DNK Power Technology Co., Ltd

DNK

SPECIFICATION OF PRODUCT

For Lithium-ion Battery Pack

48V 100Ah(4800Wh)

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48V 100AH（4800Wh）
Lithium-ion Battery Pack Specification

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CONTENT

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1、 Product Introduction

1.1 Specifications

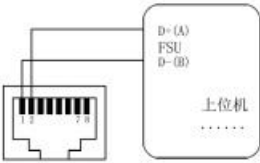| NO	Item	SPEC	Remark
1	Rated Capacity	100AH	
2	Rated Voltage	DC48	
3	Rated Energy	4800wh	
4	Operating Voltage	37.5V～54.75V	2.5V～3.65V
5	Max. Charge Current	50A	0.5C
6	Max. Discharge Current	100A	1C
7	Peak Current	200A	
8	Ip Grade	IP20	
9	Discharge Temp	-10℃～55℃	
10	Charge Temp	0℃～55℃	
11	Dimension	L482mm*W420*H177mm	
12	Weight	42Kg	
13	Internal Resistance	≤30mΩ	
14	Cycle Life	5000	25℃
15	Communication	CAN/RS232+RS485	

1.2 Model
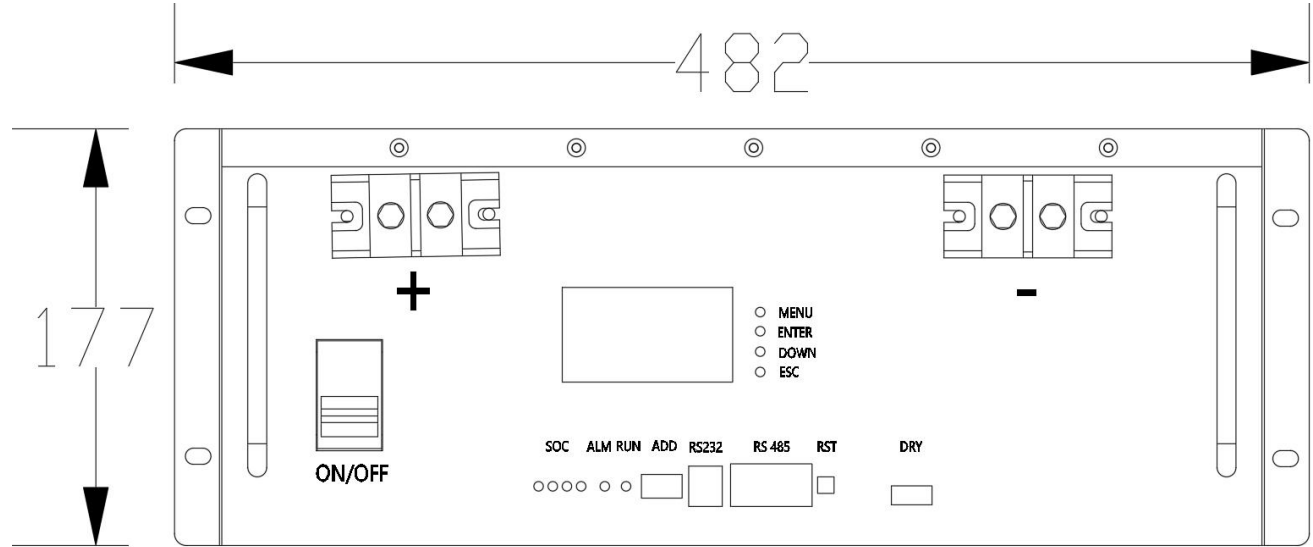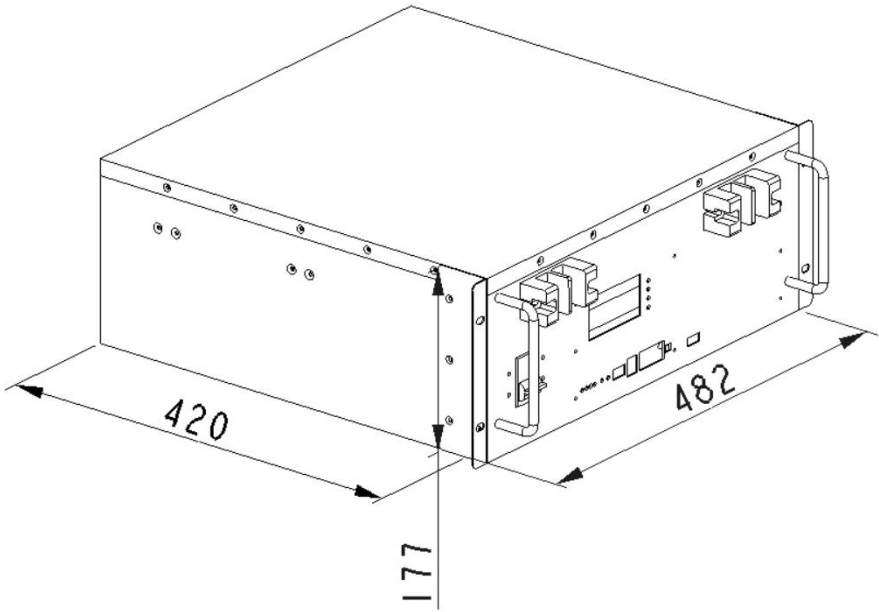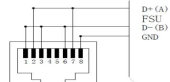
1、 Product introduction

