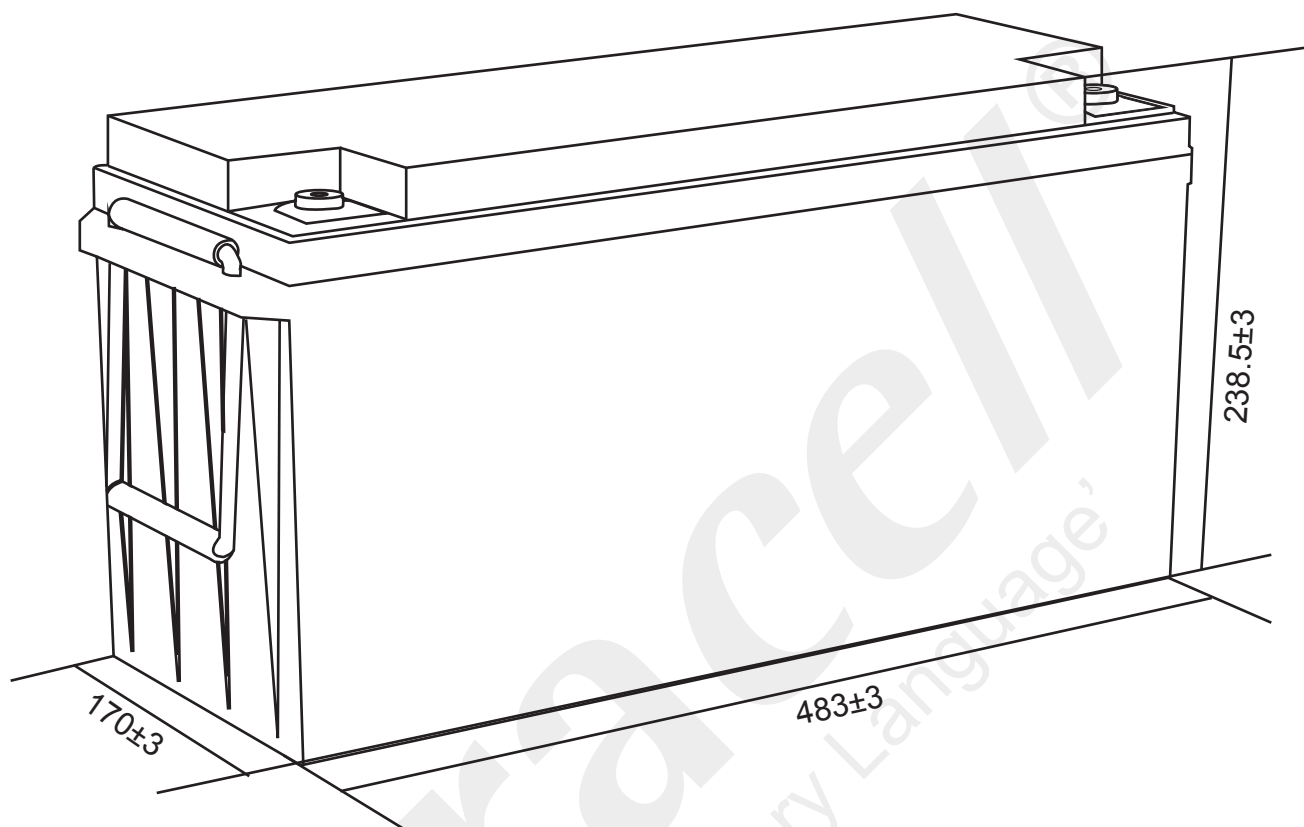


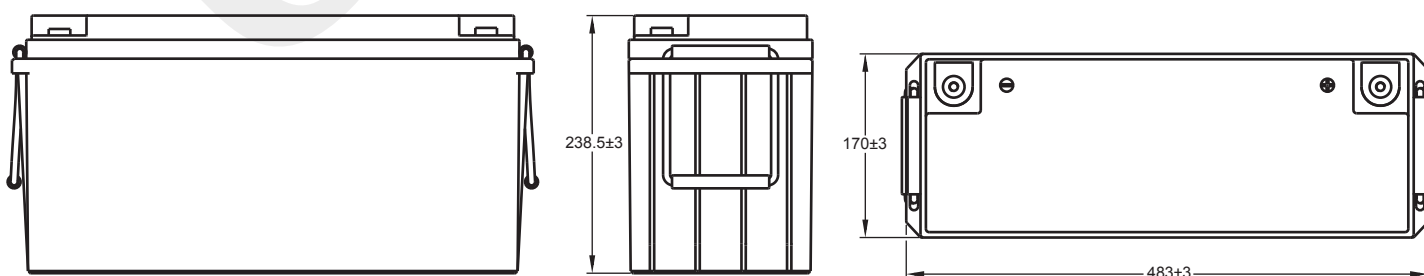
# Ultracell®

'Quality in Every Language'

