

**LITHIUM IRON PHOSPHATE BATTERY — LP15-12100**
**ELECTRICAL PERFORMANCE**

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


**CHARGE PERFORMANCE**

|                             |                     |
|-----------------------------|---------------------|
| Recommended Charge Current  | 20A                 |
| Maximum Charge Current      | 50A                 |
| Recommended Charge Voltage  | 14.6V               |
| 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) |
| Maximum Batteries in Series | 4 (*Consult MUST)   |

**MECHANICAL PERFORMANCE**

|                       |   |
|-----------------------|---|
| Dimension (L x W x H) | 320 x 172 x 215 mm<br>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                                    |

**DISCHARGE PERFORMANCE**

|                                      |                         |
|--------------------------------------|-------------------------|
| Maximum Continuous Discharge Current | 50 A                    |
| Peak Discharge Current               | 80 A (3s)               |
| BMS Discharge Cut-Off Current        | 120 A ±5 A (30ms)       |
| 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 μs            |

**TEMPERATURE PERFORMANCE**

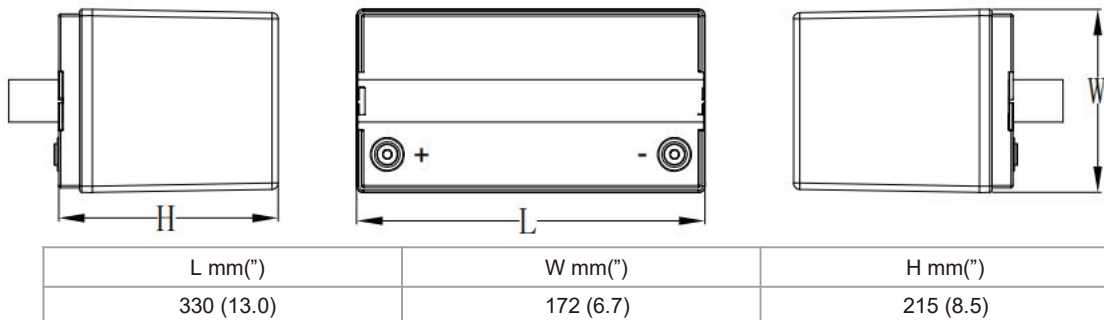
|                              |                           |
|------------------------------|---------------------------|
| Discharge Temperature        | -4 ~ 131 °F (-20 ~ 55 °C) |
| Charge Temperature           | -4 ~ 113 °F (0 ~ 45 °C)   |
| Storage Temperature          | 23 ~ 95 °F (-5 ~ 35 °C)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

**COMPLIANCE**

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

**HEATING FOIL PERFORMANCE**

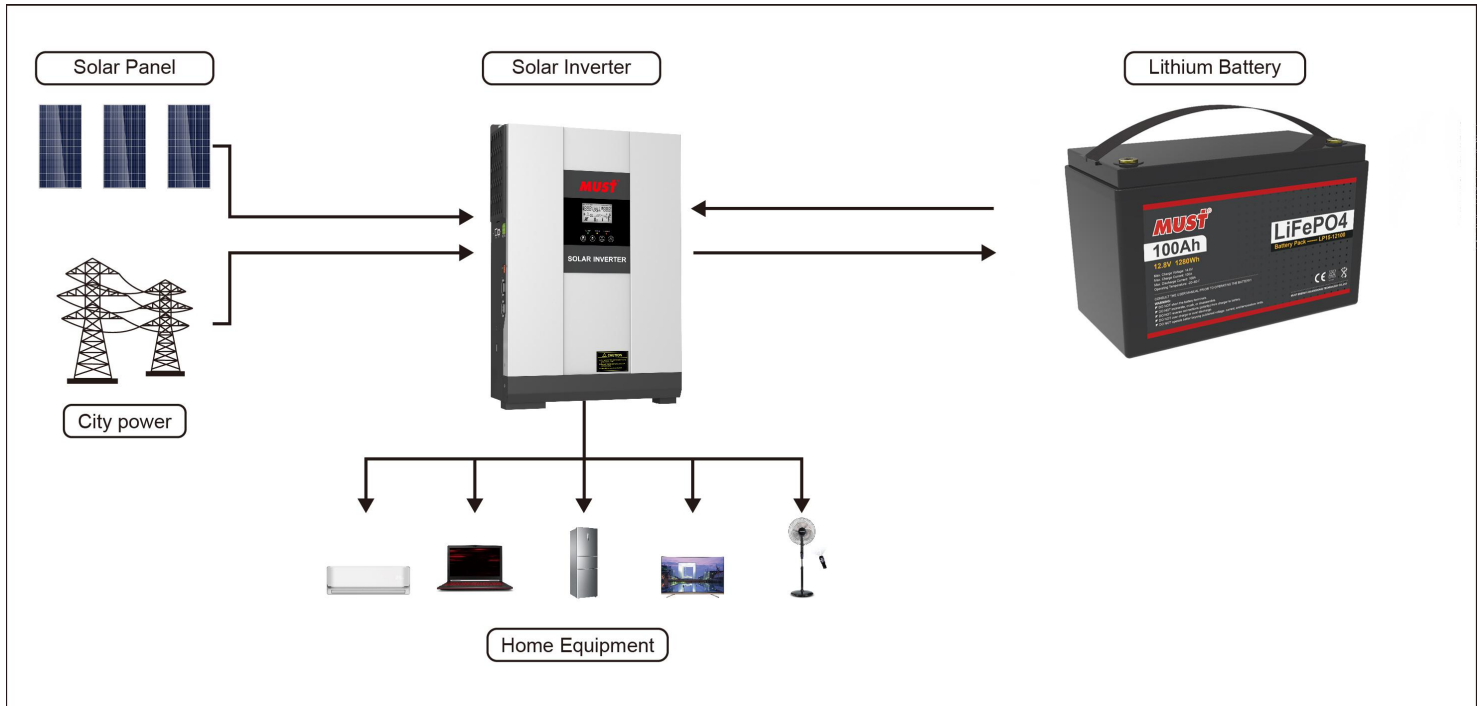
|                           |                              |
|---------------------------|------------------------------|
| Heating Temperature Range | -4 to 41 °F (-20 to 5 °C)    |
| Heating Time              | Approximately 1 hour @ 7.5 A |
| BMS Heating Foil Cut-Off  | 158 °F (70 °C)            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

**OUTLINE DIMENSION**


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.

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SYSTEM DIAGRAM



FEATURES & BENEFITS



**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.

APPLICATIONS

Lithium Iron Phosphate can be used in most applications that use Lead Acid, GEL or AGM type batteries. Suitable applications include:

- Caravan
- Marine
- Golf Car
- Buggies
- Solar Storage
- 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.

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