Specification

2021.09.22

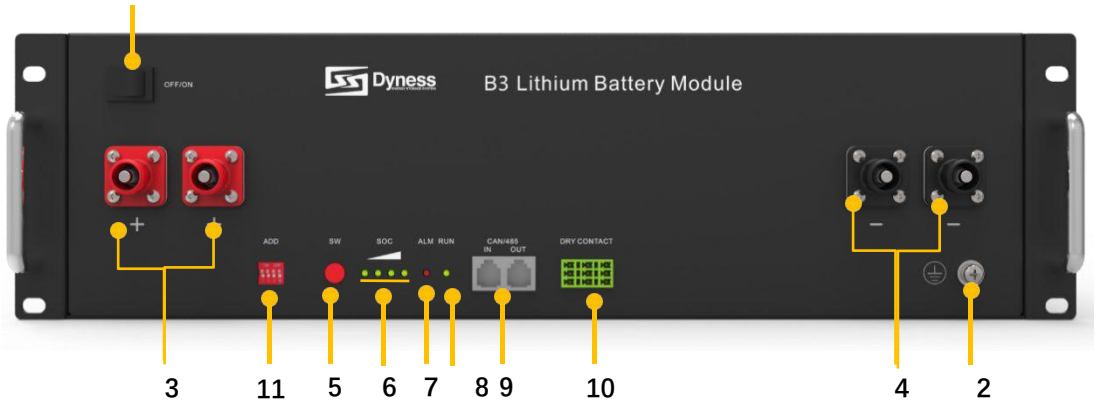
of B3 Battery System

1. Specification

Production	Nominal Voltage	Nominal Capacity	Dimension	Weight
B3	DC48V	75Ah	480×360×130mm	≈31kg

2. System internal module B3 specification

2.1 Front Panel of battery module



Port Definition

Item	Name	Definition
1	Power switch	OFF/ON, remains ‘ON’ when using
2	Grounding	Shell ground connection
3	Positive socket	Connect positive output power cable or parallel cable
4	Negative socket	Connect negative output power cable or parallel cable
5	SW (battery wake/sleep switch)	When power switch is in ‘ON’, long pressing SW for 3s to enable the battery for switch-on or dormant state
6	SOC	Green lights, showing battery capacity
7	ALM	Red lights, flashing when warning, always on when protection. When the protection removes, the battery can recover automatically
8	RUN	Green light, flashing when standby, always on when discharging, flashing when charging
9	CAN/485	Communication Port communication (factory default CAN communication)

10	DRY CONTACT	/
11	ADD	DIP switch

2.2 Product parameters

Module Name	B4850
Cell Technology	Li-ion(LFP)
Battery Module Capacity (kWh)	3.6
Battery Module Voltage (Vdc)	48
Battery Module Capacity (Ah)	75
Battery Module Cell Quantity (pcs)	45
Battery Cell Capacity (Wh)	80
Battery Cell Voltage (Vdc)	3.2
Battery Cell Capacity (AH)	25
Battery Module Cell Quantity in Series (pcs)	15
Battery Module Charge Voltage (Vdc)	53.5
Battery Charge/Discharge Current (A)	37.5(Recommended)
	45(Max continuous)
	55(Protect)
Dimension(W*D*H, mm)	480×360×130mm
Communication	CAN/RS485
Pollution Degree (PD)	II
IP Grade	IP20
Weight(kg)	31
Working temperature	Charging 0℃~+55℃
	Discharging -20℃ ~+55℃
Humidity	5%~85% RH (No condensation, system work well.)
Storage temperature	-10℃~+35℃

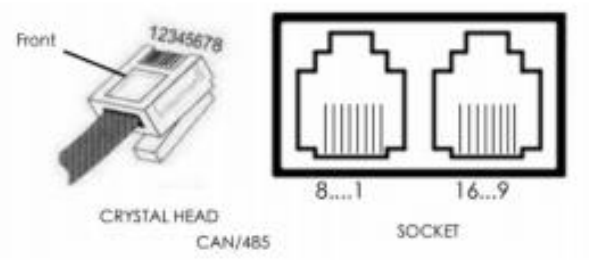
2.3 Alarms and protection

No.	Item		Default value	Remark
1	High charging voltage protection and	Alarm value	52.5V	
		Alarm recovery value	51V	
		Protection value	54.75V	

No.	Item		Default value	Remark
	recovery	Protection recovery value	52V	
2	Low discharging voltage protection	Alarm value	45V	
		Alarm recovery value	46.5V	
		Protection value	42V	
		Protection recovery value	45V	
3	Low cell voltage protection and recovery	Alarm value	2.9V	
		Alarm recovery value	3.15V	
		Protection value	2.85V	
		Protection recovery value	3.1V	
4	High cell voltage protection and recovery	Alarm value	3.55V	
		Alarm recovery value	3.5V	
		Protection value	3.6V	
		Protection recovery value	3.45V	
5	Charging current limit protection	Protection value	45A	Charging current exceeds 45A. Current-limiting board starts and current-limits to 3A.
6	Charging over current protection	Alarm value	50A	
		Alarm recovery condition	BMS will recover when the charge current is lower than 50A,or when there is a discharge current.	
		Protection value	55A	
		Protection recovery condition	BMS will restore in 60s delay or recover immediately when there is a discharge current.	
7	Discharging over current protection	Alarm value	50A	
		Alarm recovery condition	BMS will recover when the discharge current is lower than 50A,or when there is a charge current	
		Protection value	55A	
		Protection recovery condition	BMS will restore in 60s delay or recover immediately when there is a charge current.	
8		Charging alarm value	55℃	
		Charging alarm recovery value	50℃	

No.	Item		Default value	Remark
	Cell over temperature protection and recovery	Charging protection value	65℃with charging current	
		Charging protection recovery value	60℃	
		Discharging alarm value	55℃	
		Discharging alarm recovery value	50℃	
		Discharging protection value	65℃ with discharging current	
		Discharging protection recovery value	60℃	
9	Cell low temperature protection and recovery	Discharging alarm value	2℃	
		Discharging alarm recovery value	5℃	
		Discharging protection value	-20℃ with discharging current	
		Discharging protection recovery value	-10℃	
		Charging alarm value	2℃	
		Charging alarm recovery value	5℃	
		Charging protection value	0℃	
		Charging protection recovery value	2℃	

2.4 Communication port



Pin Definition

Foot position	Color	Definition
PIN1	Orange/white	485A
PIN2	Orange	GND
PIN3	Green/white	485B
PIN4	Blue	CANH
PIN5	Blue/white	CANL
PIN6	Green	Reserve
PIN7	Brown/white	XIN
PIN8	Brown	Reserve
PIN9	Orange/white	Reserve
PIN10	Orange	GND
PIN11	Green/white	Reserve
PIN12	Blue	CANH
PIN13	Blue/white	CANL
PIN14	Green	Reserve
PIN15	Brown/white	XOUT
PIN16	Brown	Reserve

Jiangsu Daqin New Energy Tech Co., Ltd.
Address: 158# South Ji'an Road, Hi-Tech District,
Yangzhou City, Jiangsu Province, China,211400.
Email: Sales@dyness.net
Website: www.dyness-tech.com.cn