UC150-12  
12V 150Ah (C<sub>10</sub>)  
12V 175Ah (C<sub>100</sub>)  
Deep Cycle Series



## Technical Dimensions (mm)

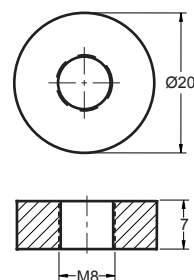


Image



Terminal Dimensions (mm)

Standard Terminal: F11



Technical Specification

Output	Nominal Voltage	12V
	Nominal Capacity (10HR)	150Ah
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)	172.0Ah/1.72A
	(20HR 1.80V/cell, 25°C)	160.8 Ah/8.04A
	(10HR 1.80V/cell, 25°C)	150.0 Ah/15.0A
	(5HR 1.75V/cell, 25°C)	131.6 Ah/26.3A
	(3HR 1.75V/cell, 25°C)	119.3 Ah/39.8A
	(1HR 1.60V/cell, 25°C)	96.9 Ah/96.9A
Max Discharge Current	1500A (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 45A. Voltage 14.4V ~ 15.0V @ 25°C Temp. Coefficient -30mV/°C
	Standby Use	Initial Charging Current less than 45A. 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.

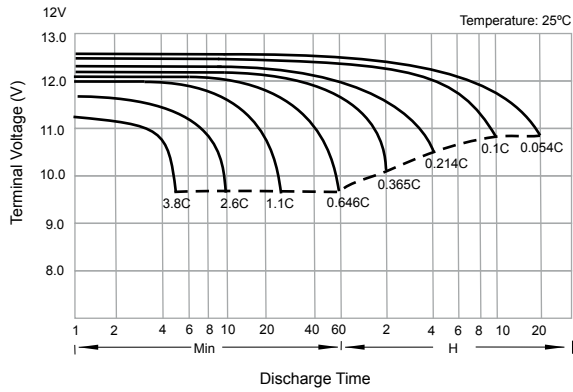
Constant Current Discharge / Constant Power Discharge At 25°C (Amperes & Watts/Cell)

A = Amperes W = Watts

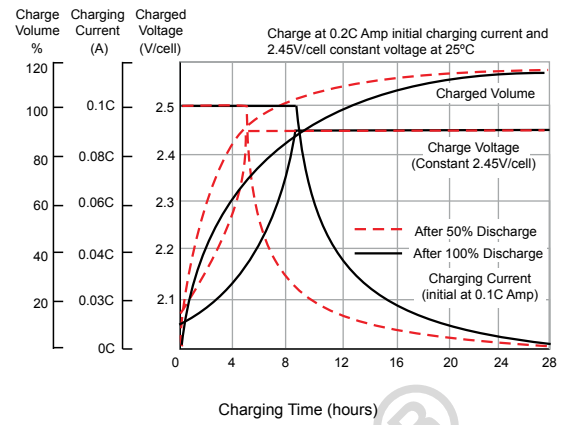
F.V/TIME	10 min	15 min	20 min	30 min	45 min	60 min	2 hours	3 hours	4 hours	5 hours	6 hours	8 hours	10 hours	20 hours
1.85V/cell	219.6 409.8	184.8 348.4	161.5 307.7	116.2 223.3	92.3 178.5	74.9 145.4	46.5 90.7	36.3 70.9	29.4 57.5	23.9 46.9	20.8 41.1	17.0 33.6	14.2 28.0	7.97 15.9
1.80V/cell	280.6 516.6	223.3 414.7	190.9 358.2	137.1 260.3	107.3 205.9	83.9 161.9	50.8 98.3	39.0 75.9	31.4 61.1	25.6 50.2	22.3 44.0	18.0 35.6	15.0 29.7	8.04 16.1
1.75V/cell	308.3 560.6	243.9 448.6	205.3 382.2	142.3 268.9	111.4 212.7	87.8 168.7	52.7 101.7	39.8 77.1	32.1 62.4	26.3 51.4	23.0 45.1	18.3 36.2	15.2 30.0	8.12 16.2
1.70V/cell	336.1 602.5	260.4 475.4	215.8 399.4	148.2 278.8	115.8 220.6	90.5 173.6	54.8 105.5	40.9 79.0	32.9 63.9	27.0 52.6	23.4 46.0	18.6 36.7	15.3 30.2	8.27 16.5
1.65V/cell	362.7 645.6	276.9 502.2	229.2 422.3	156.3 292.8	118.7 225.2	93.6 178.8	56.3 108.1	42.6 82.2	34.1 65.9	27.7 54.0	23.9 46.9	18.9 37.2	15.6 30.8	8.37 16.7
1.60V/cell	393.8 689.0	296.1 530.7	244.2 445.2	165.0 306.0	123.8 232.6	96.9 183.7	58.2 111.1	43.9 84.3	35.1 67.7	28.6 55.5	24.5 47.8	19.1 37.5	15.8 31.1	8.42 16.8



