FEATURES

- Flame-arresting one-way pressure-relief vent for safety and long life.
- Thermally welded case-to-cover bond to eliminate leakage.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Computer-generated grid design optimized for high power density.
- UL-recognized component.
- Multicell design for economy of installation and maintenance.
- Can be mounted in any orientation.
- Not restricted for air transport – Complies with IATA/ICAO Special Provision A67
- Not restricted for surface transport – Classified as non-hazardous material as related to DOT-CFR Title 49 parts 171-189.
- Computer designed lead, low calcium alloy grid for minimal gassing and ease of recycling.
- Case and cover available in both standard and flame retardant polypropylene.
- Flame retardant polypropylene case and cover compliant with UL 1778 (optional).

UPS12-310

VALVE REGULATED LEAD ACID BATTERY FOR UPS STANDBY POWER APPLICATIONS

12V 88 AH @ 20 HR RATE, 12V 330 WATTS/CELL @ 15 MIN. RATE

12 Volts – 330 Watts Per Cell For 15 Minutes to 1.67 Volts per Cell

Constant Power Discharge Ratings – Watts Per Cell @ 77°F (25°C)

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>60</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.67</td>
<td>608</td>
<td>423</td>
<td>330</td>
<td>273</td>
<td>205</td>
<td>165</td>
<td>151</td>
<td>139</td>
<td>120</td>
<td>93</td>
</tr>
</tbody>
</table>
### UPS12-310 – Specifications

<table>
<thead>
<tr>
<th>Cells Per Unit</th>
<th>Voltage Per Unit</th>
<th>Weight</th>
<th>Electrolyte</th>
<th>Maximum Discharge Current</th>
<th>Short Circuit Current</th>
<th>Ohms Imped. 60 Hz (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>12.84</td>
<td>67 lbs</td>
<td>Absorbed H2SO4 SG = 1.30</td>
<td>800 Amps</td>
<td>4200 Amps @ 0.1 sec.</td>
<td>0.0030 Ohms</td>
</tr>
</tbody>
</table>

### Capacity
- 330 watts per cell at the 15 minute rate to 1.67 volts per cell at 77°F (25°C).
- 88 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C)
- 76 Ah @ 10 hr rate to 1.80 volts per cell @ 20°C (68°F)

### Operating Temperature Range
- Discharge: -40°F (-40°C) to +160°F (71°C), Charge: -10°F (-23°C) to +140°F (60°C)

### Nominal Operating Temperature Range
- +74°F (23°C) to +80°F (27°C)

### Float Charging Voltage
- 13.5 to 13.8 VDC/unit Average at 77°F (25°C)

### Recommended Maximum Charging Current Limit
- O5 amperes (17.6 amperes @ 100% depth of discharge) @ 20 hour rate

### Equalization and Cycle Service Charging Voltage
- 14.4 to 14.8 VDC/unit Average at 77°F (25°C)

### Maximum AC Ripple (Charger)
- 0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.
- Maximum voltage allowed = 1.4% RMS (4% P-P)
- Maximum current allowed = 4.4 amperes RMS (C20)

### Self Discharge
- Dynasty UPS batteries may be stored for up to 6 months at 77°F (25°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.

### Accessories
- Inter unit connectors, racks and cabinet systems are available.

### Terminal Hardware Initial Torque
- 65 in-lbs. (7.4 N·m)

### Terminal Hardware Annual Retorque
- 52 in-lbs. (5.88 N·m)

### Constant Power Discharge Ratings – Watts Per Cell @ 77°F (25°C)

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
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<th>40</th>
<th>45</th>
<th>50</th>
<th>60</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.75</td>
<td>555</td>
<td>397</td>
<td>314</td>
<td>262</td>
<td>199</td>
<td>161</td>
<td>147</td>
<td>136</td>
<td>118</td>
<td>92</td>
</tr>
<tr>
<td>1.70</td>
<td>591</td>
<td>415</td>
<td>325</td>
<td>270</td>
<td>203</td>
<td>164</td>
<td>150</td>
<td>138</td>
<td>120</td>
<td>93</td>
</tr>
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<td>1.65</td>
<td>616</td>
<td>427</td>
<td>332</td>
<td>274</td>
<td>205</td>
<td>166</td>
<td>151</td>
<td>139</td>
<td>120</td>
<td>93</td>
</tr>
<tr>
<td>1.60</td>
<td>633</td>
<td>434</td>
<td>336</td>
<td>277</td>
<td>205</td>
<td>167</td>
<td>152</td>
<td>140</td>
<td>121</td>
<td>93</td>
</tr>
</tbody>
</table>

### Constant Current Discharge Ratings – Amperes @ 77°F (25°C)

<table>
<thead>
<tr>
<th>End Point Volts/Cell</th>
<th>.083</th>
<th>.25</th>
<th>.50</th>
<th>.75</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>20</th>
<th>24</th>
<th>72</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.90</td>
<td>145</td>
<td>101</td>
<td>68.0</td>
<td>54.7</td>
<td>41.4</td>
<td>25.4</td>
<td>18.5</td>
<td>12.3</td>
<td>8.40</td>
<td>6.95</td>
<td>5.93</td>
<td>3.83</td>
<td>3.24</td>
<td>1.11</td>
<td>0.81</td>
</tr>
<tr>
<td>1.85</td>
<td>184</td>
<td>120</td>
<td>77.0</td>
<td>62.3</td>
<td>47.7</td>
<td>28.2</td>
<td>20.5</td>
<td>13.5</td>
<td>9.10</td>
<td>7.60</td>
<td>6.50</td>
<td>4.11</td>
<td>3.45</td>
<td>1.20</td>
<td>0.87</td>
</tr>
<tr>
<td>1.80</td>
<td>222</td>
<td>132</td>
<td>85.0</td>
<td>68.0</td>
<td>51.0</td>
<td>30.3</td>
<td>22.0</td>
<td>14.4</td>
<td>9.60</td>
<td>7.98</td>
<td>6.75</td>
<td>4.30</td>
<td>3.61</td>
<td>1.25</td>
<td>0.90</td>
</tr>
<tr>
<td>1.75</td>
<td>252</td>
<td>144</td>
<td>90.0</td>
<td>72.1</td>
<td>54.3</td>
<td>31.0</td>
<td>22.5</td>
<td>14.8</td>
<td>9.90</td>
<td>8.14</td>
<td>6.97</td>
<td>4.40</td>
<td>3.68</td>
<td>1.26</td>
<td>0.92</td>
</tr>
</tbody>
</table>

**Note:** Batteries to be mounted with 0.5 in (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.