

LITHIUM IRON PHOSPHATE BATTERY — LP20-4820

ELECTRICAL PERFORMANCE

Nominal Voltage	51.2 V
Nominal Capacity	20 Ah
Capacity @ 5A	240 min
Energy	1024 Wh
Resistance	≤30 mΩ @ 50% SOC
Self Discharge	<3% / Month
Motor Power	350W-400W



(Picture for reference only)

CHARGE PERFORMANCE

Recommended Charge Current	5A
Maximum Charge Current	20A
Recommended Charge Voltage	58.4V
BMS Charge Cut-Off Voltage	<58.4 V (3.65V/Cell)
Reconnect Voltage	>57.6 V (3.6V/Cell)
Balancing Voltage	<57.6 V (3.6V/Cell)
Recommended Charge Current	5A

MECHANICAL PERFORMANCE

Dimension (L x W x H)	170 x 180 x 250 mm 9.0 x 5.7 x 8.3" (customized)
Approx. Weight	3.0 lbs (6.5 kg)
Terminal Type	DIN POST
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	Al alloy
Enclosure Protection	IP67

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	20 A
Peak Discharge Current	25 A
BMS Discharge Cut-Off Current	60 A ±5 A (30ms)
Recommended Low Voltage Disconnect	44 V (2.75V/Cell)
BMS Discharge Cut-Off Voltage	>32 V (2s) (2.0V/Cell)
Reconnect Voltage	>40 V (2.5V/Cell)
Short Circuit Protection	250 ~ 500 μs

TEMPERATURE PERFORMANCE

Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)
Charge Temperature	-4 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

COMPLIANCE

Certifications	CE (battery) UN38.3 (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9

HEATING FOIL PERFORMANCE

Heating Temperature Range	-4 to 41 °F (-20 to 5 °C)
Heating Time	Approximately 1 hour @ 7.5 A
BMS Heating Foil Cut-Off	158 °F (70 °C)

OTHER MODELS OPTIONAL

Model	Capacity	Material	Charge Current	Charge Voltage	Discharge Current	Discharge Voltage
LP20-4820	51.2V 20AH	LiFePO4	5A	58.4V	25A	40V
LP20-4825	51.2V 25AH	LiFePO4	5A	59.4V	25A	40V
LP20-6020	64V 20AH	LiFePO4	5A	73.0V	25A	50V
LP20-6040	64V 40AH	LiFePO4	8A	73.0V	50A	50V
LP20-7230	76.8V 30AH	LiFePO4	6A	87.6V	50A	60V
LP20-7240	76.8V 40AH	LiFePO4	8A	87.6V	50A	60V

It can be customized according to customers requirements.

APPLICATIONS



FEATURES & BENEFITS



High cycle life

1500 cycles @80% DoD for effectively lower total of ownership cost



Longer service life

Low maintenance batteries with stable chemistry.



Built in circuit protection

Battery Management System (BMS) is incorporated against abuse.



Better storage

up to 6 months thanks to its extremely low self discharge (LSD) rate and no risk of sulphation.



Quickly recharge

Save time and increase productivity with less down time thanks to superior charge/discharge efficiency.



Extreme heat tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.



Lightweight

Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.

CAUTIONS

- Do NOT short circuit, reverse polarity, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Store at 30~50% SOC. Recharging every 3 months is recommended. The storage area should be clean, cool, dry and ventilated.

Performance may vary depending on application. All specifications are subject to change without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.

