

UCG920-2



Physical Specification

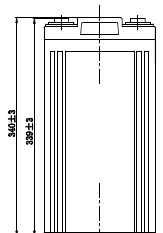
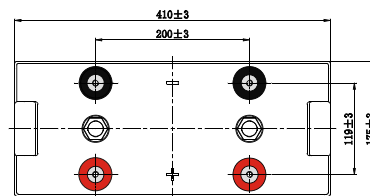
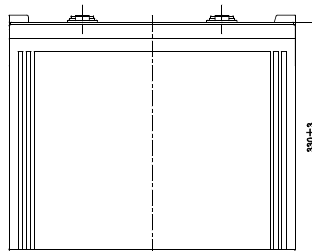
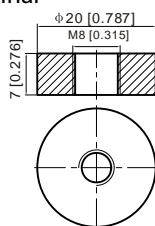
|                               |                            |
|-------------------------------|----------------------------|
| Part Number:                  | UCG920-2                   |
| Length:                       | 410 ± 2 mm (16.14 inches)  |
| Width:                        | 175 ± 2 mm (6.89 inches)   |
| Container Height:             | 330 ± 2 mm (12.99 inches)  |
| Total Height (with terminal): | 340 ± 2 mm (13.39 inches)  |
| Approx Weight:                | Approx 50.6 kg (111.57lbs) |

Specifications

|                              |  |   |
|------------------------------|--|---|
|                              | Nominal Voltage  | 2V  |
|                              | Nominal Capacity (100HR)   | 920AH   |
| Terminal Type                | Standard Terminal  | F 11  |
|                              | Optional Terminal  | -   |
| Container Material           | Standard Option  | ABS   |
|                              | Flame Retardant Option (FR)  | ABS (UL94:VO)   |
| Rated Capacity               | 853.4 AH/42.67A  | (20hr,1.80V/cell, 25°C / 77°F)  |
|                              | 800.0 AH/80.00A  | (10hr,1.80V/cell, 25°C / 77°F)  |
|                              | 688.0 AH/137.6A  | (5hr,1.75V/cell, 25°C / 77°F)   |
|                              | 598.5 AH/199.5A  | (3hr,1.75V/cell, 25°C / 77°F)   |
|                              | 469.3 AH/469.3A  | (1hr,1.60V/cell, 25°C / 77°F)   |
| Max Discharge Current        | 5600 A (5s)  |   |
| Internal Resistance          | Approx 0.6mΩ   |   |
| 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 200.0A. Voltage 2.4V ~ 2.5V at 25°C (77°F) Temp. Coe ffcient -5mV/°C |
|                              | Standby Use  | No limit on Initial Charging Current Voltage 2.25V ~ 2.3V at 25°C (77°F) Temp. Coe ffcient -3mV/°C      |
|                              | Capacity affected by Temperature   | 40°C (104°F)  |
| 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 6 months at 25°C(77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. |   |

Dimensions

F 11 Terminal



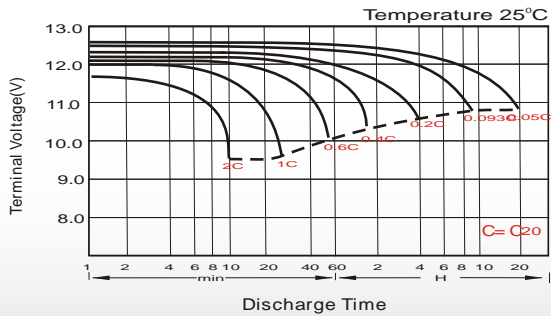
### Constant Current Discharge (Amperes) at 25 °C (77°F)

| F.V/Time   | 20min | 30min | 45min | 1h    | 2h    | 3h    | 4h    | 5h    | 6h    | 7h    | 8h    | 9h   | 10h  | 20h   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1.85V/cell | 696.0 | 547.2 | 417.1 | 362.4 | 231.2 | 176.3 | 146.0 | 126.1 | 108.8 | 96.3  | 86.9  | 79.4 | 75.1 | 40.96 |
| 1.80V/cell | 799.2 | 611.2 | 460.8 | 400.0 | 250.4 | 188.8 | 154.8 | 132.5 | 114.3 | 100.8 | 91.1  | 83.6 | 78.5 | 42.67 |
| 1.75V/cell | 897.6 | 672.0 | 497.1 | 427.2 | 265.2 | 199.5 | 162.2 | 137.6 | 118.3 | 104.5 | 94.0  | 86.0 | 80.0 | 43.52 |
| 1.70V/cell | \     | 720.0 | 528.0 | 452.8 | 281.2 | 207.7 | 167.4 | 141.8 | 122.4 | 107.9 | 96.8  | 88.3 | 81.9 | 44.12 |
| 1.67V/cell | \     | 748.8 | 547.2 | 469.3 | 288.4 | 214.4 | 171.6 | 144.8 | 124.4 | 109.5 | 98.2  | 89.5 | 82.9 | 44.52 |
| 1.60V/cell | \     | 800.0 | 587.7 | 498.4 | 300.0 | 222.9 | 178.0 | 149.3 | 127.5 | 111.8 | 100.0 | 91.4 | 84.5 | 45.16 |

