

Battery specifications		
Voltage and capacity (Industry name)	36V 80 Ah Lithium battery	48V 80Ah Lithium battery
Electric characteristics		
Specification	38.4 V / 80 Ah (1P12S)	51.2 V /80 Ah (1P16S)
Nominal Voltage	38.4 V	51.2 V
Capacity	80 Ah	80 Ah
Minimum capacity	78 Ah (0.2 C (16A) discharge 2.0 V/cell)	78 Ah (0.2 C (20A) discharge 2.0 V/cell)
Cell voltage	3.2 V	3.2 V
Energy	3.072 kWh	4.096 kWh
Cycle life	>= 4000 times (Operating conditions: 25°C ±2°C - 0.2 C/0.2C)	>= 4000 times (Operating conditions: 25°C ±2°C - 0.2 C/0.2C)
Battery material	EVE® LiFePO ₄	
Protective board	Jiabaida and Ginkgo	
Charging and discharging parameters		
Charging time	4 hours (20% - 100% SOC @ 16A)	
Standard discharge	16 A	16 A
Max discharge current	80 A (SOC 20%-100%, 0°C-50°C)	80 A (SOC: 20% -100%, 0°C - 50°C)
Discharge cut-off voltage	30 V	40 V
Charge voltage	43.2 V	57.6 V
Standard charge	16 A	16 A
Maximum charge current	80 A (SOC: 0% -80%, 25°C - 45°C)	80 A (SOC: 0% -80%, 25°C - 45°C)
Self-discharge rate	< = 3% month	
Peak discharge current	250 A (10s)	250 A (10s)
Resistance	≤ 60 mΩ	≤ 60 mΩ





Charger	43.8 V 15 A waterproof charger with portable plug	58.4 V 22 A waterproof charger with portable plug
BMS protection (PCM specifications)	Over charge, over discharge, over current, short circuit, high temperature alarm	
Operation temperature parameters		
Charge temperature range	0 ~ 45°C	
Discharge temperature range	-20 ~ 50°C	
Storage temperature range	10 ~ 30 °C	
Storage humidity	5 % ~ 90%	
Battery case material	Black iron box	
Mechanical properties		
8 slotted installation holes		
Dimensions length	470 mm	470 mm
Dimensions width	290 mm	340 mm
Dimensions height	260 mm	260 mm
Weight	40 kg	45 kg
Waterproof rate	IP 65	
Charge discharge interface	ACTB – 135	
Mode of communication	RS485	
Warranty	5 years	
Accessories	SOC Indicator and connector	
Bluetooth and app	Support	



PCM specifications				36V 80Ah		48V 105Ah	
Item	Default	Settable or not	Details	Set value	Remark	Set value	Remark
Cell overcharging protection	Open	Yes	Detection voltage	3.7 V	Qualified range: 3.7 $\pm$ 0.03 V	3.7 V	Qualified range: 3.7 $\pm$ 0.03 V
	Open	Yes	Detection delay	1S		1S	
	Open	Yes	Recovery voltage	3.35 V	Qualified range: 3.35 $\pm$ 0.05 V	3.35 V	Qualified range: 3.35 $\pm$ 0.05 V
	Open	Yes	Recovery delay	1S		1S	
Cell over discharge protection	Open	Yes	Detection voltage	2.3 V	Qualified range: 2.3 $\pm$ 0.05 V	2.3 V	Qualified range: 2.5 $\pm$ 0.05 V
	Open	Yes	Detection delay	1S		1S	
	Open	Yes	Recovery voltage	3V	Qualified range: 3 $\pm$ 0.08 V	3V	Qualified range: 3 $\pm$ 0.08 V
	Open	Yes	Recovery delay	1S		1S	
Overall overcharge protection	Open	Yes	Detection voltage	44 V	Qualified range: 44 $\pm$ 0.3 V	59 V	Qualified range: 59.0 $\pm$ 0.3 V
	Open	Yes	Detection delay	5 S		5 S	
	Open	Yes	Recovery voltage	40.5 V	Qualified range: 40.5 $\pm$ 0.3 V	54V	Qualified range: 53 $\pm$ 0.3 V
	Open	Yes	Recovery delay	1 S		1 S	
Overall over discharge protection	Open	Yes	Detection voltage	30 V	Qualified range: 30 $\pm$ 0.3 V	40V	Qualified range: 40 $\pm$ 0.3 V
	Open	Yes	Detection delay	5 S		5 S	





