

Specification of:

LFP 24V 9/30

25.6V 9Ah



Document No	Edition No	Approved By
	01	JA Annandale

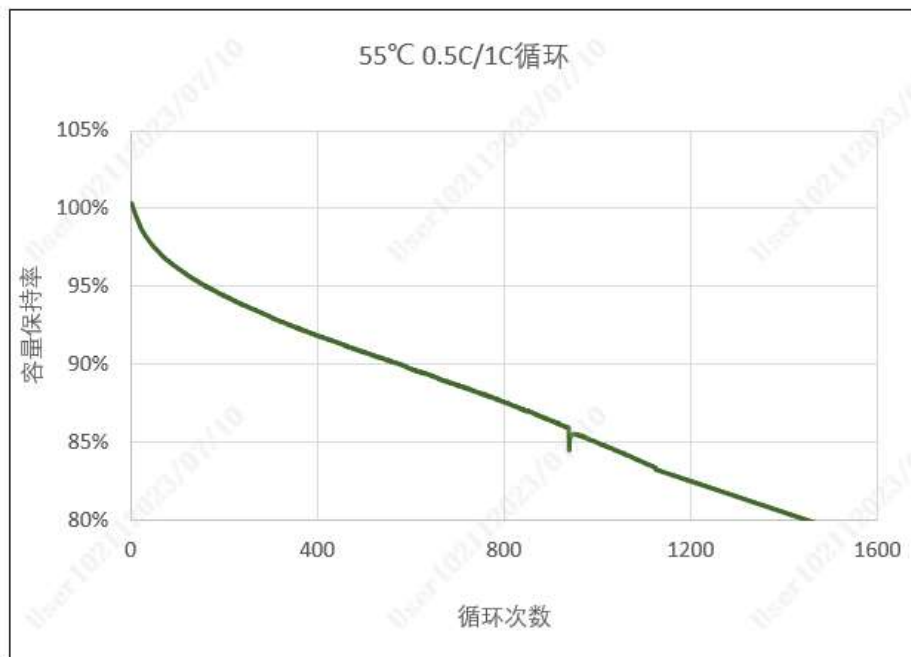
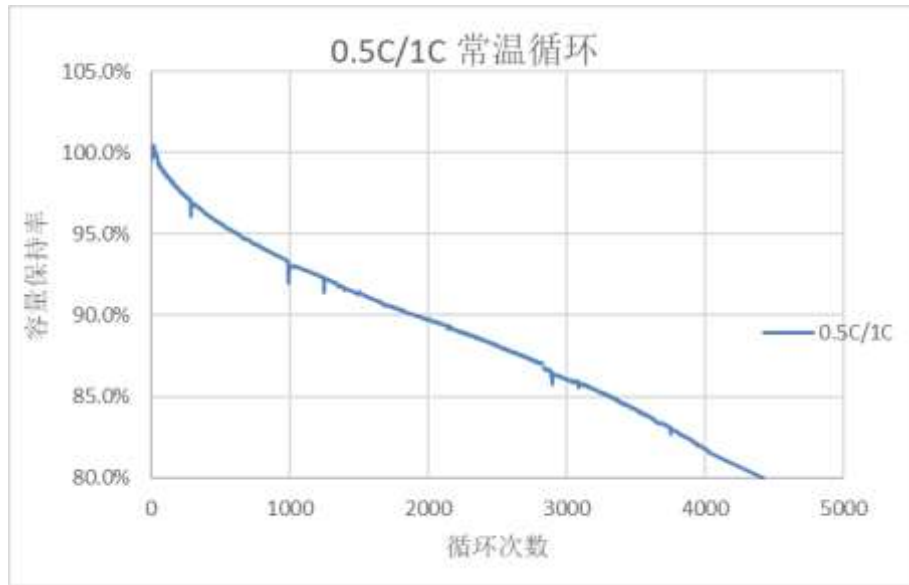
1. General

