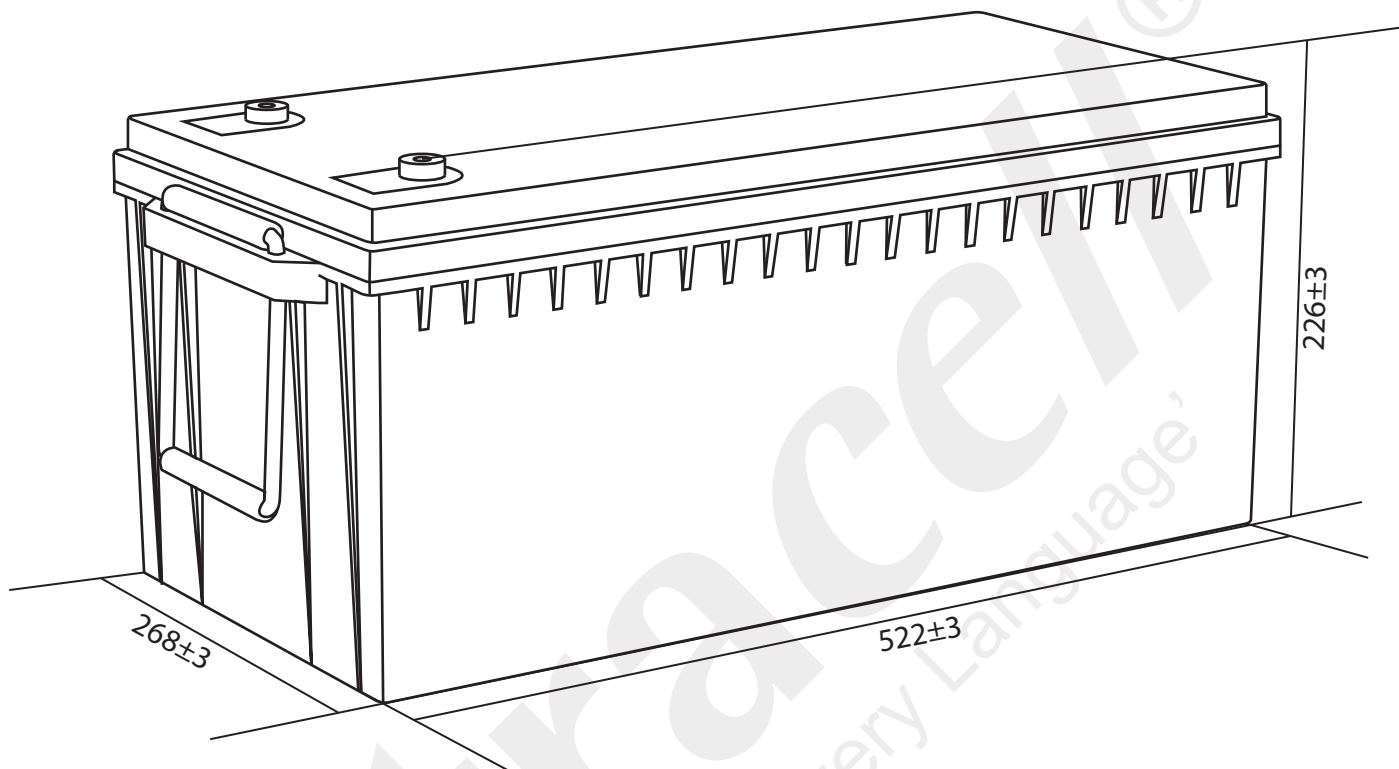


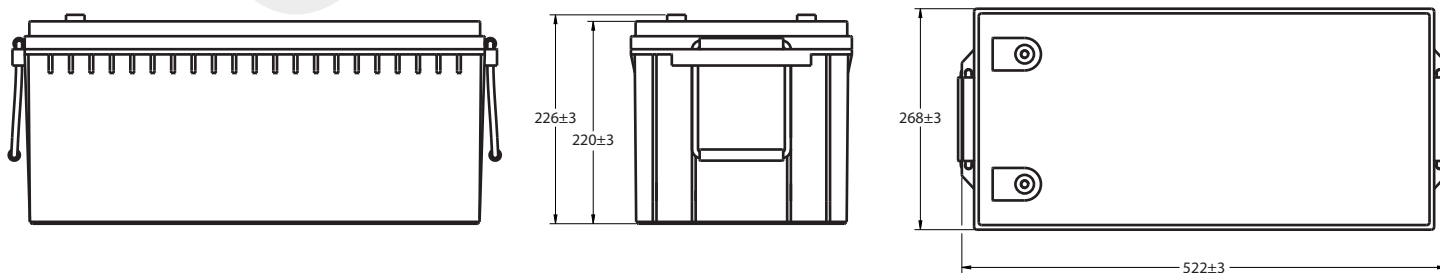
Ultracell®

'Quality in Every Language'

