

# USER MANUAL



## PRODUCT OVERVIEW





## BASIC SYSTEM ARCHITECTURE



## COMMUNICATION INTERFACE



**RS232 INTERFACE** 





#### **RS485/CAN INTERFACE**

- 1 Ext Sync
- 2 GND
- 3 None 4 - CAN H
- 5 CAN L

7 - RS485-A+ 8 - RS485-B-

- 5 CAN 1 6 - GND
- 87654321

#### BATTERY ADDRESS SETTING



DIP	1	2	3	4	5	6	address	address (H)
status	0	0	0	0	0	0	16	0X10
	0	1	1	1	1	0	1	0x01
	0	1	0	0	0	0	2	0x02
	0	0	1	0	0	0	3	0x03
	0	1	1	0	0	0	4	0x04
	0	0	0	1	0	0	5	0x05
	0	1	0	1	0	0	6	0x06
	0	0	1	1	0	0	7	0x07
	0	1	1	1	0	0	8	0x08
	0	0	0	0	1	0	9	0x09
	0	1	0	0	1	0	10	0x0A
	0	0	1	0	1	0	11	0x0B
	0	1	1	0	1	0	12	0x0C
	0	0	0	1	1	0	13	0x0D
	0	1	0	1	1	0	14	0x0E
	0	0	1	1	1	0	15	0x0F
note: this DIP switch 0 is off, 1is on								



## PARAMERTERS

# BA-32S-R/32S-P BA-34S-R/34S-P

Battery PACK parameter Specification				
Model	BA-32S-R	BA-32S-P	BA-34S-R	BA-34S-P
Cell pack basic parameter				
Pack Nominal Voltage/V	51.2	51.2	51.2	51.2
Cell model	34135192	34135192	43173205	43173205
Cell nominal Voltage/V	3.2	3.2	3.2	3.2
Max charge Voltage/V	3.65	3.65	3.65	3.65
Cell nominal voltage/AH	100	100	150	150
Cell MAX Discharge rate/ C	2	2	2	2
Cell MAX charge Rate / C	1	1	1	1
Cell in series	16	16	16	16
Cell in parallel	1	1	1	1
Battery pack method	Laser welding	Laser welding	Laser Laser welding welding	
Battery pack Energy/KWH	5.12	5.12	7.68	7.68
Battery Parameter				
BMS Type	Software	Software	Software	Software
Discharge				
Operating Voltage Range/V	40-58.4	40-58.4	40-58.4	40-58.4
Continuous current/A	100	100	150	150
Over current/A	110	110	165	165
Over current delay/S	5	1	5	1
Short circuit current/A	300	300	450	450
Short circuit current delay/µS	448	448	448	448
Charge				
Charger voltage(MAX)/V	58.4	58.4	58.4	58.4
Type current/A	50	50	75	75



continuous current(MAX)/A	100 100		150	150
Cut-off Voltage/V	58.4	58.4	58.4	58.4
Cut-off current/A	01	0-1	0-1	0-1
Protection				
Cell over voltage Alarm/V	3.6	3.6	3.6	3.6
Cell over voltage Alarm resume/V	3.4	3.4	3.4	3.4
Cell over voltage protection/V	3.65	3.65	3.65	3.65
Cell over voltage protection resume/V	3.4	3.4	3.4	3.4
Cell over voltage protection delay/S	1	1	1	1
PACK over voltage Alarm/V	57.6	57.6	57.6	57.6
PACK over voltage Alarm resume/V	54.4	54.4	54.4	54.4
Pack over voltage Protection/V	58.4	58.4	58.4	58.4
Pack over voltage Protection resume/V	54.4	54.4	54.4	54.4
Pack over voltage Protection delay/S	5	5	5	5
Cell under voltage Alarm/V	2.800	2.800	2.800	2.800
Cell under voltage protection/V	2.700	2.700 2.700		2.700
PACK under voltage Alarm/V	44.8	44.8	44.8	44.8
Pack under voltage Protection/V	43.2	43.2	43.2	43.2
charge over current alarm/A	100	100	150	150
charge over current protection /A	110	110	165	165
charge over current protection delay/S	1	1	1	1
Load detect	YES	YES	YES	YES
short circuit current protection /A	300	300	450	450



## INSTALLATION

#### PARTS LIST

Check the equipment before installation. Please make sure nothing is damaged in the package.

You should have received the items in the following package:





## LCD DISPLAY ICONS

MAIN SCREEN





TIME SETTING SCREEN



LANGUAGE SETTING SCREEN





## BATTERY INFORMATION SCREEN

2021-09	-25	14:15	3:22	Satu	rday	- It	ower the World
2021 Sat	-09-: t 星: Tim	25 14 期六 ne.	4:13		Ö Bright	less	EN Linguage
Firm Soft	1	2	3	+/-	Del	-	245
Datte	4	5	6	•	Esc		
LCD Ver.	7	8	9	0	Į Į	1.94	Designed By ABT

Password is 888888, and cannot be modify by User.

Battery Info			51.2V100Ah 5.12KWH 16S						
53.5 V	<mark>50</mark> %		3334 mV Max Voltage		3332 mV Min Voltage		2 mV Diff Voltage		
			1	3333	mV	9	3333	mV	
50 Ah	SOC	Ì	2	3333	mV	10	3333	mV	
Remain Capacity		Ì	3	3333	mV	11	3332	mV	
0	Cell Temp 25 °C	ĺ	4		m۷	12	3333	mV	
Cycles	BMS Tem 25 ℃		5	3333	mV	13	3333	mV	
Cycles	0.1		6	3333	mV	14	3333	mV	
100 Ah	c_mos ON		7	3333	mV	15	3333	mV	
SOH	u_mus on		8	3333	mV	16	3333	m۷	
Current Statu	s standby								
			A	(					



#### BATTERY PARAMETER SETTING SCREEN

Forbid to set parameter by LCD.



## LCD SHUT DOWN

2021-09-25 14:16:26 Saturday <i>Power the World</i>							
2021-09-25 14:16 Sat 星期六 Time	Drightless	EN Language					
Firmware Version: V2.0.1 Software Version: V2.0.12 Battery System Info	Parameter Set	U Turn OFF					

Click this Area once to turn off



LCD AWAKEN



Press any area Except turn off area will be awake this LCD display

## COMMUNICATION PROTOCOL

Please refer to the protocol datasheet.

#### MAINTAINENCE

For safety, if the battery is abnormal and needs to enter maintenance mode, contact technical support engineers

#### ATTENTION

- Battery connect to load must link with DC breaker
- Please do not use the battery in a high temperature environment and keep away from fire.
- Prevent water from entering the battery. If water enters the battery, stop using it immediately and contact technical support engineers
- Damage caused by human factors and accidents will not enjoy free warranty
- The damage caused by battery short circuit is not covered by warranty
- Damage caused by force majeure is not covered by free warrant