	Open	Yes	Recovery voltage	Charge recovery			
	Open	Yes	Recovery delay	1S		1S	
Over current protection	Open	Yes	Charging overcurrent protection	100A	Qualified range: 100 ±3A	100A	Qualified range: 100 ±3A
	Open	Yes	Charging overcurrent delay	2S		2S	
	Open	Yes	Discharge overcurrent protection value	250 A	Qualified range: 250 ± 3A	250 A	Qualified range: 350 ± 3A
	Open	Yes	Discharge overcurrent delay	10S	30S	10S	30S
Temperature protection	Open	Yes	Battery charging high temperature protection	55°C	Qualified range: 55±2°C	55°C	Qualified range: 55±2°C
	Open	Yes	Charging high temperature delay	5 S		5 S	
	Open	Yes	Battery charging high temperature recovery	50°C	Qualified range: 50±2°C	50°C	Qualified range: 50±2°C
	Open	Yes	Battery charging low temperature protection	-2°C	Qualified range: -2±2°C	-2°C	Qualified range: -2±2°C
	Open	Yes	Charging low temperature delay	5S		5S	
	Open	Yes	Low temperature recovery of	3°C	Qualified range: 3 ±2°C	3°C	Qualified range: 3 ±2°C

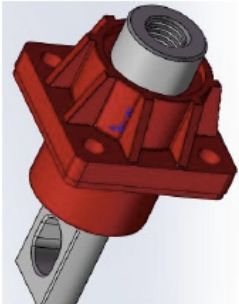




			battery charging				
	Open	Yes	Battery discharge high temperature protection	60°C	Qualified range: 60 ± 2°C	60°C	Qualified range: 60 ± 2°C
	Open	Yes	Discharge high temperature delay	5S		5S	
	Open	Yes	Battery discharge high temperature recovery	55°C	Qualified range: 55±2°C	55°C	Qualified range: 55±2°C
	Open	Yes	Battery discharge low temperature protection	-20°C	Qualified range: -20±2°C	-20°C	Qualified range: -20±2°C
	Open	Yes	Discharge low temperature delay	5S		5S	
	Open	Yes	Low temperature recovery of battery discharge	-15°C	Qualified range: -15±2°C	-15°C	Qualified range: -15±2°C
Capacity alarm	Open	Yes	Low capacity alarm	5%		5%	
	Open	Yes	Low capacity recovery	10%		10%	