UC250-12
12V 250Ah (C₁₀)
12V 290Ah (C₁₀₀)
Deep Cycle Series



Technical Dimensions (mm)

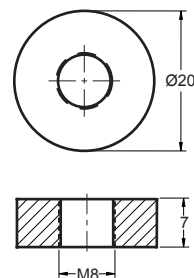


Image



Terminal Dimensions (mm)

Standard Terminal: F11



Technical Specification

| | | |
|-------------------------------------|----------------------------------|--|
| Output | Nominal Voltage | 12V |
| | Nominal Capacity (10HR) | 250Ah |
| Terminal Type | Standard Terminal | F11 |
| Container Material | Standard Option | ABS |
| | Flame Retardant Option (FR) | ABS (UL94:VO) |
| Rated Capacity | (100HR 1.80V/cell, 25°C) | 287.0Ah/2.87A |
| | (20HR 1.80V/cell, 25°C) | 268.0 Ah/13.4A |
| | (10HR 1.80V/cell, 25°C) | 250.0 Ah/25.0A |
| | (5HR 1.75V/cell, 25°C) | 219.5 Ah/43.9A |
| | (3HR 1.75V/cell, 25°C) | 198.9 Ah/66.3A |
| | (1HR 1.60V/cell, 25°C) | 161.5 Ah/161.5A |
| Max Discharge Current | 2500A (5s) | |
| Internal Resistance | Approx 2.5mΩ | |
| 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 75A. Voltage 14.4V ~ 15.0V @ 25°C Temp. Coefficient -30mV/°C |
| | Standby Use | Initial Charging Current less than 75A. 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 | 10 Years | |

Self Discharge

Ultracell® UC 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)

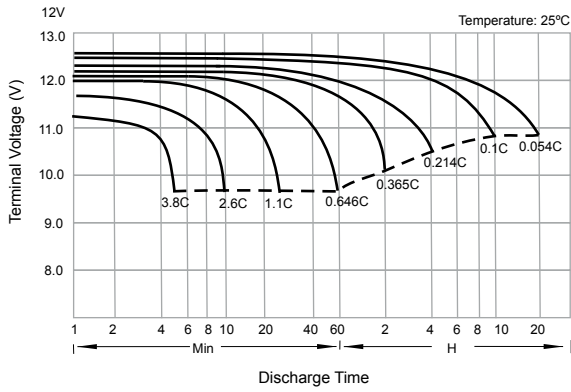
A = Amperes W = Watts

| 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 |
|-------------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|----------|----------|
| 1.85V/cell | 366.0 | 308.0 | 269.1 | 193.7 | 153.8 | 124.8 | 77.5 | 60.5 | 49.0 | 39.8 | 34.7 | 28.3 | 23.6 | 13.3 |
| 1.80V/cell | 467.7 | 372.1 | 318.1 | 228.5 | 178.9 | 139.8 | 84.6 | 65.1 | 52.3 | 42.7 | 37.2 | 30.1 | 25.0 | 13.4 |
| 1.75V/cell | 861.0 | 691.1 | 597.1 | 433.8 | 343.2 | 269.8 | 163.9 | 126.5 | 101.9 | 83.7 | 73.3 | 59.4 | 49.5 | 26.8 |
| 1.70V/cell | --- | 747.7 | 637.0 | 448.1 | 354.5 | 281.2 | 169.5 | 128.4 | 104.0 | 85.7 | 75.2 | 60.3 | 49.9 | 27.0 |
| 1.65V/cell | --- | 434.0 | 359.7 | 246.9 | 193.1 | 150.9 | 91.3 | 68.1 | 54.9 | 45.0 | 39.1 | 31.0 | 25.5 | 13.8 |
| 1.60V/cell | --- | 792.4 | 665.6 | 464.6 | 367.6 | 289.3 | 175.8 | 131.7 | 106.5 | 87.6 | 76.6 | 61.1 | 50.4 | 27.5 |
| 1.55V/cell | --- | 461.5 | 382.1 | 260.5 | 197.9 | 156.0 | 93.8 | 71.0 | 56.8 | 46.2 | 39.9 | 31.5 | 26.0 | 14.0 |
| 1.50V/cell | --- | 837.1 | 703.8 | 487.9 | 375.4 | 298.1 | 180.2 | 137.0 | 109.9 | 90.0 | 78.2 | 62.0 | 51.4 | 27.8 |
| 1.45V/cell | --- | --- | 407.0 | 275.0 | 206.3 | 161.5 | 97.0 | 73.2 | 58.6 | 47.7 | 40.8 | 31.8 | 26.3 | 14.1 |
| 1.40V/cell | --- | --- | 742.0 | 510.1 | 387.7 | 306.2 | 185.1 | 140.5 | 112.9 | 92.5 | 79.7 | 62.6 | 51.9 | 27.9 |