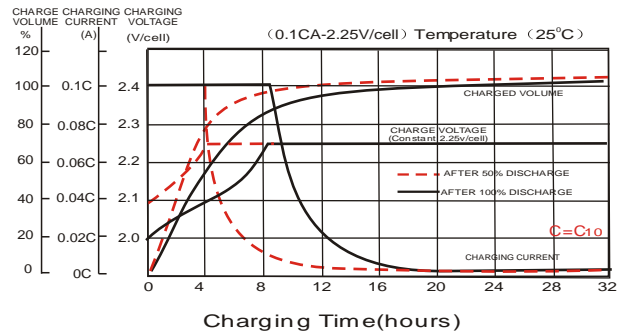
### Constant Power Discharge (Watts) at 25 °C (77°F)

| F.V/Time   | 20min  | 30min  | 45min  | 1h    | 2h    | 3h    | 4h    | 5h    | 6h    | 7h    | 8h    | 9h    | 10h   | 20h  |
|------------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1.85V/cell | 1321.7 | 1046.2 | 802.4  | 700.2 | 448.3 | 342.7 | 285.0 | 247.0 | 213.9 | 189.9 | 171.6 | 156.9 | 148.7 | 81.1 |
| 1.80V/cell | 1497.7 | 1157.6 | 878.3  | 768.8 | 483.0 | 365.7 | 300.9 | 258.6 | 223.8 | 198.0 | 179.4 | 164.8 | 155.0 | 84.4 |
| 1.75V/cell | 1663.3 | 1258.7 | 939.0  | 816.8 | 510.2 | 385.6 | 314.3 | 267.4 | 230.9 | 204.6 | 184.7 | 169.5 | 157.8 | 86.0 |
| 1.70V/cell | \      | 1339.2 | 993.7  | 862.6 | 538.5 | 400.3 | 323.6 | 274.9 | 238.6 | 211.0 | 189.9 | 173.7 | 161.5 | 87.1 |
| 1.67V/cell | \      | 1374.0 | 1020.5 | 887.0 | 549.4 | 411.4 | 330.7 | 279.8 | 241.7 | 213.5 | 192.2 | 175.7 | 163.1 | 87.8 |
| 1.60V/cell | \      | 1458.4 | 1090.2 | 937.0 | 568.8 | 425.8 | 341.9 | 287.5 | 246.9 | 217.4 | 195.3 | 179.1 | 166.0 | 88.9 |

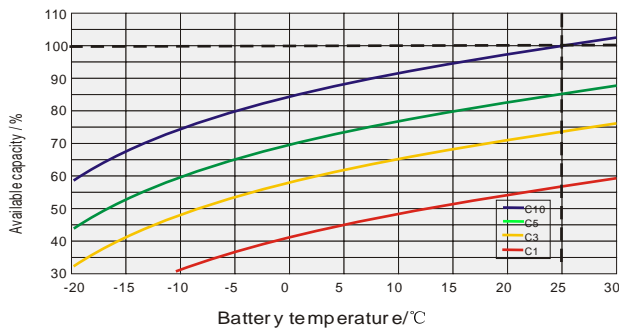
### Discharge Characteristics



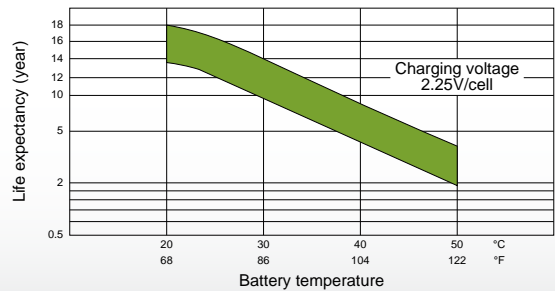
### Float Charging Characteristics



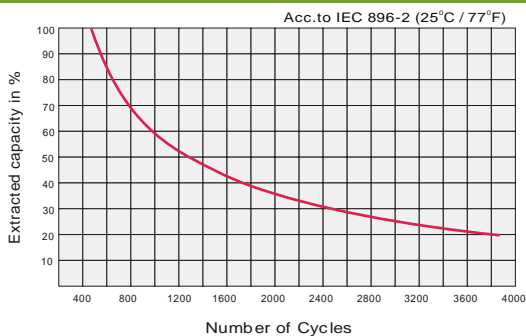
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### General Relation of Capacity VS. Storage Time

