Iron-V Lithium Iron Phosphate Battery

### Technical Characteristics

#### NOMINAL CHARACTERISTICS
- Nominal Voltage: 12.8 V
- Nominal Capacity: 15Ah
- Energy: 192Wh
- IR: ≤40mΩ@100%SOC
- Efficiency: ≥99.5%
- Maximum Modules in Series: 2 (Single Use)

#### CHARGE & DISCHARGE CHARACTERISTICS
- Voltage Window: 10.8-14.6V
- Max. Continuous Charge Current: 15A
- Max. Continuous Discharge Current: 20A
- Peak Discharge Current: 35A (10s)
- Recommended charge current: 7.5A
- Recommended discharge current: 7.5A
- Charge current cut-off: 0.45A

#### OPERATING CONDITIONS
- Cycle Life: ≥2000
- Operating Temperature:
  - Charge: 10℃~45℃
  - Discharge: -20℃~55℃
- Storage Temperature: 20℃ ~ 30℃
- Storage Duration: 12 months at 25℃

#### MECHANICAL CHARACTERISTICS
- Case Material: ABS
- Dimension (L"W"H): 151*98*101
- Weight: 1.9kg±3%
- Terminal Type: F2
- IP Grade: /
- BCI Group NO.: /
- Cell Type-Chemistry: Cylindrical LiFePO4

#### BMS CHARACTERISTICS
- Primary Charging Protection:
  - Current: 25~35A
  - Delay time: 15s
- Secondary Charging Protection:
  - Current: >35A
  - Delay time: >1s
- Primary Discharging Protection:
  - Current: 30A~40A
  - Delay time: 15s
- Secondary Discharging Protection:
  - Current: 40A~66A
  - Delay time: >1s
- Over-charge Voltage Protection:
  - Voltage: >14.8V
  - Delay time: <3s
- Over-discharge voltage protection:
  - Voltage: <9.2V
  - Delay time: <3s
- High Temperature Protection:
  - Charging: 65±3℃
  - Recover: 60±3℃
- Low Temperature Protection:
  - Charging: 0±3℃
  - Recover: 3±3℃

#### Features
- Cost Effectiveness
- Longer Service Life
- Guaranteed Safety
- Fast Charge
- Drop-in Replacement
Iron-V
LFP12-15EV (12V 15Ah) Specification

Constant Current Discharge Data（Amperes@25℃）

<table>
<thead>
<tr>
<th>Cut-off voltage (10.8V)</th>
<th>1h</th>
<th>2h</th>
<th>3h</th>
<th>5h</th>
<th>10h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15A</td>
<td>7.5A</td>
<td>5A</td>
<td>3A</td>
<td>1.5A</td>
</tr>
</tbody>
</table>

Constant Power Discharge Data（Watt@25℃）

<table>
<thead>
<tr>
<th>Cut-off voltage (10.8V)</th>
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<th>10h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>172W</td>
<td>87W</td>
<td>58.2W</td>
<td>35.1W</td>
<td>17.7W</td>
</tr>
</tbody>
</table>

Cycle No. Vs DOD%

Number of Cycles Vs. DOD

Discharge Performance at R.T.

Cycle Life in Relation to Temperature

Battery Capacity (C) Vs. Open Circuit Voltage (OCV)

Battery Capacity Vs. Charging Time

Temperature Effects on Capacity