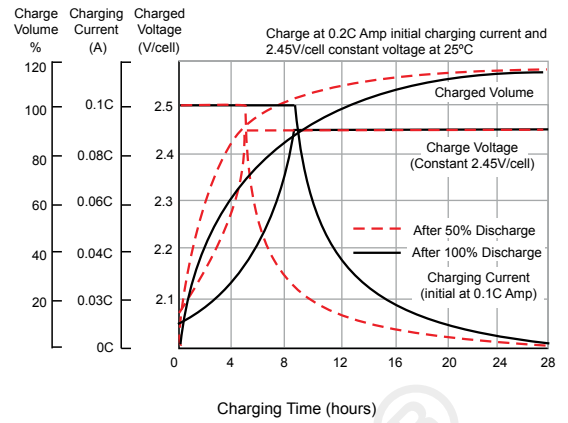




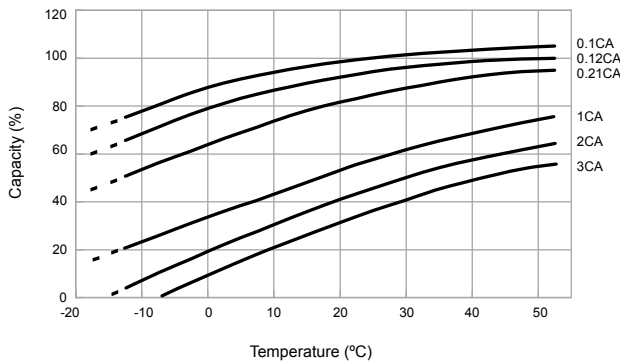
Discharge Characteristics



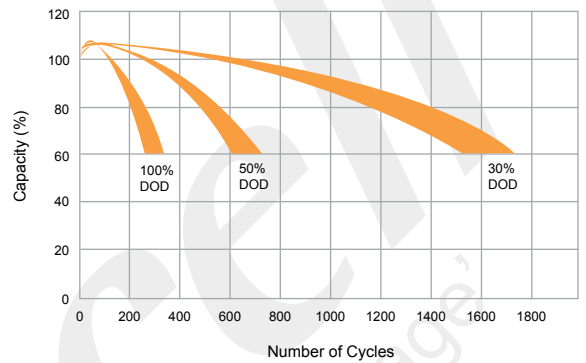
Float Charging Characteristics



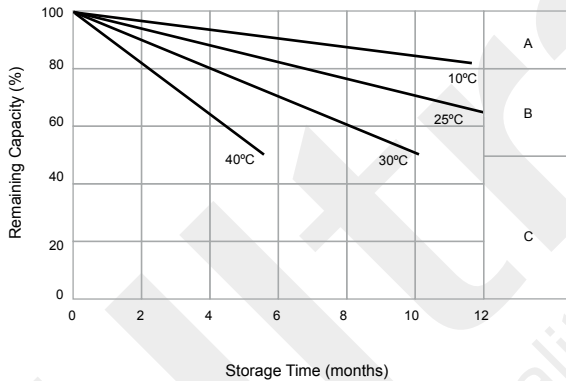
Temperature Effects in Relation to Battery Capacity



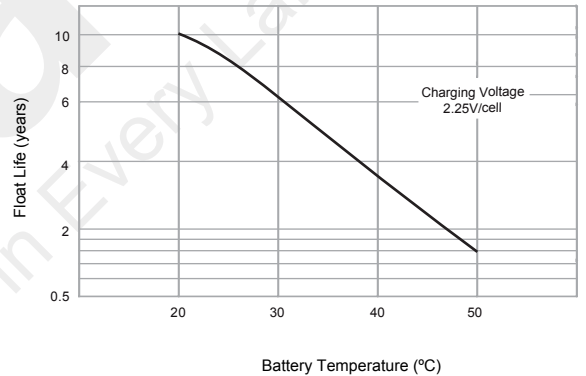
Cycle Life in Relation to Depth of Discharge



General Relation of Capacity vs. Storage Time



Effects of Temperature on Long Term Float Life



General Relation of Capacity vs. Storage Time (Notes)

- A) No supplementary charge required.
(Carryout supplementary charge before use if 100% capacity is required.)
- B) Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8 ~ 10 hours at limited current 0.05 CA.
- C) Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.