



51.2V 100Ah (5.12kWh)
KENZA LiFePO4



Details Catalog

Performance Specifications

General Information

Nominal Voltage	51.2 Vdc
Nominal Capacity	100 Ah
Nominal Energy	5120 Wh
Battery Chemistry	3.2V LiFePO ₄
Cell Connectivity	16S1P
Efficiency (Round Trip)	≥98%
Self-Discharge Rate	<3% Monthly
Max. In Parallel	16 Pcs
Max. In Series	Not Allowed
Cycle Life 0.2C, 25 °C @ 80% DoD	6500 Cycles
Origin	Shenzhen, China
BMS Build-in	Yes



BMS Protection Characteristics

Primary Charging	Current :105A	Delay Time: 20s
Second Charging	Current :110A	Delay Time: 2~3s
Primary Discharging	Current :110A	Delay Time: 10s
Second Discharging	Current :150A	Delay Time: 100ms
Over-Charge Voltage	Voltage :58.4V	Delay Time: 1~2s
Over-Discharge Voltage	Voltage :40V	Delay Time: 1~2s
Temperature	PCB Temperature ≥ 95°C Recover ≤ 85°C	
Communication Port	RS485, Optional For CAN/Dry Contact	

Operating Parameters

Operating Voltage Range	44.8V-57.6V
Discharge Cut-Off Voltage	40V
Max. Discharge Current	100A
Peak Discharge Current	150A (3s)
Max. Charge Voltage	58.4V
Standard Charge	20A (0.2C)

Environmental Specifications

Discharge Temperature	-20°C ~ 55°C
Charge Temperature	0°C ~ 55°C
Storage Temperature	-10°C ~ 30°C
Ingress Rating	IP52

Mechanical Specifications

Dimensions (L*W*H)	650*384*142 mm
Weight	45 Kg
Mounting Options	Wall
Indicator State	ALM/RUN/SoC

Others

Screen	Touchable LED
Terminals	Magnetic Plug-In
Case Material	SPCC Steel
Bracket	Yes
Heating	Optional
Bluetooth(App)	Optional



Constant Current Discharge Data (Amperes @ 25°C)

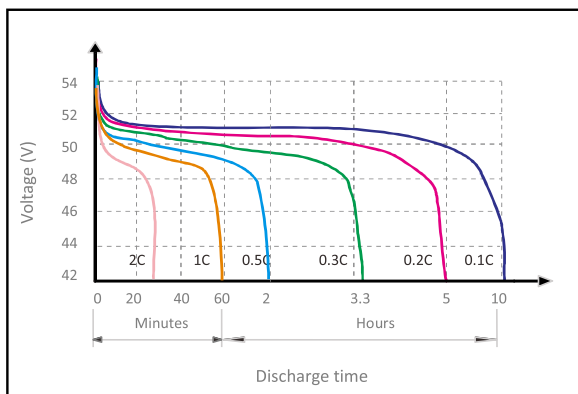
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	50A	33.3A	25A	20A	10A	5A

Constant Power Discharge Data (Watts @ 25°C)

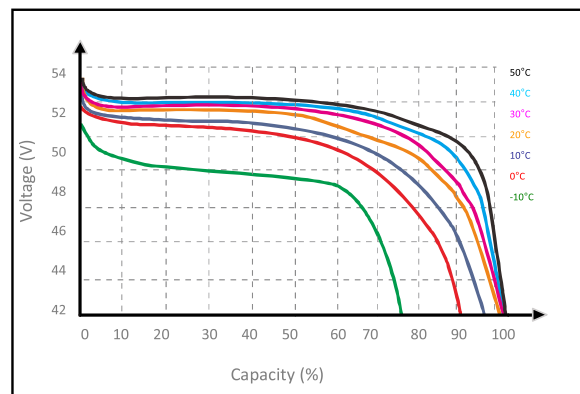
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	2560W	1706.7W	1280W	1024W	512W	256W

Testing Report Curve

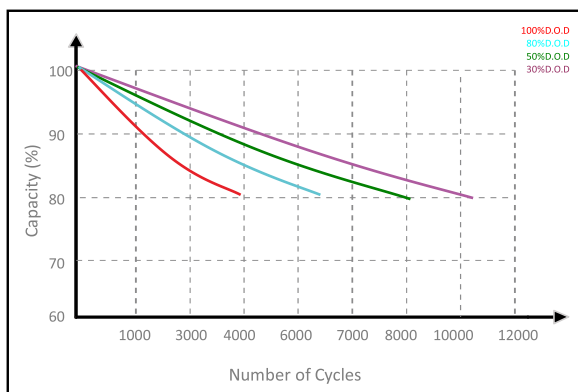
Discharge Characteristics (25°C)



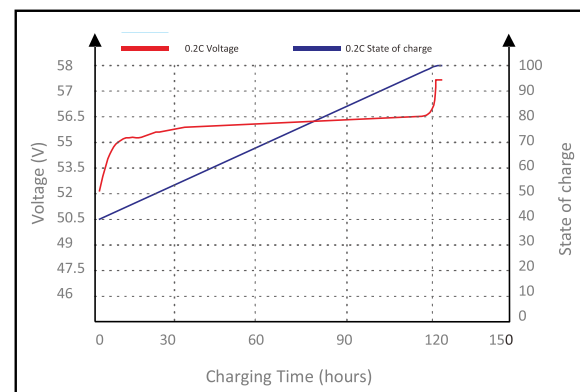
Temperature VS Discharge (0.2C)



DoD VS Cycle Life (0.2C 25°C)



State of Charge (0.2C, 25°C)



Note 1. The recommended storage temperature is 20°C to 30°C, battery life would be reduced if stored at high temperature (The recharging interval should be 12 months under the condition of storage temperature < 30°C, and 8 months under the condition of 30°C < storage temperature < 40°C).

Note 2. Affected by the external environment factors, such as temperature and duration of transportation and storage, the rated capacity may fluctuate by ±5%.