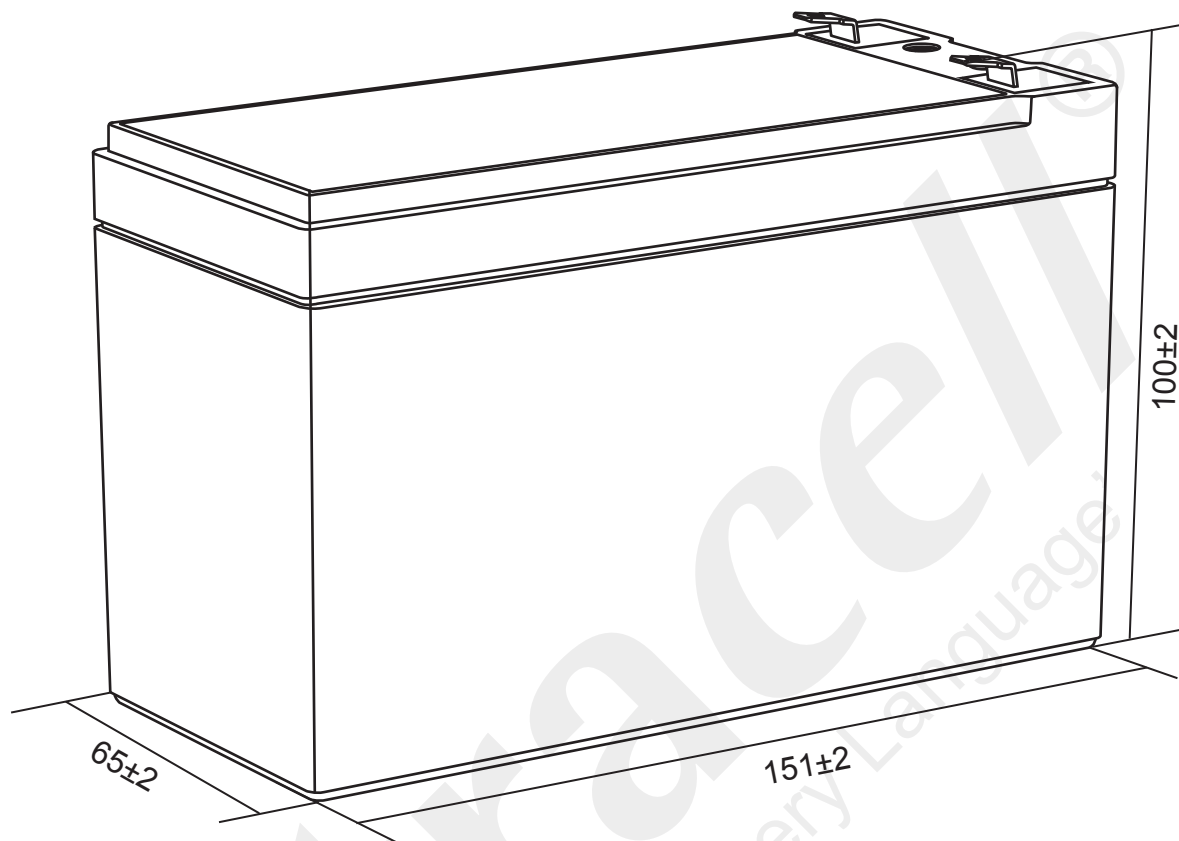
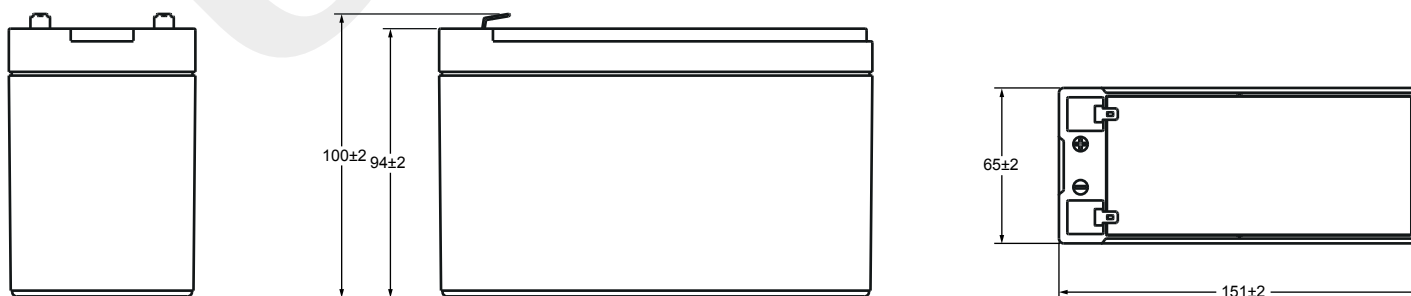




