LPL Series - Long Life Standby
LPL2-1000M(2V1000Ah)

Specifications

Rated Voltage: 2V
Nominal Capacity: 1000.0Ah (C100, 1.80V/cell)

Dimension:
- Length: 370±2mm (14.6 inches)
- Width: 181±2mm (7.13 inches)
- Container Height: 350±2mm (13.78 inches)
- Total Height: 365±2mm (14.37 inches)

Approx Weight: 56.0 Kg (123.5 lbs)
Terminal: M8

Container Material: ABS

Rated Capacity (25°C):
- 1060.0Ah (20hr, 53.0A, 1.80V/cell)
- 1000.0Ah (10hr, 100.0A, 1.80V/cell)
- 875.0 Ah (5hr, 175.0A, 1.75V/cell)
- 780.0 Ah (3hr, 260.0A, 1.75V/cell)
- 584.0 Ah (1hr, 584.0A, 1.67V/cell)

Max. Discharge Current: 8000A (5s)
Internal Resistance (25°C): Approx 0.32mΩ

Operating Temp. Range:
- Discharge: -15 ~ 60°C (5 ~ 122°F)
- Charge: 0 ~ 40°C (32 ~ 104°F)
- Storage: -15 ~ 40°C (5 ~ 104°F)

Nominal Operating Temp. Range: 25±3°C (77±5°F)

Cycle Use:
Initial Charging Current less than 0A. Voltage 2.40V~2.50V at 25°C (77°F) Temp. Coefficient -5mV/°C

Standby Use:
Initial Charging Current less than 0A. Voltage 2.25V~2.30V at 25°C (77°F) Temp. Coefficient -3mV/°C

Effect of Temp. to Capacity:
- 40°C (104°F): 103%
- 25°C (77°F): 100%
- 0°C (32°F): 86%

Self Discharge:
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.

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

<table>
<thead>
<tr>
<th>F.V/Time</th>
<th>30min</th>
<th>1h</th>
<th>1.5h</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>644.3</td>
<td>424.2</td>
<td>399.6</td>
<td>304.1</td>
<td>234.1</td>
<td>188.3</td>
<td>158.9</td>
<td>137.9</td>
<td>112.1</td>
<td>93.7</td>
<td>50.2</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>708.9</td>
<td>507.8</td>
<td>412.4</td>
<td>321.8</td>
<td>253.2</td>
<td>202.9</td>
<td>171.1</td>
<td>147.9</td>
<td>120.0</td>
<td>100.0</td>
<td>53.0</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>822.7</td>
<td>544.2</td>
<td>432.0</td>
<td>336.6</td>
<td>260.0</td>
<td>208.0</td>
<td>175.0</td>
<td>151.0</td>
<td>122.2</td>
<td>101.6</td>
<td>53.7</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>887.3</td>
<td>573.8</td>
<td>449.5</td>
<td>346.2</td>
<td>267.6</td>
<td>213.2</td>
<td>179.0</td>
<td>154.3</td>
<td>124.4</td>
<td>103.1</td>
<td>54.4</td>
</tr>
<tr>
<td>1.67V/cell</td>
<td>912.1</td>
<td>584.0</td>
<td>452.3</td>
<td>347.8</td>
<td>271.6</td>
<td>216.2</td>
<td>181.2</td>
<td>156.1</td>
<td>125.6</td>
<td>104.0</td>
<td>54.8</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>944.9</td>
<td>610.4</td>
<td>458.1</td>
<td>365.7</td>
<td>281.6</td>
<td>223.4</td>
<td>186.8</td>
<td>160.5</td>
<td>128.6</td>
<td>106.3</td>
<td>55.7</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>F.V/cell</th>
<th>30min</th>
<th>1h</th>
<th>1.5h</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>1225.9</td>
<td>966.4</td>
<td>785.1</td>
<td>588.3</td>
<td>458.9</td>
<td>370.0</td>
<td>327.2</td>
<td>271.9</td>
<td>221.5</td>
<td>185.4</td>
<td>99.9</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>1317.5</td>
<td>1014.6</td>
<td>801.5</td>
<td>618.2</td>
<td>494.5</td>
<td>397.4</td>
<td>335.8</td>
<td>290.9</td>
<td>236.6</td>
<td>197.6</td>
<td>105.3</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>1511.3</td>
<td>1066.7</td>
<td>832.3</td>
<td>642.3</td>
<td>505.5</td>
<td>405.8</td>
<td>342.4</td>
<td>296.2</td>
<td>240.5</td>
<td>200.3</td>
<td>106.6</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>1606.8</td>
<td>1093.0</td>
<td>850.0</td>
<td>653.3</td>
<td>517.9</td>
<td>414.6</td>
<td>349.2</td>
<td>301.8</td>
<td>244.2</td>
<td>203.1</td>
<td>107.8</td>
</tr>
<tr>
<td>1.67V/cell</td>
<td>1635.1</td>
<td>1095.6</td>
<td>862.0</td>
<td>658.4</td>
<td>524.2</td>
<td>419.3</td>
<td>352.8</td>
<td>304.8</td>
<td>246.4</td>
<td>204.7</td>
<td>108.6</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>1747.0</td>
<td>1145.6</td>
<td>866.9</td>
<td>661.6</td>
<td>540.4</td>
<td>431.1</td>
<td>362.0</td>
<td>312.1</td>
<td>251.5</td>
<td>208.5</td>
<td>110.4</td>
</tr>
</tbody>
</table>
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LPL2-1000M(2V1000Ah)

Applications
• Tele-communication central station (wired or cellular)
• Power system communication, military communication, etc.
• Network communication including: data transmission, television signal transmission, etc.
• Uninterruptable Power System (UPS- for Telecom)
• EPS

General Features
• 16 years design life (25°C)
• Grid refining technology and the thicker plates are used to extend the battery standby life and reduce the plate grid corrosion speed
• Using oxygen recombination technology: maintenance-free
• Unique vent valve design: control water losing, prevent air and spark going inside

Temperature Effects in Relation to Battery Capacity

Effect of Temperature on Long Term Float Life

Discharge Characteristics

Float Charging Characteristics

Temperature: 25°C

Charging Time(hours)

Charging Current

Charging Voltage

0.1CA-2.25V/cell

0.25CA

0.5CA

1CA

Temperature: 25°C

Charge Voltage

Charge Current

Charging Voltage

After 50% Discharge

After 100% Discharge

Charge Voltage

Charged Volume

Charging Current

Charging Voltage

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