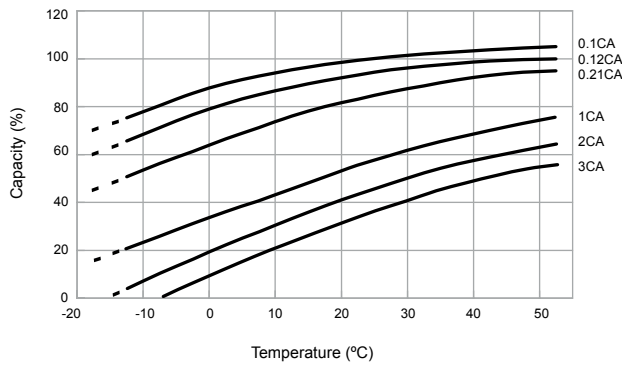
## Discharge Characteristics



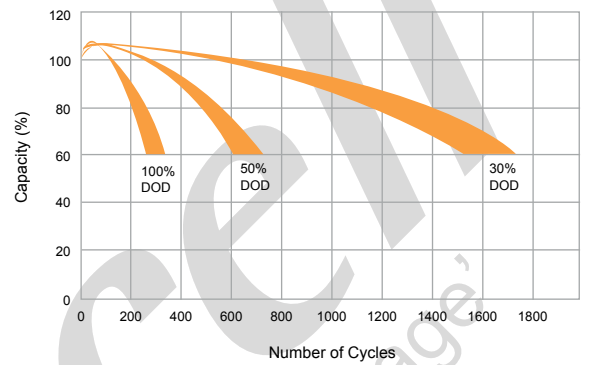
## Float Charging Characteristics



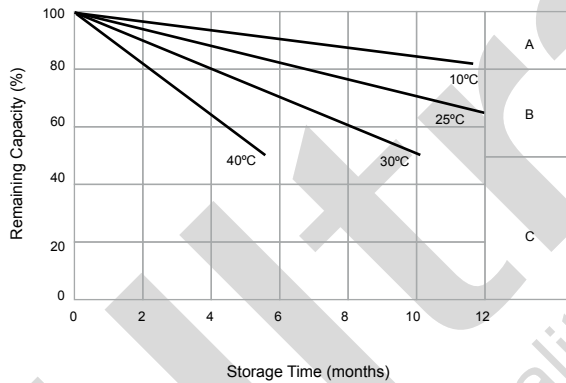
## Temperature Effects in Relation to Battery Capacity



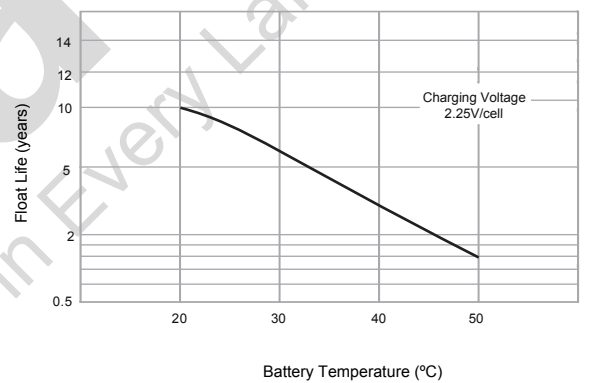
## Cycle Life in Relation to Depth of Discharge



## 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.

