

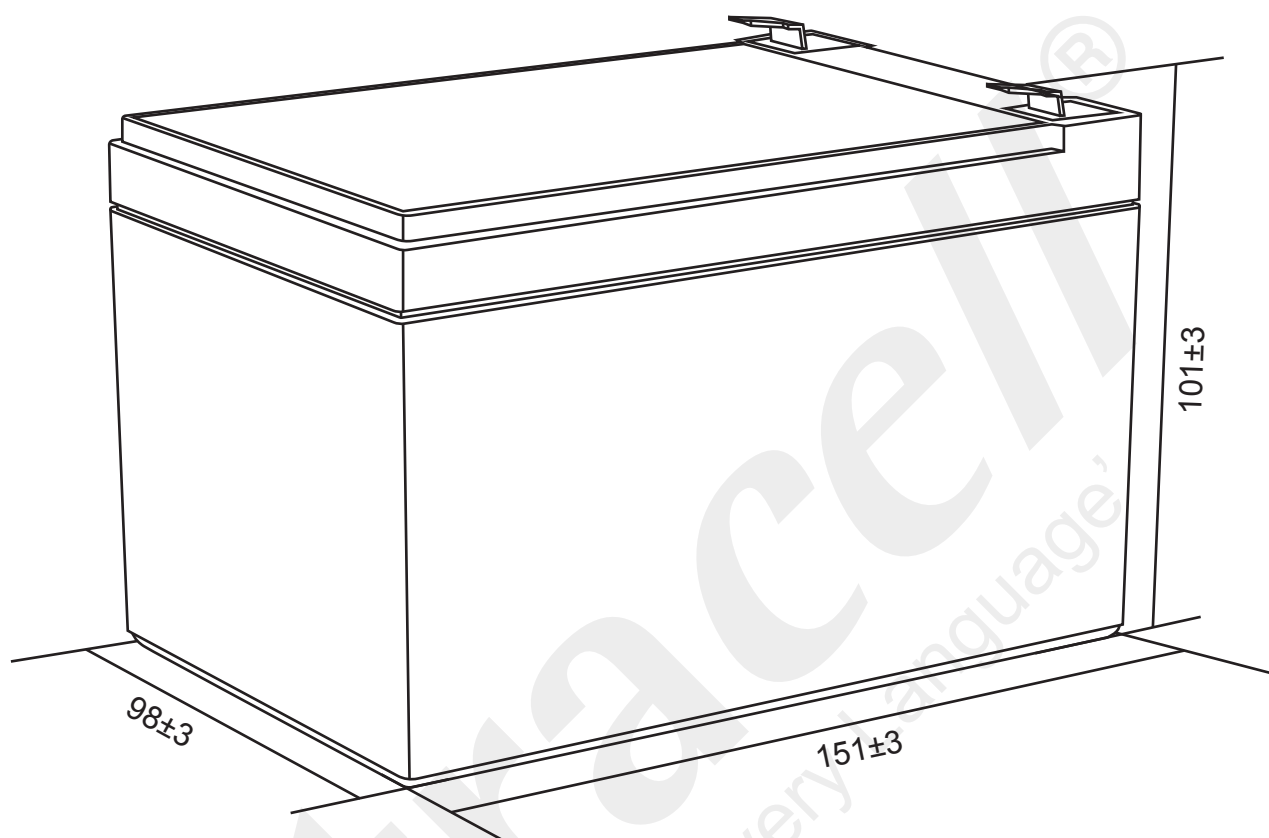
Ultracell®

'Quality in Every Language'

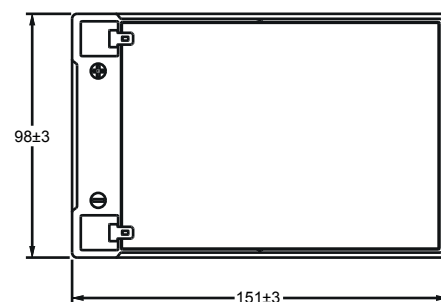
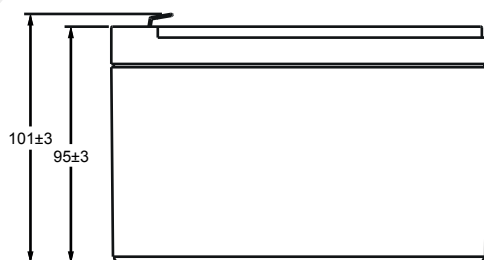
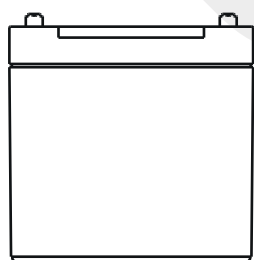
UXL12-12

