

RPT lithium series batteries provide superior performance, capacities and reliability. Using state of high power cell technology, the lithium series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial.

RPT lithium batteries are widely used in industrial, residential, commercial and private applications. The maintenance free construction and advanced design features makes the lithium series the definitive choice for a wide variety of markets. Like solar and renewable energy storage, electric vehicle, golf cart and industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and no-idle solution; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems.

Applications



BATTERY SPECIFICATIONS

Battery type-Chemistry	LiFePO4	Voltage Window	44.8V-57.6V
Nominal Voltage	51.2V	Recommend Charge Voltage	57
Nominal Capacity	100Ah	Max Charge Voltage	59V
Energy Density	5120Wh	Recommend Charge Current	20A
Dimensions(LxWxH)	550*500*217mm	Max Continuous Current	100A
Weight	50KGS	Recommend Discharge Voltage	46V
Terminal Type	Plug-in	Max Discharging Voltage	44.8V
Terminal Torque	8.5NM	Max Continuous Discharge Current	100A
Case Material	SPCC	Peak Discharge Current	150A/3S
BMS build-in	Yes	Cycle life(0.2C, 25°C@100% DOD)	6000 Cycles
AH Efficiency – round trip	>98%	Discharge Temperature	(- 20 to 55)°C
Self Discharge per Month	<3%	Charge Temperature	(0 to 55)°C
Max in Parallel	16 PCS	Storage Temperature	(- 20 to 45)°C
Max in Series	Not Allowed	Bluetooth(App)	Optional
LCD Screen	Optional	Heating Function	Optional

BMS CHARACTERISTICS

Primary Charging Protection	Current :105A	Delay Time: 20s
Second Charging Protection	Current :110A	Delay Time: 2~3s
Primary Discharging Protection	Current :110A	Delay Time: 30s
Second Discharging Protection	Current :150A	Delay Time: 2~3s
Over Charge Voltage Protection	Voltage :59.2V	Delay Time: 1~2s
Over Discharge Voltage Protection	Voltage :43.3V	Delay Time: 1~2s
Temperature Protection	PCB Temperature≥95 Recover≤85	°C °C
Communication Port	Major RS485, optional for CAN Dryport, customized acceptable	



RPES-51.2V100-WM2

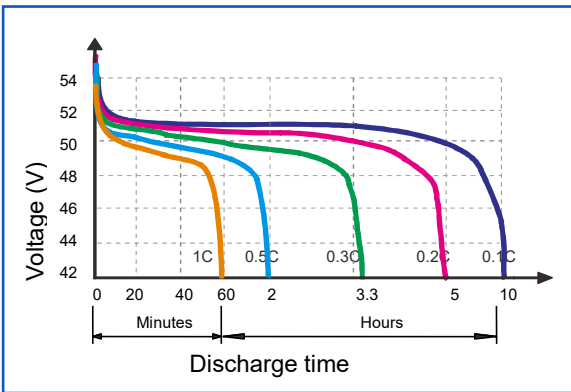
Constant Current Discharge Data (Amperes @ 25°)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (44.8V)	100A	50A	33.3A	25A	20A	10A	5A

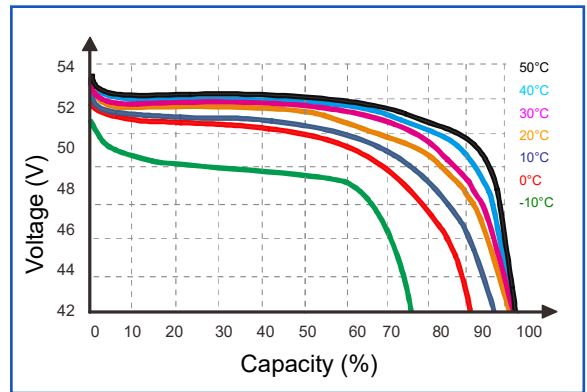
Constant Power Discharge Data (Watts @ 25°C)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (44.8V)	5120W	2560W	1706.7W	1280W	1024W	512W	256W

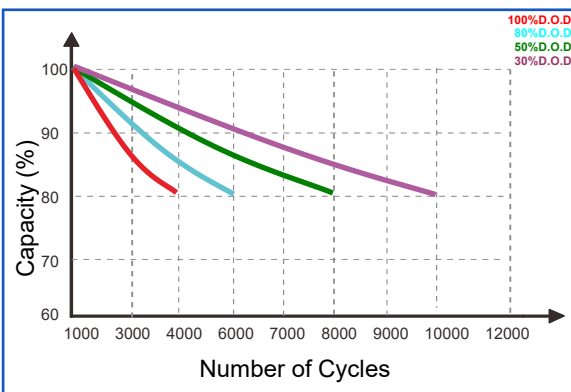
Discharge characteristics (25°C)



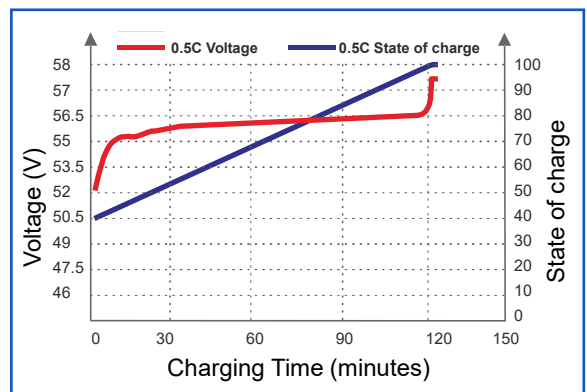
Different Temperature Discharge Curve (0.5C)



Different DOD Discharge cycle life Curve 0.2C 25°C



State of Charge Curve (0.5C, 25°C)



- Note 1: Please always refer to the latest edition of our technical manual that published on our website to ensure safe and efficient operation.
- Note 2: When make parallel connection, please full discharge batteries, then recharge after parallel connected; when series connect, please keep batteries with same remain capacity/
- Note 3: Parallel connection is only for longer backup time, not for larger output power.