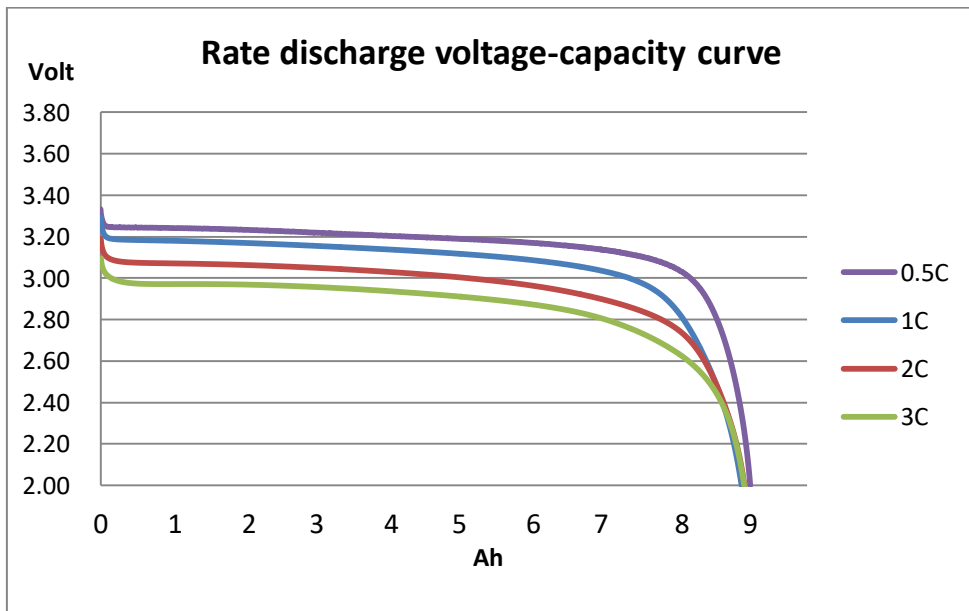
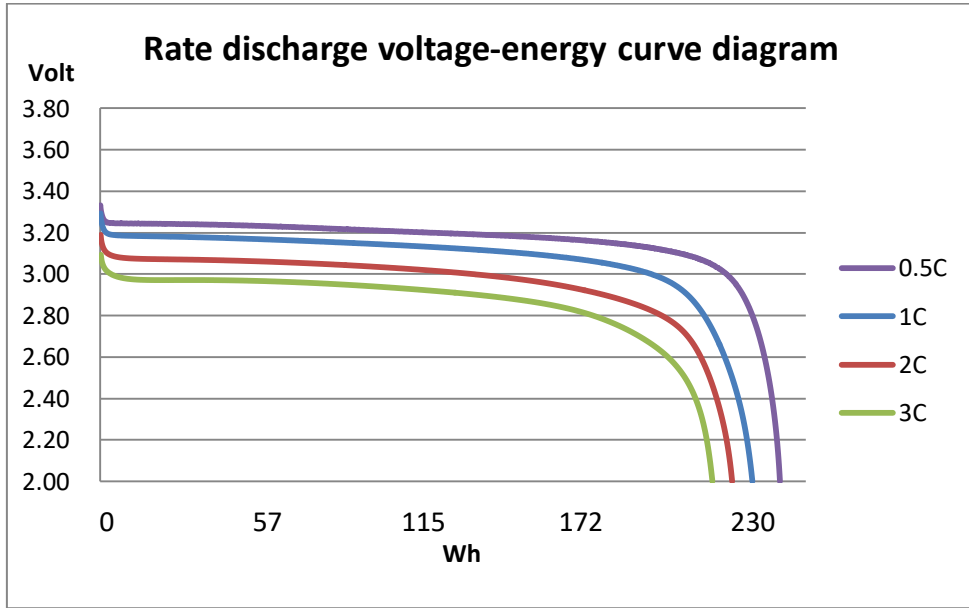
LFP 24V 9/30 is a 8S2P Lithium Iron Phosphate rechargeable battery pack with battery protection circuit board integrated, normal voltage is 25.6V and 9Ah.
The pack comes enclosed in a 3D printed housing, the size of two standard 12V7 lead acid housings side by side

2. Battery Pack basic characteristics

Lithium Iron Phosphate cells used	3.2V 4.5Ah
Capacity Simulated Lead Acid	9Ah
Nominal Voltage	25.6V
Internal impedance	≤ 100mΩ
Discharge cut-off voltage	17V
Max charge voltage	29.2V
Max allowable continuous charge current	4.5A
Max possible continuous discharge current	15A (determined by polyswitch)
Max allowable continuous discharge current	9A
Max discharge peak current	30A (0.5 second)
Cycle life	Dependent on environment and temperature
Protections	PCM, polyswitch
Weight	+/-1.4 kg
Max dimension	151mm x 130mm x 100mm
Operating temperature	Charge : 0 to 45°C Discharge: -10 to 60°C
Storage temperature	1 year : 0~35°C(1*)

Note (1): If the cell is kept as ex-factory status (50% of charge), the capacity recovery rate is more than 80%.





3. PCM parameters

Test item	Criterion	
Voltage	Charging voltage	DC: CC/CV(3.60V/cell)
	Balance voltage for single cell	3.60±0.025V
Current	Balance current for single cell	70±5mA
	Current consumption for single cell	≤90µA
	Max. continuous charging current	30A (Limited by polyswitch 15A)
	Max. cont. discharging current	30A (Limited by polyswitch 15A)
Over charge protection (single cell)	Over charge detection voltage	3.75±0.025V
	Over charge detection delay time	1S—5.0S
	Over charge release voltage	3.55 ±0.05V
Over discharge protection (single cell)	Over discharge detection voltage	2.2±0.08V
	Over discharge detection delay time	10-200mS
	Over discharge release voltage	2.7±0.1V
Over current protection	Over current detection voltage	68.25mV
	Over current detection current	90A ± 20A
	Detection delay time	1-5S
	Release condition	Cut load, Auto release
Short protection	Detection condition	Exterior short circuit
	Detection delay time	80-500uS
	Release condition	Automatic
Resistance	Protection circuitry	<50mΩ
Temperature	Operating Temperature Range	-20~+60°C
	Storage Temperature Range	-20~+85°C