

Details Catalog

51.2V 280Ah (14.24kWh)

KEMMO LiFePO₄



kemmotec.com

Performance Specifications

General Information

Nominal Voltage	51.2 Vdc
Nominal Capacity	280 Ah
Nominal Energy	14336 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	8000 Cycles
<i>0.2C, 25 °C @ 80% DoD</i>	
Origin	Shenzhen, China
BMS Build-in	Yes
Design Life	20 Years

BMS Protection Characteristics

Primary Charging	Current :155A	Delay Time: 20s
Second Charging	Current :160A	Delay Time: 2~3s
Primary Discharging	Current :155A	Delay Time: 10s
Second Discharging	Current :200A	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	150A
Peak Discharge Current	200A (3s)
Max. Charge Voltage	58.4V
Standard Charge	56A (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)	825*413*230 mm
Weight	108 Kg
Mounting Options	Wall/Mobile
Indicator State	ALM/RUN/SoC



Others

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

Constant Current Discharge Data (Amperes @ 25°C)

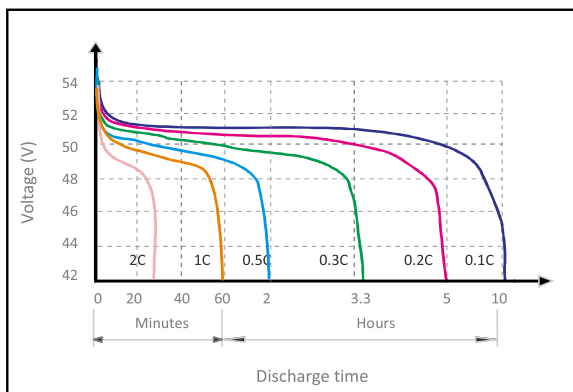
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	140A	93A	70A	56A	28A	14A

Constant Power Discharge Data (Watts @ 25°C)

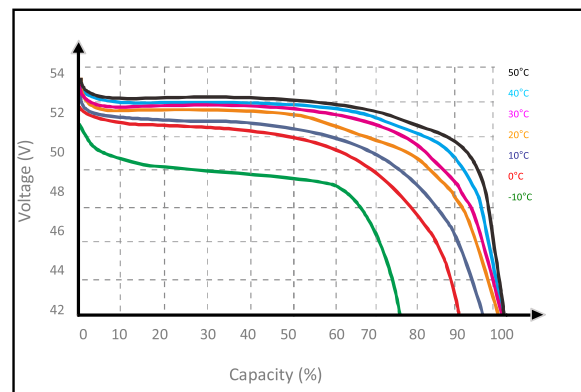
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	7168W	4779W	3584W	2867W	1434W	717W

Testing Report Curve

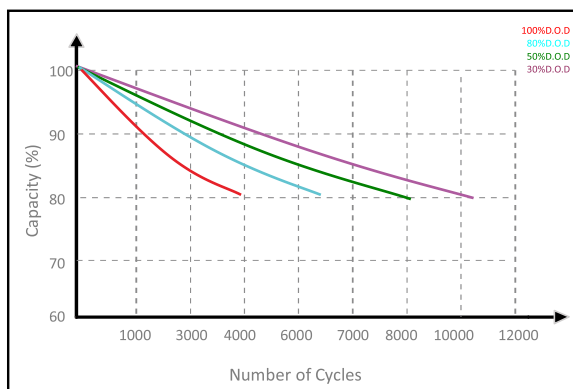
Discharge Characteristics (25°C)



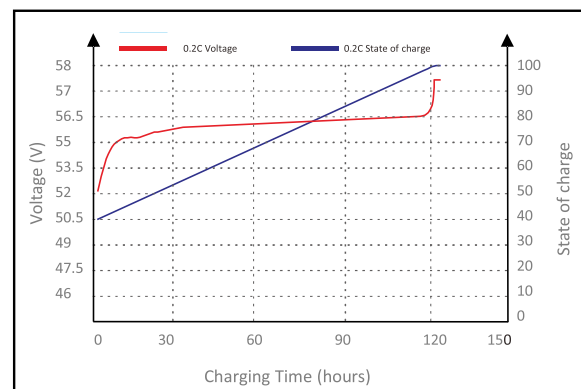
Temperature VS Discharge (0.2C)



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%.