### Specification

<table>
<thead>
<tr>
<th>Nominal Voltage</th>
<th>12V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Capacity(20HR)</td>
<td>0.8AH</td>
</tr>
<tr>
<td>Length</td>
<td>96 ± 1mm (3.78 inches)</td>
</tr>
<tr>
<td>Width</td>
<td>25 ± 1mm (0.98 inches)</td>
</tr>
<tr>
<td>Container Height</td>
<td>62 ± 1mm (2.44 inches)</td>
</tr>
<tr>
<td>Total Height</td>
<td>62 ± 1mm (2.44 inches)</td>
</tr>
<tr>
<td>Approx Weight</td>
<td>Approx. 0.35 kg (0.77lbs)</td>
</tr>
<tr>
<td>Terminal</td>
<td>T20</td>
</tr>
<tr>
<td>Container Material</td>
<td>ABS</td>
</tr>
<tr>
<td>Rate Capacity</td>
<td>0.80 AH/0.040A</td>
</tr>
<tr>
<td></td>
<td>(20hr, 1.80V/cell, 25°C/77°F)</td>
</tr>
<tr>
<td></td>
<td>0.74 AH/0.074A</td>
</tr>
<tr>
<td></td>
<td>(10hr, 1.80V/cell, 25°C/77°F)</td>
</tr>
<tr>
<td></td>
<td>0.67 AH/0.134A</td>
</tr>
<tr>
<td></td>
<td>(5hr, 1.75V/cell, 25°C/77°F)</td>
</tr>
<tr>
<td></td>
<td>0.588 AH/0.196A</td>
</tr>
<tr>
<td></td>
<td>(3hr, 1.75V/cell, 25°C/77°F)</td>
</tr>
<tr>
<td></td>
<td>0.486 AH/0.486A</td>
</tr>
<tr>
<td></td>
<td>(1hr, 1.60V/cell, 25°C/77°F)</td>
</tr>
<tr>
<td>Max. Discharge Current</td>
<td>12A (5s)</td>
</tr>
<tr>
<td>Internal Resistance</td>
<td>Approx 150mΩ</td>
</tr>
<tr>
<td>Operating Temp. Range</td>
<td>25±3°C (77±5°F)</td>
</tr>
<tr>
<td>Nominal Operating Temp. Range</td>
<td>25±3°C (77±5°F)</td>
</tr>
<tr>
<td>Cycle Use</td>
<td>Initial Charging Current less than 0.24A.Voltage</td>
</tr>
<tr>
<td></td>
<td>14.4V~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C</td>
</tr>
<tr>
<td>Standby Use</td>
<td>No limit on Initial Charging Current Voltage</td>
</tr>
<tr>
<td></td>
<td>13.5V~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C</td>
</tr>
<tr>
<td>Capacity affected by</td>
<td>Temperature</td>
</tr>
<tr>
<td></td>
<td>40°C (104°F)</td>
</tr>
<tr>
<td></td>
<td>103%</td>
</tr>
<tr>
<td></td>
<td>25°C (77°F)</td>
</tr>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>0°C (32°F)</td>
</tr>
<tr>
<td></td>
<td>86%</td>
</tr>
<tr>
<td>Self Discharge</td>
<td>LP series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.</td>
</tr>
</tbody>
</table>

### Constant Current Discharge (Amperes) at 25°C (77°F)

<table>
<thead>
<tr>
<th>F.V/Time</th>
<th>5min</th>
<th>10min</th>
<th>15min</th>
<th>20min</th>
<th>30min</th>
<th>45min</th>
<th>1h</th>
<th>2h</th>
<th>3h</th>
<th>4h</th>
<th>5h</th>
<th>6h</th>
<th>8h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85V/cell</td>
<td>1.54</td>
<td>1.07</td>
<td>0.883</td>
<td>0.766</td>
<td>0.614</td>
<td>0.473</td>
<td>0.386</td>
<td>0.236</td>
<td>0.180</td>
<td>0.148</td>
<td>0.125</td>
<td>0.109</td>
<td>0.086</td>
<td>0.072</td>
<td>0.040</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>1.89</td>
<td>1.28</td>
<td>1.02</td>
<td>0.866</td>
<td>0.680</td>
<td>0.515</td>
<td>0.416</td>
<td>0.251</td>
<td>0.189</td>
<td>0.155</td>
<td>0.131</td>
<td>0.113</td>
<td>0.090</td>
<td>0.074</td>
<td>0.040</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>2.24</td>
<td>1.44</td>
<td>1.13</td>
<td>0.943</td>
<td>0.726</td>
<td>0.547</td>
<td>0.438</td>
<td>0.262</td>
<td>0.196</td>
<td>0.160</td>
<td>0.134</td>
<td>0.116</td>
<td>0.092</td>
<td>0.076</td>
<td>0.040</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>2.54</td>
<td>1.59</td>
<td>1.22</td>
<td>1.01</td>
<td>0.763</td>
<td>0.569</td>
<td>0.456</td>
<td>0.272</td>
<td>0.202</td>
<td>0.164</td>
<td>0.138</td>
<td>0.119</td>
<td>0.093</td>
<td>0.077</td>
<td>0.041</td>
</tr>
<tr>
<td>1.65V/cell</td>
<td>2.84</td>
<td>1.78</td>
<td>1.28</td>
<td>1.06</td>
<td>0.795</td>
<td>0.591</td>
<td>0.475</td>
<td>0.280</td>
<td>0.207</td>
<td>0.168</td>
<td>0.141</td>
<td>0.121</td>
<td>0.095</td>
<td>0.078</td>
<td>0.042</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>2.94</td>
<td>1.79</td>
<td>1.35</td>
<td>1.10</td>
<td>0.818</td>
<td>0.604</td>
<td>0.486</td>
<td>0.289</td>
<td>0.212</td>
<td>0.172</td>
<td>0.144</td>
<td>0.124</td>
<td>0.097</td>
<td>0.080</td>
<td>0.042</td>
</tr>
</tbody>
</table>