1.3 Interface Command

Item	SPEC	Interface	Refer
POSITIVE	100A runs through the fence terminal - 2p	M6screw	
NEGATIVE	100A runs through the fence terminal - 2p	M6 screw	
485 Communication Interface	DATA＋ （A）	RJ45 interface	
	DATA－ （B）		
Display	LED display	Four keystrokes	
Power Indicator	LED lights	Six lights indicate	
Power	Switch closed, open discharge	DC-125A Air Switch	

1、Product introduction

1.4 Interface Definition

Item	Definition
Air Switch	Switch on, battery circuit turns on；Switch off, battery circuit turns off.
SOC	Percentage of remaining power：25%~50%~75%~100%
ALM	ALM Blinking：Battery alarm；ALM ON：Battery protection
RUN	RUN Blinking： Battery running
RS232	Communication Protocol（RJ11 port）follows RS232, used for battery information transmission
RS485	Communication Protocol（RJ45 port）follows RS485, used for battery information transmission
ADD	Before connecting multiple devices in parallel, set the DIP switch address for each battery. The DIP switch address for each battery should be different.
RST	Long pressing a few seconds to restart battery
DRY	Dry connect terminal: provide one input and one output

2、 Characteristic Curve

48V100Ah Charge-Discharge Curve 0.20C,25°C
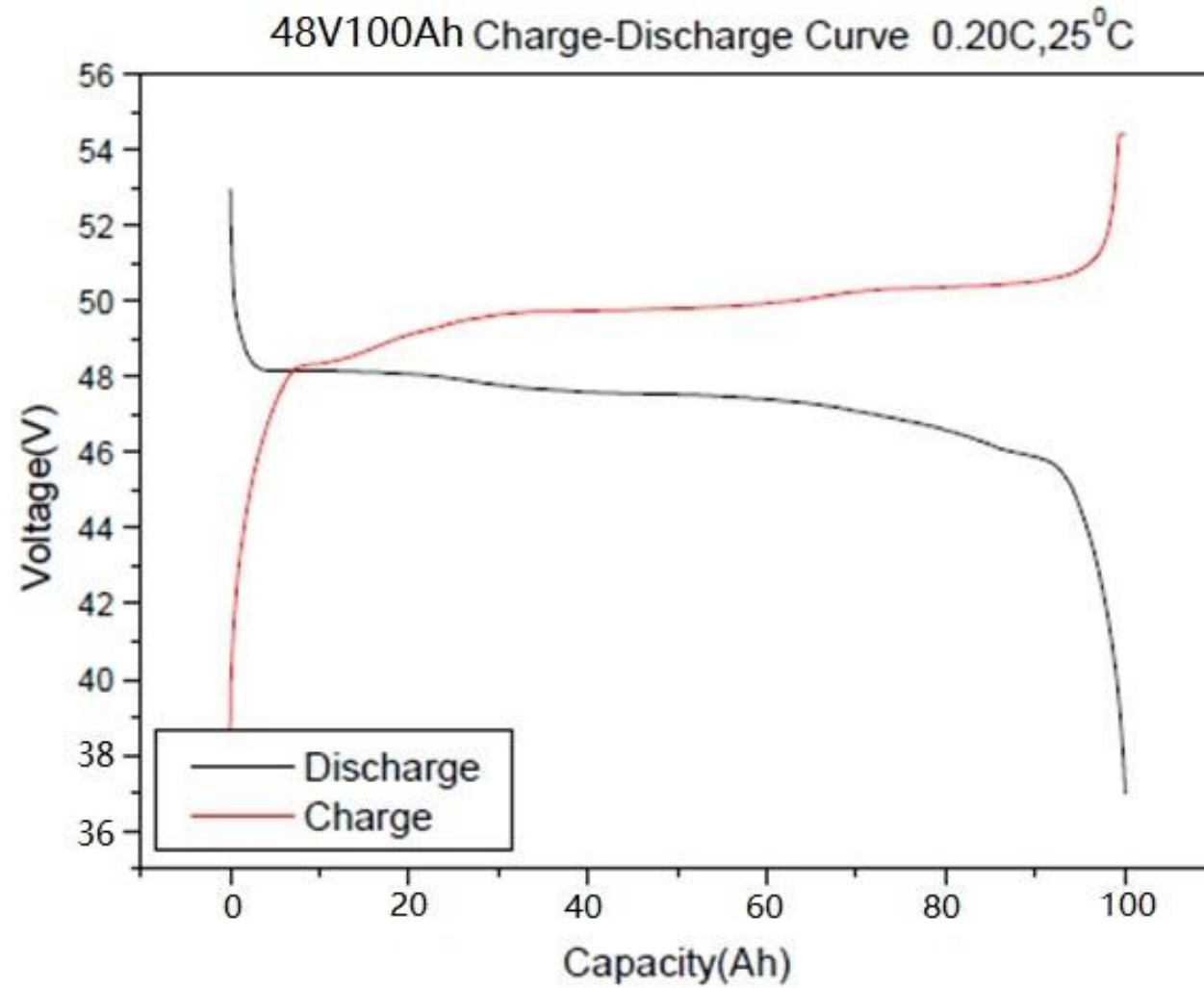
3、BMS

BMS Description

NO	Item	MIN	MAX	Type	Unit
1	Operating Voltage	37.5	54.75	/	V
2	Continuous Charging Current	1	50	/	A
3	Continuous Discharging Current	1	100	/	A
4	Discharging Over Current	180	220	/	A
5	Operating Temp	-20	70	/	℃
6	Operating Humidit	10	85	/	%
7	Internal Resistance	<10			mΩ
8	Normal Operating Consumption	<30			mA
9	Static Total Consumption		100	50	uA

4、Cautions

(1) Do not immerse the battery in water, and keep the battery in a cool dry surrounding if it stands by.

