720AH 2V Lead Carbon Battery

Main Technical Advantages
- Design life 20 years
- Combine the advantage of lead acid battery and supercapacitor
- Ideal for PSOC cycle application
- High power, rapid charge/discharge
- Reduced sulfation of negative plate, excellent recharge acceptance performance
- Waterproof, anti-salt treatment, shockproof module installation design
- Complies with IEC60896, IEC61427 standards

Applications
- Solar power generation grid/off-grid energy storage system
- Renewable energy storage
- Smart power grids and microgrids system
- Distributed energy storage system
- Hybrid energy storage systems
- Home energy storage systems
- Emergency lighting system
- Generator and battery hybrid energy system
- Other standby, cycling system

Specifications 2V 720Ah Lead Carbon

- Nominal Voltage: 2V
- Rated Capacity: 720Ah (120hr to 1.85V/cell @25°C)
- Weight: Approx. 46.0kg
- Dimensions: Length: 180mm, Width: 231mm, Container Height: 396mm, Total Height (with terminals): 408mm
- Internal Resistance: Approx. 0.23mΩ
- Short-Circuit Current: 8614A
- Self-Discharge: The residual capacity is above 90% after 90 days storage (25°C)
- Max. Charging Current: 180A
- Max. Constant Charging Current: 120A
- Charge Voltage: Floating: 2.25V (25°C), Equalizing/Cycle: 2.30V (25°C)
- Terminal: M8 embedded copper
- Terminal Hardware Torque: >10N·m

7 YEAR 3 YEAR FULL REPLACEMENT WARRANTY WITH 48 MONTH PRO-RATA REPLACEMENT WARRANTY
### CONSTANT CURRENT DISCHARGE CHARACTERISTICS - UNITS: AMPERES (25°C)

<table>
<thead>
<tr>
<th>End voltage per cell</th>
<th>1 hour</th>
<th>3 hours</th>
<th>5 hours</th>
<th>8 hours</th>
<th>10 hours</th>
<th>24 hours</th>
<th>48 hours</th>
<th>72 hours</th>
<th>120 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.75V</td>
<td>339.3</td>
<td>155.9</td>
<td>108.3</td>
<td>75.8</td>
<td>63.2</td>
<td>28.2</td>
<td>14.6</td>
<td>10.0</td>
<td>6.30</td>
</tr>
<tr>
<td>1.80V</td>
<td>317.8</td>
<td>151.2</td>
<td>105.8</td>
<td>74.4</td>
<td>61.8</td>
<td>27.7</td>
<td>14.2</td>
<td>9.70</td>
<td>6.20</td>
</tr>
<tr>
<td>1.83V</td>
<td>297.6</td>
<td>146.3</td>
<td>103.3</td>
<td>73.1</td>
<td>60.5</td>
<td>27.1</td>
<td>13.9</td>
<td>9.50</td>
<td>6.10</td>
</tr>
<tr>
<td>1.85V</td>
<td>286.9</td>
<td>143.4</td>
<td>102.3</td>
<td>72.3</td>
<td>60.1</td>
<td>26.8</td>
<td>13.8</td>
<td>9.50</td>
<td>6.00</td>
</tr>
<tr>
<td>1.88V</td>
<td>274.8</td>
<td>140.5</td>
<td>101.2</td>
<td>71.4</td>
<td>59.6</td>
<td>26.6</td>
<td>13.7</td>
<td>9.40</td>
<td>5.90</td>
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</tbody>
</table>

### Discharge Data with Constant Power Units: Watts per cell (25°C)

<table>
<thead>
<tr>
<th>End voltage per cell</th>
<th>15min</th>
<th>30min</th>
<th>1hr</th>
<th>2hr</th>
<th>3hr</th>
<th>4hr</th>
<th>5hr</th>
<th>6hr</th>
<th>8hr</th>
<th>10hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.75V</td>
<td>1480</td>
<td>1033.1</td>
<td>698.8</td>
<td>453.7</td>
<td>323.9</td>
<td>263.2</td>
<td>223.6</td>
<td>192.4</td>
<td>172.4</td>
<td>157.6</td>
</tr>
<tr>
<td>1.80V</td>
<td>1392</td>
<td>996.6</td>
<td>682.7</td>
<td>445.3</td>
<td>312.5</td>
<td>254.7</td>
<td>217.3</td>
<td>186.8</td>
<td>143.4</td>
<td>121.7</td>
</tr>
<tr>
<td>1.83V</td>
<td>1311</td>
<td>939.9</td>
<td>658.3</td>
<td>427.2</td>
<td>304.9</td>
<td>250.9</td>
<td>212.8</td>
<td>181.1</td>
<td>140.6</td>
<td>119.3</td>
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<tr>
<td>1.85V</td>
<td>1224</td>
<td>886.2</td>
<td>620.9</td>
<td>409.2</td>
<td>295.9</td>
<td>244.9</td>
<td>207.2</td>
<td>176.9</td>
<td>138.7</td>
<td>117.0</td>
</tr>
<tr>
<td>1.88V</td>
<td>1138</td>
<td>824.1</td>
<td>583.4</td>
<td>380.3</td>
<td>285.8</td>
<td>236.5</td>
<td>200.4</td>
<td>170.6</td>
<td>154.9</td>
<td>114.1</td>
</tr>
</tbody>
</table>

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**Discharge curve at different rate (25°C)**

**Charge curve (25°C)**

**Capacity vs OCV curve**

**Residue capacity vs storage time**

**Capacity vs temperature curve**

**Design life vs temperature**