



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.



(Optional Indicators)

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) | 8000 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 |