Technical Dimensions (mm)

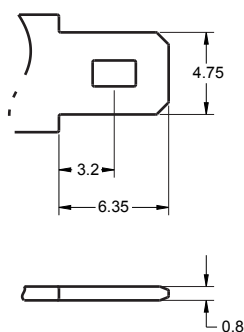


Image

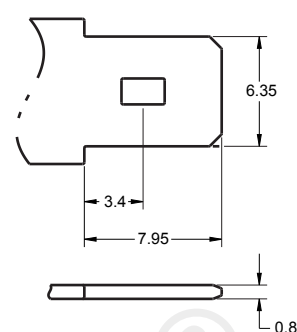


Terminal Dimensions (mm)

Standard Terminal: F1



Optional Terminal: F2



Technical Specification

Output	Nominal Voltage Nominal Capacity (20HR)	12V 9Ah
Terminal Type	Standard Terminal Optional Terminal	F1 F2
Container Material	Standard Option Flame Retardant Option (FR)	ABS ABS (UL94:VO)
Rated Capacity	(100HR 1.75V/cell, 25°C) (20HR 1.75V/cell, 25°C) (10HR 1.75V/cell, 25°C) (1HR 1.60V/cell, 25°C)	11 Ah/0.11A 9 Ah/0.45A 8.2 Ah/0.82A 5.4 Ah/5.4A
Max Discharge Current	135A (5s)	
Internal Resistance	Approx 21mΩ	
Discharge Characteristics	Operating Temp Range	Discharge: -15 ~ 50°C Charge: -10 ~ 50°C Storage: -20 ~ 50°C
	Nominal Operating Temp Range	25 ± 3°C
	Cycle Use	Initial Charging Current less than 2.7A. Voltage 14.4V ~ 14.7V @ 25°C Temp. Coefficient -30mV/°C
	Standby Use	No limit on initial charging current. Voltage 13.6V ~ 13.8V @ 25°C Temp. Coefficient -18mV/°C
	Capacity affected by Temperature	40°C 102% 25°C 100% 0°C 85%
Design Floating Life at 20°C	10 Years	

Self Discharge

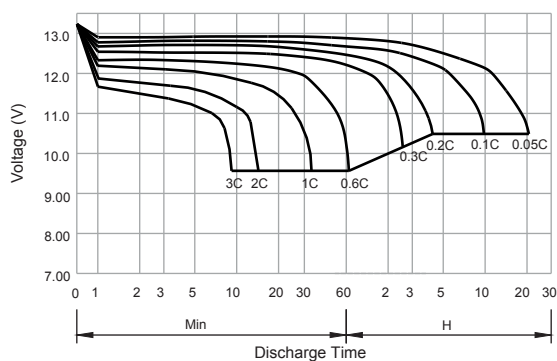
Ultracell® UCG batteries may be stored for up to 6 months at 25°C and then a refresh charge is required. For higher temperatures the time intervals will be shorter.

