UCG 100-12
12V 100AH
Deep Cycle

UCG100-12

Physical Specification

Part Number: UCG100-12
Length: 328 ± 2 mm
Width: 173 ± 2 mm
Container Height: 212 ± 2 mm
Total Height (with terminal): 235 ± 2 mm
Approx Weight: 31kg

Specifications

Nominal Voltage 12V
Nominal Capacity (10HR) 100AH

Terminal Type
Standard Terminal F10
Optional Terminal F11

Container Material
Standard Option ABS
Flame Retardant Option (FR) UL94:VO

Rated Capacity
104.0 AH/5.20A (20hr, 1.80V/cell, 25°C / 77°F)
100.0 AH/10.0A (10hr, 1.80V/cell, 25°C / 77°F)
88.0 AH/17.6A (5hr, 1.75V/cell, 25°C / 77°F)
76.2 AH/25.4A (3hr, 1.75V/cell, 25°C / 77°F)
63.8 AH/63.8A (1hr, 1.60V/cell, 25°C / 77°F)

Max Discharge Current 1000A (5s)
Internal Resistance Approx 5.9mΩ

Discharge Characteristics
Operating Temp. Range Discharge: -20 ~ 55°C (-4 ~ 131°F)
Charge: 0 ~ 40°C (32 ~ 104°F)
Storage: -20 ~ 50°C (-4 ~ 122°F)

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

Cycle Use Initial Charging Current less than 24.0A Voltage
14.4~15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
Standby Use No limit on Initial Charging Current Voltage
13.5~13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C

Capacity affected by Temperature
40°C (104°F) 103%
25°C (77°F) 100%
0°C (32°F) 86%

Design Floating Life at 20°C 15 Years

Self Discharge Ultracell batteries may be stored for up to 9 months at 25°C (77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.

Dimensions

F10 Terminal

Part Number: UCG100-12
Length: 328 ± 2 mm
Width: 173 ± 2 mm
Container Height: 212 ± 2 mm
Total Height (with terminal): 235 ± 2 mm
Approx Weight: 31kg
### Constant Current Discharge (Amperes) at 25°C (77°F)

<table>
<thead>
<tr>
<th>F.V/Time</th>
<th>5 min</th>
<th>10 min</th>
<th>15 min</th>
<th>20 min</th>
<th>30 min</th>
<th>45 min</th>
<th>1h</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>173.6</td>
<td>146.4</td>
<td>130.2</td>
<td>115.3</td>
<td>87.5</td>
<td>65.2</td>
<td>52.4</td>
<td>31.3</td>
<td>23.5</td>
<td>19.2</td>
<td>16.4</td>
<td>14.4</td>
<td>11.6</td>
<td>9.65</td>
<td>5.13</td>
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<tr>
<td>1.80V/cell</td>
<td>210.0</td>
<td>167.6</td>
<td>143.7</td>
<td>125.3</td>
<td>92.1</td>
<td>68.7</td>
<td>55.1</td>
<td>33.1</td>
<td>24.6</td>
<td>20.2</td>
<td>17.2</td>
<td>15.0</td>
<td>12.0</td>
<td>10.0</td>
<td>5.20</td>
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<tr>
<td>1.75V/cell</td>
<td>237.0</td>
<td>186.3</td>
<td>154.0</td>
<td>130.8</td>
<td>104.2</td>
<td>80.5</td>
<td>65.2</td>
<td>37.5</td>
<td>25.4</td>
<td>20.2</td>
<td>17.2</td>
<td>15.0</td>
<td>12.0</td>
<td>10.0</td>
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<tr>
<td>1.70V/cell</td>
<td>261.6</td>
<td>199.5</td>
<td>165.1</td>
<td>138.9</td>
<td>112.3</td>
<td>80.5</td>
<td>59.5</td>
<td>35.3</td>
<td>26.0</td>
<td>21.2</td>
<td>17.9</td>
<td>15.6</td>
<td>12.4</td>
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<td>1.65V/cell</td>
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<td>215.1</td>
<td>178.5</td>
<td>146.6</td>
<td>106.7</td>
<td>77.4</td>
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<td>36.3</td>
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<td>1.60V/cell</td>
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<td>232.5</td>
<td>188.5</td>
<td>154.3</td>
<td>112.3</td>
<td>80.5</td>
<td>63.8</td>
<td>37.5</td>
<td>27.6</td>
<td>22.2</td>
<td>18.6</td>
<td>16.2</td>
<td>12.7</td>
<td>10.5</td>
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### Constant Power Discharge (Watts) at 25°C (77°F)

<table>
<thead>
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<th>F.V/Time</th>
<th>5 min</th>
<th>10 min</th>
<th>15 min</th>
<th>20 min</th>
<th>30 min</th>
<th>45 min</th>
<th>1h</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>
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<tbody>
<tr>
<td>1.85V/cell</td>
<td>322.5</td>
<td>274.9</td>
<td>247.1</td>
<td>220.5</td>
<td>168.5</td>
<td>126.4</td>
<td>102.2</td>
<td>60.8</td>
<td>45.7</td>
<td>37.5</td>
<td>32.2</td>
<td>28.2</td>
<td>22.9</td>
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<td>10.2</td>
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<td>1.80V/cell</td>
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<td>312.2</td>
<td>271.0</td>
<td>235.1</td>
<td>176.8</td>
<td>132.7</td>
<td>107.2</td>
<td>63.8</td>
<td>47.7</td>
<td>39.2</td>
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<td>29.4</td>
<td>23.7</td>
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<td>10.3</td>
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<tr>
<td>1.75V/cell</td>
<td>431.3</td>
<td>344.9</td>
<td>288.7</td>
<td>247.8</td>
<td>184.3</td>
<td>137.3</td>
<td>110.8</td>
<td>66.0</td>
<td>49.1</td>
<td>40.1</td>
<td>34.3</td>
<td>29.9</td>
<td>24.0</td>
<td>19.9</td>
<td>10.4</td>
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<tr>
<td>1.70V/cell</td>
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<td>366.5</td>
<td>307.7</td>
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<td>193.6</td>
<td>143.0</td>
<td>115.0</td>
<td>67.6</td>
<td>50.1</td>
<td>41.0</td>
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<td>30.4</td>
<td>24.3</td>
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<td>10.5</td>
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<tr>
<td>1.65V/cell</td>
<td>519.3</td>
<td>418.2</td>
<td>345.1</td>
<td>274.5</td>
<td>211.1</td>
<td>152.9</td>
<td>122.4</td>
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<td>41.8</td>
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<td>30.8</td>
<td>24.6</td>
<td>20.3</td>
<td>10.6</td>
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<tr>
<td>1.60V/cell</td>
<td>578.9</td>
<td>481.2</td>
<td>345.1</td>
<td>286.6</td>
<td>211.1</td>
<td>152.9</td>
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<td>35.9</td>
<td>30.8</td>
<td>24.6</td>
<td>20.3</td>
<td>10.7</td>
</tr>
</tbody>
</table>

### Discharge Characteristics

Temperature Effects in Relation to Battery Capacity

Cycle Life in Relation to Depth of Discharge

Effect of Temperature on Long Term Float Life

General Relation of Capacity VS. Storage Time

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

**Constant Power Discharge (Watts) at 25°C (77°F)**

**Discharge Characteristics**

**Float Charging Characteristics**

**Temperature Effects in Relation to Battery Capacity**

**Effect of Temperature on Long Term Float Life**

**Cycle Life in Relation to Depth of Discharge**

**General Relation of Capacity VS. Storage Time**