(2) Do not use or leave the battery at high temperature as fire or heater. Otherwise, it can overheat or fire or its performance will be degenerate and its service life will be decreased.

(3) Do not reverse the position and negative terminals.

(4) Do not connect the battery electrodes to an electrical outlet.

(5) Do not short circuit. Otherwise it will cause serious damage of the battery.

(6) Do not transport or store the battery together with metal objects such as hairpins, necklaces, etc.

(7) Do not use the battery in a location where static electricity and magnetic field is great, otherwise, the safety devices may be damaged, causing hidden trouble of safety.Turn off the switch on its base.

(8) Please use special lithium charger.

(9) It should be noted that the cell would be possible to be at a over-discharged state by its self-discharge characteristics in case the cell is not used for long time. In order to prevent over-discharging, the cell shall be charged periodically to maintain about 51V(Recommended 3 months one cycle).Over-discharging may causes loss of cell performance, characteristics, or battery functions.

(10) Do not disassemble battery.

Company is not responsible for the incident caused by not obeying the specifications. Before using the battery, you should read the specifications, usage instruction and some attentions carefully to learn its application method and areas. If the phenomenon such as error using method or wrong circuit connection, or input power data, working index are inconsistent with the specifications, cause damage to product, load and its accessories, we are not responsible for it.

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