12V 12Ah

Long Life Series



Technical Dimensions (mm)

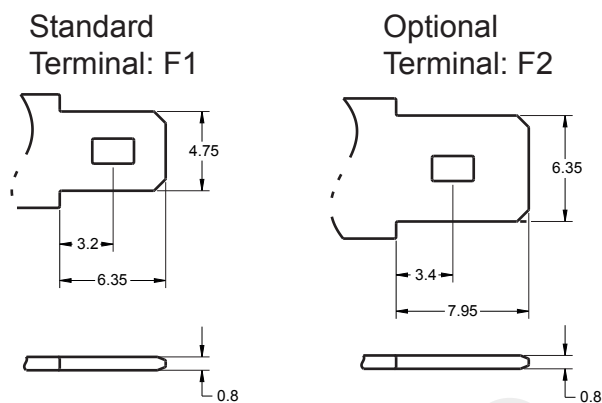




Image



Terminal Dimensions (mm)



Technical Specification

| | | |
|-------------------------------------|----------------------------------|---|
| Output | Nominal Voltage | 12V |
| | Nominal Capacity (20HR) | 12Ah |
| Terminal Type | Standard Terminal | F1 |
| | Optional Terminal | F2 |
| Container Material | Standard Option | ABS |
| | Flame Retardant Option (FR) | ABS (UL94:VO) |
| Rated Capacity | (20HR 1.75V/cell, 25°C) | 12 Ah/0.600A |
| | (10HR 1.75V/cell, 25°C) | 11.6 Ah/1.16A |
| | (5HR 1.75V/cell, 25°C) | 10.65 Ah/2.13A |
| | (3HR 1.75V/cell, 25°C) | 9.39 Ah/3.13A |
| | (1HR 1.60V/cell, 25°C) | 7.89 Ah/7.89A |
| Max Discharge Current | 180A (5s) | |
| Internal Resistance | Approx 18mΩ | |
| Discharge Characteristics | Operating Temp Range | Discharge: -15 ~ 50°C Charge: 0 ~ 40°C Storage: -15 ~ 40°C |
| | Nominal Operating Temp Range | 25 ± 3°C |
| | Cycle Use | Initial Charging Current less than 3.6A. Voltage 14.4V ~ 15.0V @ 25°C Temp. Coefficient -30mV/°C |
| | Standby Use | Initial Charging Current less than 3.6A. Voltage 13.5V ~ 13.8V @ 25°C Temp. Coefficient -20mV/°C |
| | Capacity affected by Temperature | 40°C 103% 25°C 100% 0°C 86% |
| Design Floating Life at 20°C | 12 Years | |

Self Discharge

Ultracell® UXL batteries may be stored for up to 6 months at 25°C and then a refresh charge is required. For higher temperatures the time intervals will be shorter.

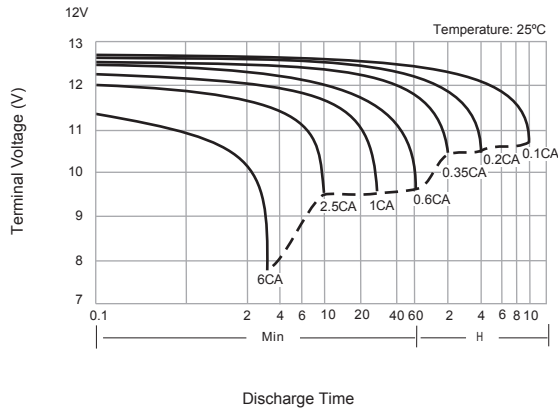
Constant Current Discharge / Constant Power Discharge At 25°C (Amperes & Watts/Cell)

