UPS6-620
VALVE REGULATED LEAD ACID BATTERY FOR UPS STANDBY POWER APPLICATIONS
6V 200 AH @ 20 HR RATE, 6V 620 WATTS/CELL @ 15 MIN. RATE

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).

6 Volts – 620 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>940</td>
<td>750</td>
<td>620</td>
<td>525</td>
<td>410</td>
<td>333</td>
<td>309</td>
<td>285</td>
<td>245</td>
<td>173</td>
</tr>
</tbody>
</table>
## UPS6-620 – 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>3</td>
<td>6.42</td>
<td>72 lbs. 33 kg</td>
<td>Absorbed H₂SO₄, SG = 1.300</td>
<td>800 Amps</td>
<td>4350 Amps</td>
<td>0.0015 Ohms</td>
</tr>
</tbody>
</table>

### Capacity

- 620 watts per cell at the 15 minute rate to 1.67 volts per cell at 77°F (25°C).
- 200 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C).
- 170 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) (with temperature compensation)

### Nominal Operating Temperature Range

+74°F (23°C) to +80°F (27°C)

### Float Charging Voltage

6.75 to 6.90 VDC/unit Average at 77°F (25°C).

### Recommended Maximum Charging Current Limit

C/5 amperes (40 amperes @ 100% depth of discharge) @ 20 hour rate

### Equalization and Cycle Service Charging Voltage

7.2 to 7.4 VDC/unit Average at 77°F (25°C).

### Maximum AC Ripple (Charger)

0.5% RMS or 1.5% of float charge voltage recommended for best results. Maximum voltage allowed = 1.4% RMS (4% P-P), Maximum current allowed = 9 amperes RMS (C20).

### Self Discharge

Dyson 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

75 in.-lbs. (8.5 N·m).

### Terminal Hardware Annual Retorque

60 in.-lbs. (6.8 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>840</td>
<td>680</td>
<td>575</td>
<td>500</td>
<td>395</td>
<td>320</td>
<td>297</td>
<td>275</td>
<td>242</td>
<td>168</td>
</tr>
<tr>
<td>1.70</td>
<td>890</td>
<td>720</td>
<td>600</td>
<td>520</td>
<td>405</td>
<td>332</td>
<td>306</td>
<td>280</td>
<td>243</td>
<td>170</td>
</tr>
<tr>
<td>1.67</td>
<td>940</td>
<td>750</td>
<td>620</td>
<td>525</td>
<td>410</td>
<td>333</td>
<td>309</td>
<td>285</td>
<td>245</td>
<td>173</td>
</tr>
<tr>
<td>1.65</td>
<td>950</td>
<td>760</td>
<td>630</td>
<td>532</td>
<td>414</td>
<td>335</td>
<td>311</td>
<td>288</td>
<td>248</td>
<td>176</td>
</tr>
<tr>
<td>1.60</td>
<td>1000</td>
<td>790</td>
<td>650</td>
<td>550</td>
<td>420</td>
<td>340</td>
<td>315</td>
<td>290</td>
<td>250</td>
<td>178</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>250</td>
<td>207</td>
<td>149</td>
<td>122</td>
<td>94.0</td>
<td>57.7</td>
<td>42.0</td>
<td>27.9</td>
<td>19.0</td>
<td>15.8</td>
<td>13.5</td>
<td>8.70</td>
<td>7.31</td>
<td>2.51</td>
<td>1.82</td>
</tr>
<tr>
<td>1.85</td>
<td>332</td>
<td>248</td>
<td>174</td>
<td>142</td>
<td>110</td>
<td>62.7</td>
<td>45.5</td>
<td>30.0</td>
<td>20.3</td>
<td>16.9</td>
<td>14.5</td>
<td>9.30</td>
<td>7.84</td>
<td>2.73</td>
<td>1.98</td>
</tr>
<tr>
<td>1.80</td>
<td>418</td>
<td>288</td>
<td>196</td>
<td>158</td>
<td>120</td>
<td>68.0</td>
<td>48.3</td>
<td>31.6</td>
<td>21.3</td>
<td>17.6</td>
<td>15.2</td>
<td>9.80</td>
<td>8.21</td>
<td>2.83</td>
<td>2.05</td>
</tr>
<tr>
<td>1.75</td>
<td>454</td>
<td>312</td>
<td>208</td>
<td>166</td>
<td>123</td>
<td>69.5</td>
<td>50.0</td>
<td>32.4</td>
<td>22.0</td>
<td>18.2</td>
<td>15.6</td>
<td>10.0</td>
<td>8.38</td>
<td>2.87</td>
<td>2.08</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.