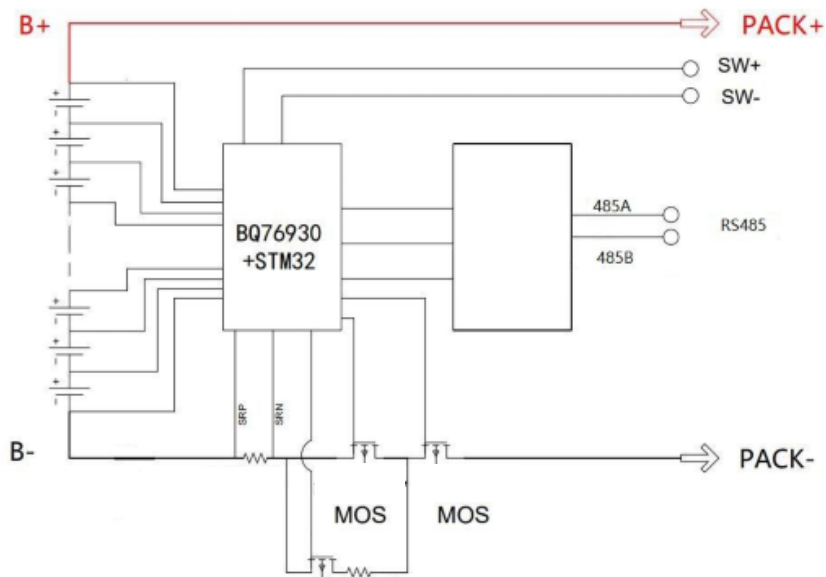


	ACTB 135 – GY – M6 RD	+	38.4V	51.2 V
	ACTB 135 – GY – M6 BK	-	38.4V	51.2 V
	LP – 20 – J02SX – 03 - 401	1		12 V
		2		12 V
	LP – 16 – JO5SX -03 – 401	1		RS 485 B
		2		RS 485 A
	M22 48V	1		

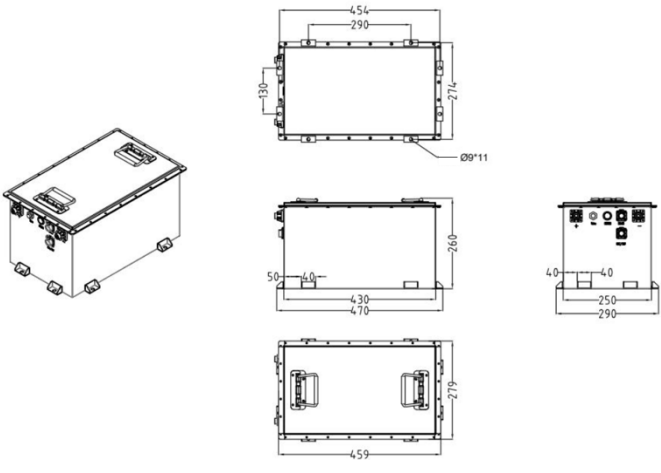
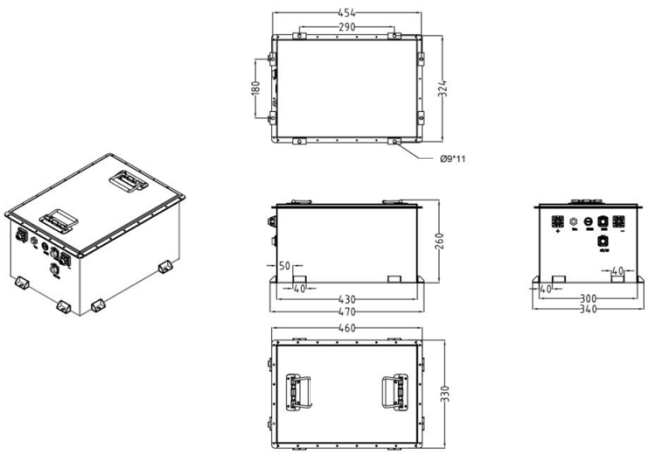


	30V-90V USB	1		
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Battery specifications



Battery Drawing

36V 80Ah	48V 80Ah
 Isometric view of the 36V 80Ah battery unit. Top view dimensions: 454mm (length), 290mm (width), 30mm (height), 274mm (depth). Bottom view dimensions: 459mm (length), 279mm (depth), 430mm (width), 470mm (depth). Side view dimensions: 260mm (height), 40mm (width), 250mm (depth), 290mm (depth). Terminal block dimensions: 40mm (width), 40mm (height), 250mm (depth), 290mm (depth).	 Isometric view of the 48V 80Ah battery unit. Top view dimensions: 454mm (length), 290mm (width), 30mm (height), 274mm (depth). Bottom view dimensions: 459mm (length), 279mm (depth), 430mm (width), 470mm (depth). Side view dimensions: 260mm (height), 40mm (width), 250mm (depth), 290mm (depth). Terminal block dimensions: 40mm (width), 40mm (height), 250mm (depth), 290mm (depth).