A = Amperes W = Watts

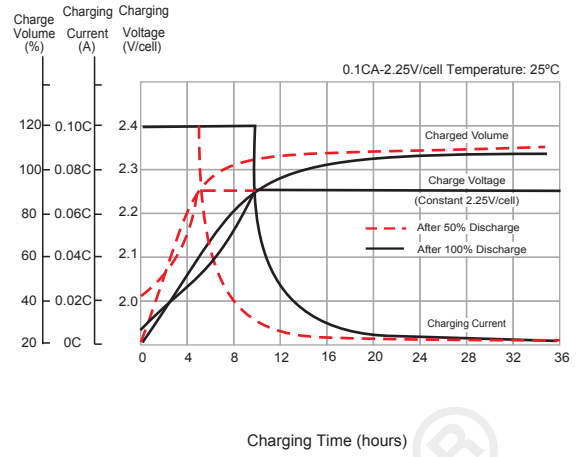
| F.V/TIME | 10 min | 15 min | 20 min | 30 min | 45 min | 60 min | 2 hours | 3 hours | 4 hours | 5 hours | 6 hours | 8 hours | 10 hours | 20 hours |
|------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|----------|----------|
| A \ W | | | | | | | | | | | | | | |
| 1.85V/cell | 23.9 | 18.9 | 15.9 | 12.0 | 8.84 | 7.23 | 4.19 | 3.04 | 2.46 | 2.08 | 1.78 | 1.40 | 1.13 | 0.588 |
| | 45.7 | 36.4 | 30.7 | 23.3 | 17.2 | 14.1 | 8.21 | 5.97 | 4.84 | 4.10 | 3.52 | 2.77 | 2.24 | 1.18 |
| 1.80V/cell | 25.1 | 19.7 | 16.4 | 12.4 | 9.02 | 7.36 | 4.26 | 3.08 | 2.49 | 2.11 | 1.80 | 1.41 | 1.14 | 0.595 |
| | 47.7 | 37.6 | 31.5 | 23.8 | 17.4 | 14.3 | 8.31 | 6.05 | 4.90 | 4.15 | 3.56 | 2.80 | 2.27 | 1.19 |
| 1.75V/cell | 26.3 | 20.4 | 16.9 | 12.6 | 9.20 | 7.49 | 4.32 | 3.13 | 2.53 | 2.13 | 1.82 | 1.43 | 1.16 | 0.600 |
| | 49.8 | 38.8 | 32.2 | 24.2 | 17.7 | 14.5 | 8.42 | 6.12 | 4.96 | 4.20 | 3.60 | 2.83 | 2.29 | 1.20 |
| 1.70V/cell | 27.6 | 21.1 | 17.4 | 12.9 | 9.37 | 7.62 | 4.39 | 3.17 | 2.56 | 2.16 | 1.85 | 1.45 | 1.17 | 0.607 |
| | 51.8 | 40.0 | 33.1 | 24.7 | 18.0 | 14.7 | 8.53 | 6.20 | 5.02 | 4.25 | 3.64 | 2.86 | 2.32 | 1.21 |
| 1.65V/cell | 28.3 | 21.6 | 17.7 | 13.1 | 9.48 | 7.70 | 4.43 | 3.20 | 2.58 | 2.18 | 1.86 | 1.46 | 1.18 | 0.610 |
| | 53.0 | 40.7 | 33.5 | 25.0 | 18.1 | 14.8 | 8.60 | 6.25 | 5.05 | 4.28 | 3.66 | 2.88 | 2.33 | 1.22 |
| 1.60V/cell | 30.0 | 22.6 | 18.4 | 13.5 | 9.73 | 7.89 | 4.52 | 3.27 | 2.63 | 2.22 | 1.89 | 1.48 | 1.20 | 0.619 |
| | 55.8 | 42.2 | 34.6 | 25.6 | 18.5 | 15.1 | 8.74 | 6.35 | 5.13 | 4.34 | 3.72 | 2.93 | 2.37 | 1.24 |



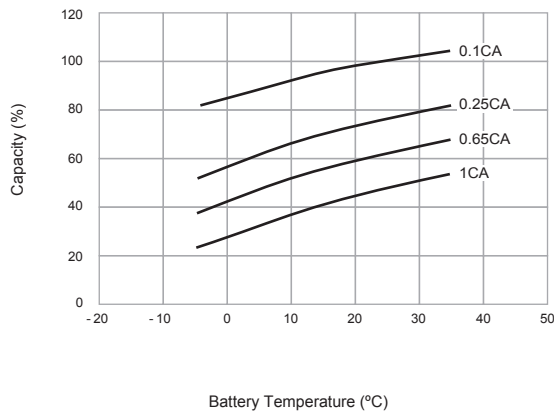
Discharge Characteristics



Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life

