CG2-600 2V 600Ah(10hr)

Gel battery shows some distinctive advantages over flooded battery or AGM battery, such as super thermal stability, high deep discharge capability, good recovery from deep discharge, even if the battery is left discharged for three days, it will recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, specially suitable for motive power applications, such as golf trailer, struubber, folkiflt, etc. The deep discharge cycles increased 50% as compared with the AGM battery.

Battery Construction

<table>
<thead>
<tr>
<th>Component</th>
<th>Positive plate</th>
<th>Negative plate</th>
<th>Container</th>
<th>Cover</th>
<th>Safety valve</th>
<th>Terminal</th>
<th>Separator</th>
<th>Electrolyte</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw material</td>
<td>Lead dioxide</td>
<td>Lead</td>
<td>ABS</td>
<td>ABS</td>
<td>Rubber</td>
<td>Copper</td>
<td>PVC</td>
<td>Gelled acid</td>
</tr>
</tbody>
</table>

General Features
- Nanometer SiO2 and H2SO4 gelled electrolyte technology for efficiency gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

Performance Characteristics
- Nominal Voltage: 2V
- Number of cell: 1
- Design Life: 20 years
- Nominal Capacity 77°F(25°C) 10 hour rate (60.0A, 1.80V): 600Ah
- 5 hour rate (106A, 1.75V): 530Ah
- 1 hour rate (372A, 1.60V): 372Ah
- Internal Resistance: Fully Charged battery 77°F(25°C): ≤ 0.7mOhms
- Self-Discharge: 2% of capacity declined per month at 20°C (average)
- Operating Temperature Range
  - Discharge: -20~60°C
  - Charge: -10~60°C
  - Storage: -20~60°C
- Max. Discharge Current 77°F(25°C): 2200A(5s)
- Charge Methods: Constant Voltage Charge 77°F(25°C)
  - Cycle use: Maximum charging current 120A
  - Temperature compensation: -3.3mV/°C
  - Standby use: Temperature compensation: -5mV/°C

Dimensions and Weight

<table>
<thead>
<tr>
<th>Length(mm / inch)</th>
<th>302 / 11.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width(mm / inch)</td>
<td>175 / 6.89</td>
</tr>
<tr>
<td>Height(mm / inch)</td>
<td>330 / 13.0</td>
</tr>
<tr>
<td>Total Height(mm / inch)</td>
<td>367 / 14.5</td>
</tr>
<tr>
<td>Approx. Weight(Kg / lbs)</td>
<td>40 / 88.2</td>
</tr>
</tbody>
</table>

- Weight deviation: ±3%

Discharge Constant Current (Amperes at 77°F25°C)

<table>
<thead>
<tr>
<th>End point volts/cell</th>
<th>10min</th>
<th>15min</th>
<th>30min</th>
<th>1h</th>
<th>3h</th>
<th>5h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.60V</td>
<td>1260</td>
<td>1032</td>
<td>600</td>
<td>372</td>
<td>156</td>
<td>114</td>
<td>63.0</td>
<td>33.6</td>
</tr>
<tr>
<td>1.65V</td>
<td>1188</td>
<td>960</td>
<td>588</td>
<td>360</td>
<td>152</td>
<td>110</td>
<td>62.4</td>
<td>33.0</td>
</tr>
<tr>
<td>1.70V</td>
<td>1116</td>
<td>912</td>
<td>576</td>
<td>348</td>
<td>148</td>
<td>108</td>
<td>61.2</td>
<td>32.4</td>
</tr>
<tr>
<td>1.75V</td>
<td>1044</td>
<td>840</td>
<td>564</td>
<td>336</td>
<td>146</td>
<td>106</td>
<td>60.6</td>
<td>32.1</td>
</tr>
<tr>
<td>1.80V</td>
<td>972</td>
<td>768</td>
<td>540</td>
<td>318</td>
<td>140</td>
<td>102</td>
<td>60.0</td>
<td>31.5</td>
</tr>
</tbody>
</table>

Discharge Constant Power (Watts at 77°F25°C)

<table>
<thead>
<tr>
<th>End point volts/cell</th>
<th>10min</th>
<th>15min</th>
<th>30min</th>
<th>1h</th>
<th>3h</th>
<th>5h</th>
<th>10h</th>
<th>20h</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.60V</td>
<td>2157</td>
<td>1750</td>
<td>1123</td>
<td>696</td>
<td>292</td>
<td>219</td>
<td>122</td>
<td>66.1</td>
</tr>
<tr>
<td>1.65V</td>
<td>2053</td>
<td>1736</td>
<td>1073</td>
<td>662</td>
<td>277</td>
<td>207</td>
<td>111</td>
<td>62.3</td>
</tr>
<tr>
<td>1.70V</td>
<td>2000</td>
<td>1663</td>
<td>1023</td>
<td>635</td>
<td>263</td>
<td>197</td>
<td>109</td>
<td>59.6</td>
</tr>
<tr>
<td>1.75V</td>
<td>1904</td>
<td>1559</td>
<td>993</td>
<td>613</td>
<td>250</td>
<td>193</td>
<td>105</td>
<td>57.5</td>
</tr>
<tr>
<td>1.80V</td>
<td>1804</td>
<td>1475</td>
<td>950</td>
<td>585</td>
<td>235</td>
<td>180</td>
<td>97.9</td>
<td>55.4</td>
</tr>
</tbody>
</table>

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.
All data shall be changed without notice, LUXURY reserves the right to explain and update the information contained herein.
**CG2-600 2V600Ah**

**Discharge characteristic (25°C)**

- Battery voltage (V) vs. discharge time (min/h)
- Battery types: 12V, 24V, 48V, 72V

**Charging characteristic for Cycle use**

- Battery Voltage vs. charging time (hours)
- Charging current (A) vs. voltage (V)

**Relationship between charging voltage and temperature**

- Temperature (°C) vs. charging voltage (V)

**Self-discharge characteristic**

- Capacity (%) vs. storage time (months)

**Life characteristics of Standby use**

- Capacity (%) vs. life (years)
- Testing conditions: floating voltage 2.23 to 2.28V/cell, ambient temperature 25°C (77°F)

**Cycle service life in relation to depth of discharge**

- Capacity (%) vs. number of cycles (cycles)

**Temperature effects on float life**

- Life (years) vs. temperature (°C)

**Temperature effects on capacity**

- Capacity (%) vs. temperature (°C)