LPL Series—Long Standby Life
LPL6-180 (6V180Ah)

Specifications

- **Rated Voltage**: 6V
- **Nominal Capacity**: 180.0Ah (C<sub>10</sub>, 1.80V/cell)
- **Dimension**:
  - Length: 306x2mm (12.05 inches)
  - Width: 168x2mm (6.61 inches)
  - Container Height: 222x2mm (8.74 inches)
  - Total Height: 228x2mm (8.98 inches)
- **Approx Weight**: 30.3 Kg (66.80 lbs)
- **Terminal**: M6
- **Container Material**: ABS
- **Rated Capacity (25°C)**:
  - 180.0 Ah (20hr, 9.54A, 1.80V/cell)
  - 180.0 Ah (10hr, 18.0A, 1.80V/cell)
  - 165.5 Ah (5hr, 33.1A, 1.75V/cell)
  - 150.6 Ah (3hr, 50.2A, 1.75V/cell)
  - 115.9 Ah (1hr, 115.9A, 1.60V/cell)
- **Max. Discharge Current**: 1800A (5s)
- **Internal Resistance (25°C)**: Approx 1.5mΩ
- **Operating Temp. Range**:
  - Discharge: -15 to 50°C (5 to 122°F)
  - Charge: 0 to 40°C (32 to 104°F)
  - Storage: -15 to 40°C (5 to 104°F)
- **Nominal Operating Temp. Range**: 25±3°C (77±5°F)
- **Cycle Use**:
  - Initial Charging Current less than 0A.
  - Voltage: 7.2V~7.5V at 25°C (77°F) Temp. Coefficient -10mV/°C
- **Standby Use**:
  - Initial Charging Current less than 54.0A. Voltage: 6.75V~6.9V at 25°C (77°F) Temp. Coefficient -15mV/°C
- **Effect of temp. to Capacity**:
  - 40°C (104°F): 103%
  - 25°C (77°F): 100%
  - 0°C (32°F): 86%
- **Self Discharge**:
  - LPL 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>8h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85V/cell</td>
<td>163.9</td>
<td>101.6</td>
<td>73.6</td>
<td>61.9</td>
<td>45.4</td>
<td>35.6</td>
<td>30.9</td>
<td>21.0</td>
<td>17.4</td>
<td>9.21</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>178.5</td>
<td>105.2</td>
<td>76.1</td>
<td>63.9</td>
<td>49.3</td>
<td>38.0</td>
<td>32.5</td>
<td>22.0</td>
<td>18.0</td>
<td>9.54</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>182.2</td>
<td>110.4</td>
<td>80.0</td>
<td>67.3</td>
<td>50.2</td>
<td>38.7</td>
<td>33.1</td>
<td>22.2</td>
<td>18.4</td>
<td>9.64</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>185.8</td>
<td>112.6</td>
<td>81.6</td>
<td>68.6</td>
<td>51.2</td>
<td>39.4</td>
<td>33.6</td>
<td>22.5</td>
<td>18.5</td>
<td>9.74</td>
</tr>
<tr>
<td>1.67V/cell</td>
<td>188.5</td>
<td>114.3</td>
<td>82.8</td>
<td>69.6</td>
<td>51.7</td>
<td>40.0</td>
<td>34.3</td>
<td>22.8</td>
<td>18.8</td>
<td>9.86</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>191.3</td>
<td>115.9</td>
<td>84.0</td>
<td>70.6</td>
<td>52.2</td>
<td>40.5</td>
<td>34.8</td>
<td>23.1</td>
<td>19.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

### Constant Power Discharge (Watts/cell) 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>8h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.85V/cell</td>
<td>313.3</td>
<td>196.4</td>
<td>142.8</td>
<td>120.4</td>
<td>88.7</td>
<td>69.8</td>
<td>60.9</td>
<td>41.6</td>
<td>34.5</td>
<td>18.3</td>
</tr>
<tr>
<td>1.80V/cell</td>
<td>338.4</td>
<td>202.4</td>
<td>123.7</td>
<td>123.7</td>
<td>95.8</td>
<td>74.3</td>
<td>63.8</td>
<td>43.6</td>
<td>36.1</td>
<td>19.0</td>
</tr>
<tr>
<td>1.75V/cell</td>
<td>342.7</td>
<td>311.4</td>
<td>128.7</td>
<td>129.7</td>
<td>97.5</td>
<td>75.4</td>
<td>64.7</td>
<td>43.7</td>
<td>36.4</td>
<td>19.1</td>
</tr>
<tr>
<td>1.70V/cell</td>
<td>346.6</td>
<td>214.5</td>
<td>131.7</td>
<td>131.7</td>
<td>99.0</td>
<td>78.5</td>
<td>65.5</td>
<td>44.4</td>
<td>38.8</td>
<td>19.3</td>
</tr>
<tr>
<td>1.67V/cell</td>
<td>349.1</td>
<td>216.4</td>
<td>133.1</td>
<td>133.1</td>
<td>99.5</td>
<td>77.4</td>
<td>66.7</td>
<td>44.9</td>
<td>37.2</td>
<td>19.5</td>
</tr>
<tr>
<td>1.60V/cell</td>
<td>350.6</td>
<td>218.0</td>
<td>134.2</td>
<td>134.2</td>
<td>99.9</td>
<td>77.9</td>
<td>67.3</td>
<td>45.4</td>
<td>37.5</td>
<td>19.7</td>
</tr>
</tbody>
</table>
Applications
- UPS and EPS
- Emergency light
- Railway signal and aircraft signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply, DC power supply

General Features
- 10 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

Discharge Characteristics

Temperature Effects in Relation to Battery Capacity

Effect of Temperature on Long Term Float Life

Sales Offices Worldwide

LEOCH BATTERY
LPL Series-Long Standby Life
LPL6-180(6V180Ah)

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