

# ML 280-51.2-W

# LiFePo4 Lithium Battery

Marvel Tech 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 tech 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.





## **Battery Specifications**

Cells	Grade A new cells with QR code	Voltage Window	43.2V-58.4V
Battery type-Chemistry	LiFePO4	Recommend Charge Voltage	56 V± 0.2
Nominal Voltage	51.2V	Max Charge Voltage	58.4V
Nominal Capacity	280Ah	Recommend Charge Current	60A
Energy Density	14336Wh	Max Continuous Current	150A
Dimensions(LxWxH)	825*413*233mm	Recommend Discharge Voltage	44.8V
Weight	114.3KGS	Max Discharging Voltage	43.2V
Terminal Type	Plug-in	Max Continuous Discharge Current	150A
Terminal Torque	8.5NM	Peak Discharge Current	200A
Case Material	SPCC	Cycle Life(0.2C, 25°C@80% DOD)	6000 Cycles
BMS build-in	Yes	Discharge Temperature	(- 20 to 55)°C
AH Efficiency – round trip	>98%	Charge Temperature	( 0 to 55)°C
Self Discharge per Month	<3%	Storage Temperature	(- 20 to 45)°C
Max in Parallel	16PCS	Bluetooth(App)	Optional
Max in Series	Not Allowed	Heating Function	Optional
LCD Screen	Optional		

### **BMS CHARACTERISTICS**

Primary Charging Protection	Current :155A	Delay Time: 20s
Second Charging Protection	Current :160A	Delay Time: 2~3s
Primary Discharging Protection	Current :155A	Delay Time: 10s
Second Discharging Protection	Current :200A	Delay Time: 100ms
Over charge Voltage Protection	Voltage :58.4V	Delay Time: 1~2s
Over Discharge Voltage Protection	Voltage :43.2V	Delay Time: 1~2s
Temperature Protection	PCB Temperature≥95 Recover≤85	°C °C
Communication Port	Major RS485, optional for CAN /	Dry port, customized acceptable





#### **Constant Current Discharge Data (Amperes @ 25°)**

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (44.8V)		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 (44.8V)		7168W	4779W	3584W	2867W	1434W	717W