### Constant Power Discharge (Watts/cell) at 25°C (77°F)

<table>
<thead>
<tr>
<th>F.V/Time</th>
<th>5min</th>
<th>10min</th>
<th>15min</th>
<th>20min</th>
<th>30min</th>
<th>45min</th>
<th>1h</th>
<th>2h</th>
<th>3h</th>
<th>4h</th>
<th>5h</th>
<th>6h</th>
<th>8h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85V/cell</td>
<td>2.90</td>
<td>2.04</td>
<td>1.70</td>
<td>1.48</td>
<td>1.20</td>
<td>0.927</td>
<td>0.761</td>
<td>0.467</td>
<td>0.357</td>
<td>0.295</td>
<td>0.251</td>
<td>0.218</td>
<td>0.174</td>
<td>0.145</td>
<td>0.080</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>3.52</td>
<td>2.41</td>
<td>1.95</td>
<td>1.67</td>
<td>1.32</td>
<td>1.00</td>
<td>0.815</td>
<td>0.494</td>
<td>0.374</td>
<td>0.308</td>
<td>0.260</td>
<td>0.226</td>
<td>0.179</td>
<td>0.149</td>
<td>0.080</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>4.12</td>
<td>2.70</td>
<td>2.13</td>
<td>1.80</td>
<td>1.40</td>
<td>1.06</td>
<td>0.853</td>
<td>0.512</td>
<td>0.384</td>
<td>0.316</td>
<td>0.266</td>
<td>0.230</td>
<td>0.183</td>
<td>0.151</td>
<td>0.081</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>4.62</td>
<td>2.94</td>
<td>2.29</td>
<td>1.92</td>
<td>1.46</td>
<td>1.09</td>
<td>0.884</td>
<td>0.530</td>
<td>0.395</td>
<td>0.322</td>
<td>0.271</td>
<td>0.235</td>
<td>0.184</td>
<td>0.153</td>
<td>0.082</td>
</tr>
<tr>
<td>1.65V/cell</td>
<td>5.03</td>
<td>3.13</td>
<td>2.39</td>
<td>1.99</td>
<td>1.51</td>
<td>1.13</td>
<td>0.915</td>
<td>0.543</td>
<td>0.403</td>
<td>0.327</td>
<td>0.275</td>
<td>0.238</td>
<td>0.187</td>
<td>0.154</td>
<td>0.082</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>5.19</td>
<td>3.21</td>
<td>2.46</td>
<td>2.03</td>
<td>1.53</td>
<td>1.14</td>
<td>0.928</td>
<td>0.556</td>
<td>0.410</td>
<td>0.333</td>
<td>0.279</td>
<td>0.241</td>
<td>0.189</td>
<td>0.156</td>
<td>0.082</td>
</tr>
</tbody>
</table>

Specifications subject to change without notice.
### Terminal
Unit: mm [inches]

- Dimensions:
  - Terminals: A, B, C
  - Dimensions:
    - Width: 96 ±1 mm
    - Height: 62 ±1 mm

### Discharge Characteristics
- Temperature: 25°C (77°F)
- Discharge Time vs. Terminal Voltage
  - Min and Max Values

### Float Charging Characteristics
- Charge Voltage vs. Charging Current
  - Temperature: 0.10CA-2.25V/cell

### Temperature Effects in Relation to Battery Capacity
- Capacity (%) vs. Temperature (°C)

### Effect of Temperature on Long Term Float Life
- Battery Temperature vs. Uncharged Discharge Time

### Cycle Life in Relation to Depth of Discharge
- Number of Cycles vs. Capacity (%)
- Testing conditions:
  - Discharging: current 0.17CA (FV 1.7V/cell)
  - Charging: current 0.25C max, voltage 2.45V/cell
  - Charging volume: 125% of discharged capacity

### Self Discharge Characteristics
- Remaining Capacity (%) vs. Storage Time (Months)

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**No supplementary charge required**
(Carry out supplementary charge before use if 100% capacity is required.)

**Supplementary charge required before use.** Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25CA.
3. Charged for 8-10 hours at limited current 0.05CA.

**Supplementary charge may often fail to recover the capacity.**
The battery should never be left standing till this is reached.