

LITHIUM ION PHOSPHATE BATTERY

DE15-12100

SPECIFICATION



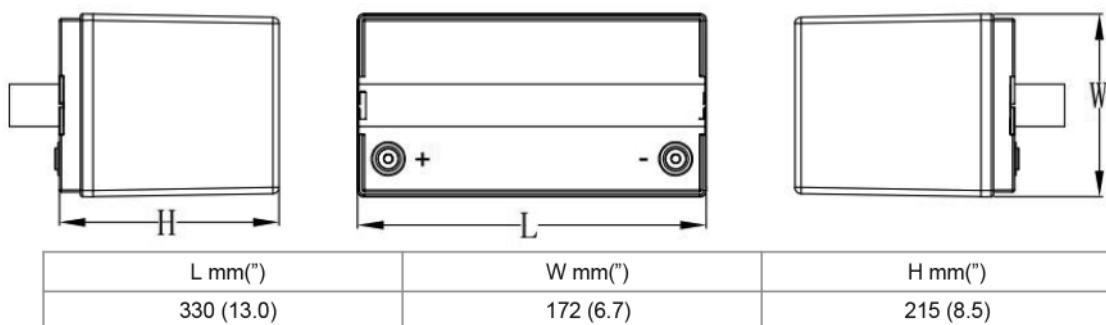
CHARGE PERFORMANCE

| | |
|----------------------------|---------------------|
| Recommended Charge Current | 20A |
| Maximum Charge Current | 100A |
| Recommended Charge Voltage | 14.5V |
| BMS Charge Cut-Off Voltage | <15.6 V (3.9V/Cell) |
| Reconnect Voltage | >14.4 V (3.6V/Cell) |
| Balancing Voltage | <14.4 V (3.6V/Cell) |

DISCHARGE PERFORMANCE

| | |
|--------------------------------------|-------------------------|
| Maximum Continuous Discharge Current | 100 A |
| Peak Discharge Current | 200 A (3s) |
| BMS Discharge Cut-Off Current | 300 A \pm 10 A (30ms) |
| Balancing open voltage | 51.7V (3.45V/Cell) |
| Recommended Low Voltage Disconnect | 11 V (2.75V/Cell) |
| BMS Discharge Cut-Off Voltage | >8.0 V (2s) (2.0V/Cell) |
| Reconnect Voltage | >10.0 V (2.5V/Cell) |
| Short Circuit Protection | 250 ~ 500 μ s |

OUTLINE DIMENSION



ELECTRICAL PERFORMANCE

| | |
|------------------|--------------------------------|
| Nominal Voltage | 12.8V |
| Nominal Capacity | 100 Ah |
| Capacity @ 20A | 300 min |
| Energy | 1280 Wh |
| Resistance | \leq 30 m Ω @ 50% SOC |
| Self Discharge | <3% / Month |

MECHANICAL PERFORMANCE

| | |
|-----------------------|---|
| Dimension (L x W x H) | 320 x 172 x 215 mm 13.0 x 6.7 x 8.5" |
| Approx. Weight | 27.8 lbs (12 kg) |
| Terminal Type | DIN POST |
| Terminal Torque | 80 ~ 100 in-lbs (9 ~ 11 N-m) |
| Case Material | ABS+PC |
| Enclosure Protection | IP65 |

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) |

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) |

COMPLIANCE

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

LITHIUM ION PHOSPHATE BATTERY

DE15-12100



Applications

Lithium Ion Phosphate can be used in most applications that use Lead Acid, GEL or AGM type batteries.

Suitable applications include:

- Caravan
- Marine
- Golf Car
- Buggies
- Remote Monitoring
- Switching applications and more
- UPS

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.

FEATURES



High cycle life

2000 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.

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.

Johannesburg: Unit 4, Cambridge West, Cambridge Commercial Park, Witkoppen Road, Paulshof • Tel: + 27 (0) 11 646 5250

Cape Town: Unit 29, Creation Park, 2 Computer Rd, Montague Gardens (Marconi Beam) 7441 • Tel: + 27 (0) 21 761 4525

info@digitalenergy.co.za | www.digitalenergy.co.za

 **Digital Energy**