

Marvel 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.

Marvel 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	43.2V-57.6V
Nominal Voltage	51.2V	Recommend Charge Voltage	56V
Nominal Capacity	200Ah	Max Charge Voltage	57.6V
Energy Density	10240Wh	Recommend Charge Current	80A
Dimensions(LxWxH)	400*240*650mm	Max Continuous Current	100A
Weight	Around 86KGS	Recommend Discharge Voltage	46V
Terminal Type	M6	Max Discharging Voltage	43.2V
Case Material	SPCC	Max Continuous Discharge Current	100A
BMS build-in	Yes	Peak Discharge Current	175A
AH Efficiency – round trip	>98%	Cycle life(25°C@80% DOD)	6000 Cycles
Self Discharge per Month	<3%	Discharge Temperature	(- 20 to 55)°C
Max in Parallel	16PCS	Charge Temperature	(0 to 55)°C
Max in Series	Not Allowed	Storage Temperature	(- 20 to 45)°C
LCD Screen	Optional	Bluetooth(App)	Optional

BMS CHARACTERISTICS

Primary Charging Protection	Current :105A	Delay Time: 20s
Second Charging Protection	Current :110A	Delay Time: 2~3ms
Primary Discharging Protection	Current :110A	Delay Time: 30s
Second Discharging Protection	Current :150A	Delay Time: 2~3ms
Over Charge Voltage Protection	Voltage :59.2V	Delay Time: 1~2s
Over Discharge Voltage Protection	Voltage :43.2V	Delay Time: 1~2s
Temperature Protection	PCB Temperature≥95 Recover≤85	°C
Communication Port	Major RS485, optional for CAN / Dryport, customized acceptable	

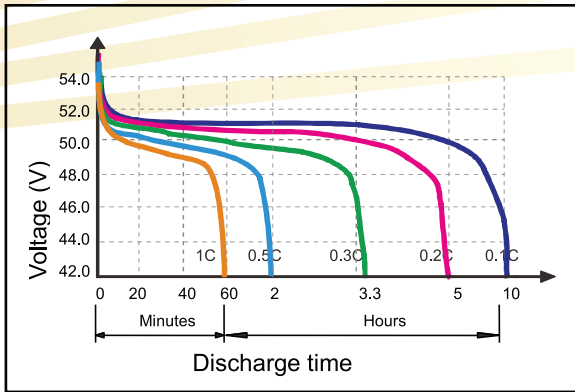
Constant Current Discharge Data (Amperes @ 25°)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (43.2V)	--	50A	66.7A	50A	40A	20A	10A

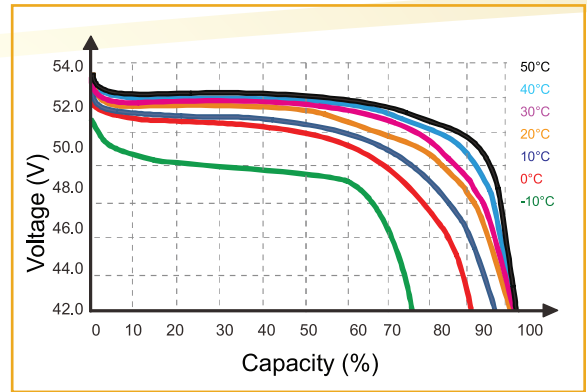
Constant Power Discharge Data (Watts @ 25°C)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (43.2V)	--	5120W	3413.3W	2560W	2048W	1024W	512W

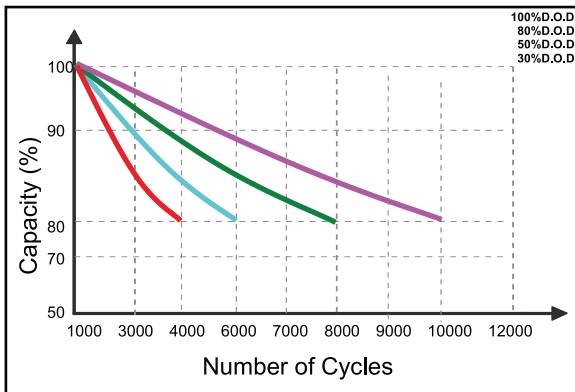
Discharge characteristics (25°C)



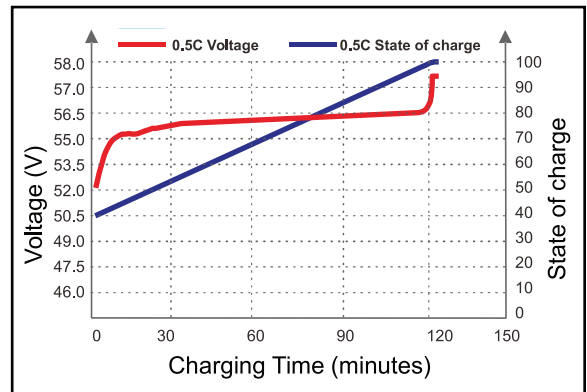
Different Temperature Discharge Curve (0.5C)



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.