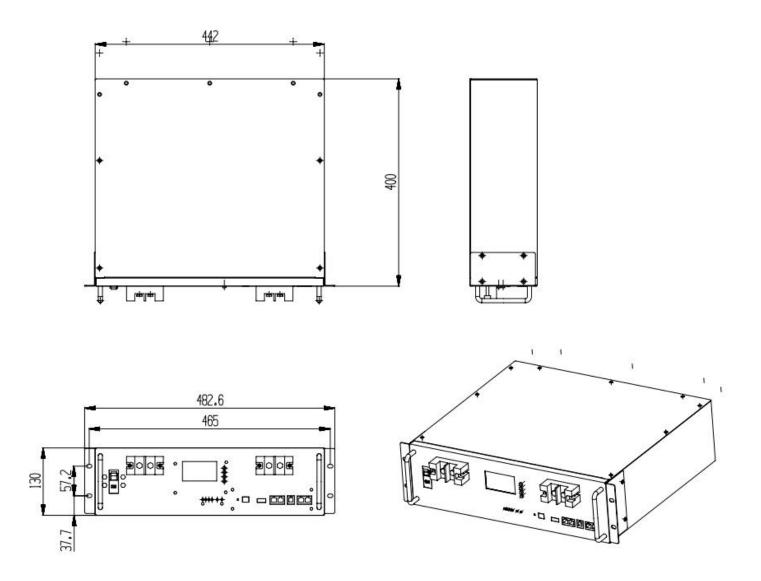
Total capacity function (总容量功能)

Storage history function (存储历史记录功能)

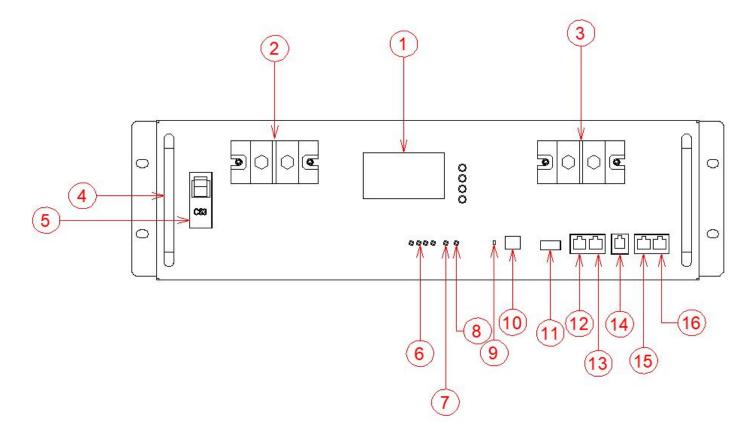
LCD (帯LCD屏)

Current limiting function(限流功能)

### 2. Product appearance of Battery Pack



## 3. Panel View



No.	Description	Functional Description
1	LCD	Display message
2	Battery +	Positive terminal
3	Battery -	Negative terminal
4	Handle	Handling
5	MCB	Output ON/OFF
6	Electricity volume indicator	Display the battery's capacity(Four lights)
7	Red- trouble-light on	ALM alarm indicator light blinking
8	Display state information	Run indicator light blinking
9	Reset key	On/OFF button
10	Display connection address	ADS Dialer
11	Dry contact	1/2 Normally open, closed during fault protection 3/4 Normally open, closed when a low battery alarm signal has occurred

12	RS-485 connection port	RS 485 communication interface
12	·	
13	CAN connection port	CAN
		communication interface
14	RS-232 connection port	RS 232 communication interface
		(for battery condition monitoring)
15	RS-485 connection port	RS 485 communication interface (Used in
13		communication parallel, and for battery condition
		monitoring or manufacturer to debug or service)
	RS-485 connection port	RS 485 communication interface (Used in
		communication parallel,and for battery condition
16		monitoring or manufacturer to debug or service)