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

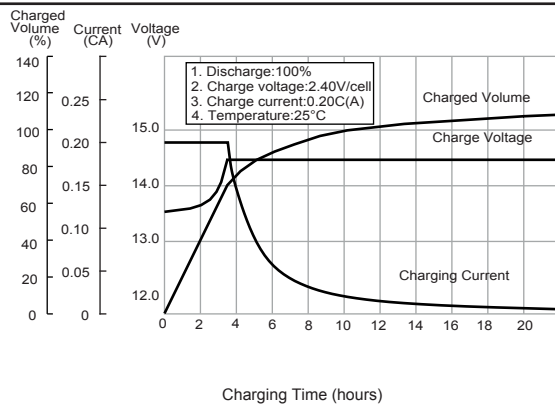
A = Amperes W = Watts

F.V/TIME	5 min	10 min	15 min	30 min	60 min	2 hours	3 hours	4 hours	5 hours	10 hours	20 hours
A W											
1.80V/cell	22.7 253	15.5 175	13.2 150	8.04 92.1	4.92 57.0	2.94 34.4	2.10 24.9	1.70 20.3	1.40 16.7	0.80 9.63	0.44 5.29
1.75V/cell	24.0 268	16.4 185	13.9 158	8.34 95.6	5.08 58.8	3.01 35.3	2.16 25.7	1.76 20.9	1.44 17.2	0.82 9.83	0.45 5.40
1.70V/cell	25.1 280	17.2 194	14.4 164	8.55 98.0	5.18 60.0	3.06 35.8	2.18 25.8	1.77 21.0	1.45 17.3	0.82 9.89	0.45 5.43
1.65V/cell	26.2 292	17.9 202	14.9 170	8.82 101	5.32 61.6	3.09 36.1	2.19 26.0	1.78 21.2	1.46 17.4	0.83 9.94	0.45 5.46
1.60V/cell	27.0 301	18.5 208	15.3 174	9.00 103	5.40 62.5	3.11 36.3	2.20 26.2	1.79 21.3	1.47 17.5	0.83 9.98	0.46 5.48

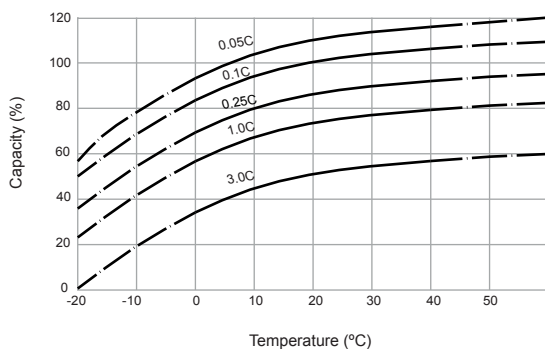
Discharge Characteristics



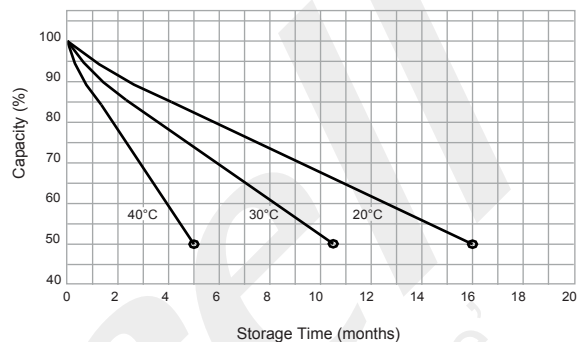
Charging Characteristics



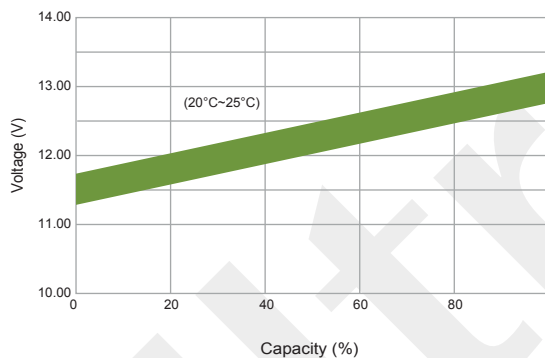
Temperature Effects in Relation to Battery Capacity



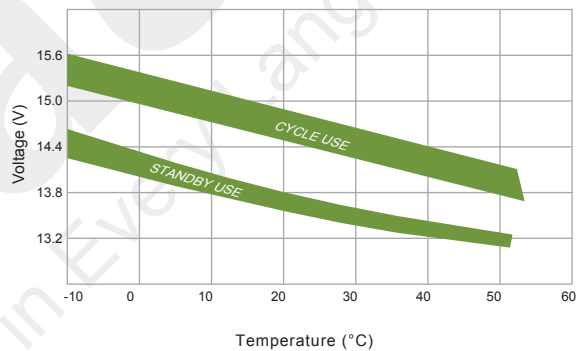
Self-Discharge Characteristics



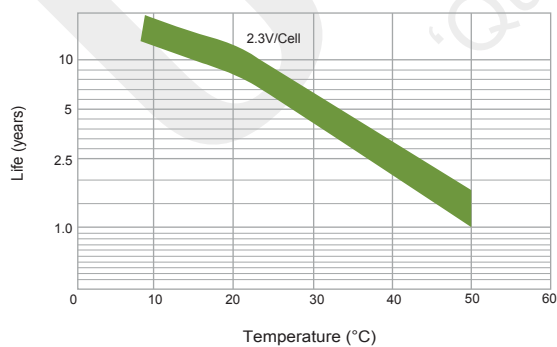
Open Circuit Voltage and Residual Capacity (25°C)



Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life in Relation to Depth of Discharge

